INDIVIDUAL TRAUMA
Recovering from Deep Wounds and Exploring the Potential for Renewal

Kathryn Gow
Marek J. Celinski
Editors

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INDIVIDUAL TRAUMA

RECOVERING FROM DEEP WOUNDS
AND EXPLORING THE POTENTIAL FOR RENEWAL

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INDIVIDUAL TRAUMA

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AND EXPLORING THE
POTENTIAL FOR RENEWAL

KATHRYN M. GOW
AND
MAREK J. CELINSKI
EDITORS

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## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>ix</td>
</tr>
<tr>
<td><strong>Part 1: Trauma Theory</strong></td>
<td>1</td>
</tr>
<tr>
<td>Chapter 1</td>
<td>3</td>
</tr>
<tr>
<td>Overview: Conceptualising Trauma as a Deep Wound While Continuing to Live One’s Life</td>
<td>Kathryn M. Gow</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>15</td>
</tr>
<tr>
<td>Challenge-Resilience-Resourcefulness as the Essential Components of Recovery</td>
<td>Marek J. Celinski</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>35</td>
</tr>
<tr>
<td>The Role of Meaning and Purpose in Psychological Trauma: Insight and Reintegration</td>
<td>Linda Stocks and Kathryn Gow</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>53</td>
</tr>
<tr>
<td>Grounded Transcendence: Resilience to Trauma through Spirituality and Religion</td>
<td>Cynthia B. Eriksson and Dow-Ann Yeh</td>
</tr>
<tr>
<td><strong>Part 2: Trauma and Struggle</strong></td>
<td>73</td>
</tr>
<tr>
<td>Narrative</td>
<td>75</td>
</tr>
<tr>
<td>Family Trauma or Challenge and Resilience in the Galapagos Archipelago</td>
<td>Elizabeth Tindle</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>83</td>
</tr>
<tr>
<td>Trauma, Grief and Guilt in Suicide Bereavement</td>
<td>Anita D. Groos</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>101</td>
</tr>
<tr>
<td>The Long Term effects of Childhood Sexual Abuse</td>
<td>Leigh Hodder and Kathryn Gow</td>
</tr>
<tr>
<td>Chapter 7</td>
<td>115</td>
</tr>
<tr>
<td>The Deep Trauma of Secondary Victimisation: Parents of Sex Offenders</td>
<td>Julie Bennett and Ron Frey</td>
</tr>
<tr>
<td>Chapter 8</td>
<td>139</td>
</tr>
<tr>
<td>Resilience and Resourcefulness in Predicting Recovery Outcome</td>
<td>Marek J. Celinski and Lyle M. Allen</td>
</tr>
</tbody>
</table>

Complimentary Contributor Copy
### Chapter 9
How are Social Support, Sociotropy, and Autonomy Related to Traumatic Stress Disorders?
*Richard E. Hicks and Sandra Lorensini*

**Part 3: Struggle, Recovery and Renewal**

**Poem**
*Ward 2E*

**Chapter 10**
Depression among Holocaust Survivors: A Meta-Analytic Review
*Janine Lurie-Beck, Kathryn Gow and Poppy Liossis*

**Chapter 11**
Sleep Disturbances and Nightmares in Combat Veterans
*Sandra Sacre*

**Chapter 12**
Coping Self-Efficacy and Psychological Distress in Flood Victims
*Catherine Pritchard and Kathryn Gow*

**Chapter 13**
A Qualitative Study of Adversity Activated Development and Resilience in Young People with CHD and their Parents
*Jillian Kaisar, Esben Strodl, Robert D. Schweitzer, and Dorothy Radford*

**Chapter 14**
Contribution of Integration Personality Factor in High Stress Medical Procedures: Organ Transplant Adjustment
*Catherine Anne Bart*

**Chapter 15**
Psychosocial Experiences of Cancer: Surpassing Survival and Recognising Posttraumatic Growth as Well as Distress
*Bronwyn Morris and Jane Shakespeare-Finch*

### Part 4: Moving Clients from Traumatic Effects to Recovery

**Narrative**
Frozen in Time: A Therapeutic Encounter
*Kathryn Gow*

**Chapter 16**
EMDR Therapy and Adaptive Information Processing: The Development of Resilience and Coherence
*Roger Solomon and Francine Shapiro*

**Chapter 17**
The Role of Mindfulness in Treating Trauma Clients through Dialectic Behavior Therapy
*Thomas Marra*

**Chapter 18**
Utilizing and Integrating Mathematics and Physics in Treatment for Recovery from Trauma and Abuse
*Bruce Gregory*

**Chapter 19**
Activating Spontaneity to Heal Childhood Trauma
*Charmaine McVea*

**Chapter 20**
Treading Carefully: Avoiding Minefields in Importing Therapy to Cambodia
*Kathryn Gow*

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**Complimentary Contributor Copy**
<table>
<thead>
<tr>
<th>Contents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative</td>
<td></td>
</tr>
<tr>
<td>Ripples of a Kindness Remembered</td>
<td>379</td>
</tr>
<tr>
<td><em>Paul W. Schenk</em></td>
<td></td>
</tr>
<tr>
<td>Index</td>
<td></td>
</tr>
<tr>
<td></td>
<td>383</td>
</tr>
</tbody>
</table>
Life is a mix of good and bad happenings and sometimes terrible things happen to people. Trauma is evident across our lifespan; it is part of our lives. Many theorists believe that it stays there, even though it may move aside, in order for other experiences to take centre stage and occupy our minds and bodies. It may not exert the same demands on the individual when they get on with their lives or experience other positive aspects of what life has to offer; however, it does not change its form from trauma to growth – it stays there etched into our psyche as trauma. In simple terms, growth occurs alongside the traumatic etchings.

If we have been able to move on, then our focus of attention moves to other events and experiences in life, some joyful, some traumatic, some mundane, and others challenging and satisfying – all for varying periods of time in our lives. It is really about making room for other parts of life and living; not dismissing it or trying to remove it from our existence, or pretending that it was not that bad and that we can “bounce back” – “no problem”.

Other theorists believe that people change and grow in spite of the trauma. Yet another group of theorists believe that it is the force of the trauma which propels the person to change for the better; in other words, they “bounce forward.”

This is the third book in our series on resilience published by NOVA. The first book celebrated resilience and resourcefulness in individuals and communities, and the second book on coping and survival focused on the ways in which people cope in stressful times and how they manage to survive within a range of contexts. The fourth book focuses on mass trauma and its effects on communities and countries.

In this book, the third one in the series, we explore different approaches to conceptualizing trauma, and working with traumatized individuals and groups. This is not a “good feel”, positive thinking book; it is about loss and hard times and the feeling that we will never ever get up again. It is also about courage and resilience in the face of life’s worst scenarios and that if we are fortunate we can be: “braver, stronger, wiser” and continue on life’s journey, in spite of the traumatic events that unfold in our lives and our environments.


This is the theme of the Salvation Army in their DVD “Braver, Stronger, Wiser” created to assist farmers and rural communities through the tragedy of the long hard drought in recent Australian history.

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PART 1: TRAUMA THEORY
Chapter 1

OVERVIEW: CONCEPTUALISING TRAUMA AS A DEEP WOUND WHILE CONTINUING TO LIVE ONE’S LIFE

Kathryn M. Gow
Consulting Psychologist, Regional Australia

PEREGRINATIONS THROUGH THE REALMS OF PHILOSOPHY

I met Marek Celinski several years ago at an International Hypnosis Conference in Germany when we wandered into the same seminar; we spoke only a little and then accidentally met at the airport where we both had several hours to fill in and shared ideas on a number of topics, but I don’t remember trauma being one of them at that stage.

We liaised by e-mail about his new Resourcefulness and Resilience scales and I then undertook university research utilising them (results published in the two previous volumes). Then in 2008, Marek came to Australia to conduct a series of seminars and to present a workshop on trauma at our national hypnosis congress, on a small little known island in the pacific (Norfolk Island). Again, after his seminar, we talked for a couple of hours, or rather Marek talked and I intercepted his flow of ideas to discuss the possibility of our writing a book on trauma. That was the beginning of a series of books on the topics surrounding resourcefulness and resilience, coping and survival, and trauma and recovery.

While we share common views about the nature of trauma, we approach it differently, hence I am writing this overview (Ch. 1) which focuses more on trauma and survival, while Marek is writing the introductory chapter (Ch. 2) which focuses more on recovery and resilience. Hence, you will note that in the four book series, Marek heads the book on resourcefulness and resilience, while I head the books on coping and survival and trauma and recovery. Kathryn is the glass half empty; Marek is the glass half full. [Actually he speaks as if his glass is overflowing and I speak as if the glass should be recycled.]

1 My mother, who valued education highly, told us about her win with a business colleague when she wrote in a letter to him “and I hope to continue our peregrinations through the realms of philosophy”. She was one of two most resilient woman I have ever met; the other being Elizabeth Tindle, one of our authors in the book series.
The Focus of the Book

The direction of the third book is about Individual Trauma and Recovery (whereas the fourth book is about Mass Trauma). This book is about serious and deeply felt trauma that has damaged the psyche of the person on multiple levels. It is not a “good feel” positive thinking book; it is about courage and resilience in the face of life’s worst scenarios.

Several of our authors have referred to the APA definition of trauma. Celinski in his chapter (Ch. 2) verifies that while some of these cases may appear to be less than deep trauma they do fit the commonly accepted understanding of trauma as applied to clinical practice as based on the definition in The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (APA, 2004).

There are four sections to this book:

Part 1: Trauma Theory
Part 2: Trauma and Struggle
Part 3: Struggle, Recovery and Renewal
Part 4: Moving Clients from Traumatic Effects to Recovery

The sections in this book are designed to lead from acknowledging the depth of traumatic experiences in life and the real damage that befalls people as part of our living in this world, through to exploring certain aspects of some struggles in and after traumatic events, onto considering how people recover, although they may continue to struggle while this recovery gets underway, and then go onto encountering or inducing renewal in their lives and those of others. The final section offers some ways of easing the traumatic effects and or finding ways to live with them at the individual level.

All the chapters were submitted to a peer review process to satisfy the international standards for the quality of publications in research and theory, with the exception of the Overview, the poems and the narratives – not labelled as chapters. Both the UK and the USA spelling systems were allowed within the volume, and the APA system of referencing was utilized throughout, with the exception of Chapter 14, where it would have been incongruous to list multiple sources via name and date.

THE GLASS IS HALF EMPTY

In “The Preface”, I wrote that trauma is an inherent part of living; it always has been and always will be. Some people, more than others, have terrible things happen to them and some of them encounter them more often than other people. Sometimes, it takes many years for them to get up again and to start living more freely and with joy or contentment. Then over time, they get knocked down again, or some other horrible event intrudes on their respite. “We fall down and we get up, we fall down and get up”, as writer William Barlow², the only


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survivor of a British army vehicle full of soldiers blown up in the Middle East, once conveyed to me.

Now this does not mean that I do not know that people do indeed change aspects of their lives after traumatic events, and in many instances after some traumas this is done in a life changing way; but many do not. There is the small matter of cumulative trauma over time, or life/identity shattering trauma which changes forever one’s world view, value systems, etcetera so much that life will never ever be the same as it was; certainly you can say that some of these people who have been traumatised adjust and make the most of it, and/or throw off old values etcetera and that act liberates them; but deep inside those people, they are not the same. As Kelly (1955) would frame it, the person has to reconstruct the self and it will not seem like the same self to the traumatized person (Gordon, 1978). The different person may look good on the outside, but the trauma imprints the brain and leaves a record on the soul.

There are those people who cannot help themselves from viewing life as an ongoing series of challenges and who continue to rise to the occasion with amazing resilience and resourcefulness; if you ask Elizabeth Tindle what she really thought about the dangers she encountered on the Galapagos Islands where she lived with her husband doing research for three years, she would say on reflection that she had no idea of how much danger she would encounter, or how much trauma she might have endured from having and raising a young child on the island. The story about the family on Galapagos demonstrates that a baby was nearly lost and indeed a colleague's child had died on the island and there were ever present dangers – on the surface it is paradise, but in paradise lurks sudden death.

One of the contributions has been included to demonstrate what Celinski and Allen attempt to prove, that there are transcendent personalities as demonstrated by individuals such as Elizabeth Tindle in her narrative: “Raising a Family in Extreme Conditions”. This does not mean that she is a person who sails through life untouched, as you can gauge from her poem “Ward 2E” which she wrote as she waited in a city hospital for the outcome of the treatment for her beautiful and equally resilient daughter who was at that time being treated for Hodgkins Lymphoma.

All the poems and narratives are personal human depth pieces. The backdrop to the cancer diagnosis in Ward 2E, which makes the poem all the more poignant, is that in 1983, her husband, Dr Robert Tindle, discovered the marker for the stem cell for all blood cells, and could not know at that time that this discovery would help his own daughter 20 years later. Elizabeth’s daughter, Danielle Tindle, obviously has inherited the resilience from her parents and appeared on several television channels arguing the case for budget funding for medical research not to be reduced and part of her argument was that she would not be here, were it not for medical research, as she had been given only a 5% chance of survival.

There are those who do nothing in the aftermath of a tragedy and then there are those such as Paul Schenk who do; taking meaning from it and taking action - you can try to pick him out from the bicycle riders in the photo. This is a narrative which encapsulates action in “Tribute: Ripples of a Kindness Remembered”; Paul features how meaning was made out of loss and how action was taken to ensure that those who have gone before us have not died in vein. Love underwrites all the special section pieces that have been included in the book (a factor not mentioned in the chapters, nor in the majority of research and academic papers across the world). Indeed, it is difficult to find even the word compassion mentioned in the social science literature. Without love and solidarity, there is no meaning; there is only survival. Solidarity however, a different word from love, is evident in several of the chapters

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in this book and certain chapters in the companion book about mass trauma (Gow and Celinski, in press).

**THE GLASS IS EMPTY**

Being encouraged here by Stevan Weine’s (in press) emphasis on the use of narratives in these circumstances, I am going to use narratives to elaborate on the ideas herein. In this chapter, I will present some scenarios in order to provide an opportunity for readers to ask themselves questions about how much they sense about the actual level of traumatic conditions of the persons depicted.

Maria was a lovely young woman who appeared as if she had everything to live for; young, fit, attractive, married with three beautiful young children with just enough money to travel and see new things in life and live for a few years in another country.

But Maria was not lucky in many ways; when her husband had married her, he had been impotent from the first day; she lost her virginity extremely painfully in the doctor’s surgery with a sharp instrument. It then took seven months for the marriage to be consummated and the husband remained impotent for the majority of the time, but was fertile enough to give her three babies.

In a new country far away from all their family, friends, values and morés, her husband took on a different personae and became mentally manipulative with his wife, was absent from home a great deal and started to have extra-marital affairs which he reported back to her in great detail. She had no one to talk to about these problems, but she did find a new life at the same time that she was experiencing this pain. However, from her own point of view, her whole sexual being was being frustrated and denied.

Then a few years later, while travelling, she became extremely ill with a serious and mysterious illness with severe complications and her life changed again for the worse; she was seriously physically ill, mentally burned out and spiritually bereft and she had powerful dreams during the fevers associated with the illness which proved to her unconscious (then made conscious) that her “God” to whom she had been faithful all her life had deserted her; not only had “He” deserted her but he had betrayed her and laughed in her face. [Her behavior, over the next couple of months, changed and she appeared to exhibit some psychotic behavior whether related to the psychological disintegration or the illness we have no way of knowing; this is however consistent with what Horowitz (1976) reports of trauma clients when they go through the acute crises stage.]

In addition to a failed marriage (she refused to follow her husband to another country to live) a serious illness, poverty as she had no income except what her extended family (now returned to her own country) could give her, she had lost the pearl of great price – her religious links and spiritual faith. She quickly disintegrated and found herself repeating these simple affirmations in order to survive: “I am Maria Lorene, I live at number 20 in Chateau Street; I am 30 years old, I was born in France and I have 3 children.” Her whole identity was under threat. However, when she reached the bottom of the pit of despair, she discovered a strange thing – she could not go any lower. Over time, she came up and vowed that never again would she sink to the bottom of the pit of despair again.
It took more than two years for her to physically recover her strength such was the power of the illness and the psycho-spiritual crash. She was never the same person again, but she learned many things and became freer in many ways, and went on to live her life and do many wonderful things and remarry satisfactorily. Indeed, she became very successful in all the endeavours she undertook, had many friends, and attempted challenges that most other women would never even dream about. Later, when she reviewed that time in her life, she maintained that her core values had shifted and life was never the same again and she considered that this was a loss which, while she did not think often about it, was still there.

This is a story of normal traumas that people go through in life, except for the added disintegration of the personality episode which was later medically diagnosed as being brought on by the serious physical effects of the illness on her whole being. There are many worse traumas, and in this book we cover just some of those.

But let us look again at this narrative. This may be a story of resilience because when nearly all of her resources had disappeared, she kept going. It may be more apt to classify it as a story of survival; she fought back and went on to succeed in life; you could even win an argument that here was a great example of post-traumatic growth; that had she not endured the traumas, she would not have attempted new things, or broken away from a bad marriage, or learned to stand up for herself and leave behind restrictive unrealistic values.

If we had more information, we could refer back to the work of authors in the first book in the series, and call on the wealth of ideas about how she advanced in various aspects of her life, although a part of her was still injured and might remain so for the rest of her life. How, although she endured trauma, she progressed in other ways in life and no doubt did not continue to have thoughts of “the pit”. We could claim she was resilient in spite of the trauma, but had no resources left to fall back on. That when she lost her values (or they were rearranged in the hierarchy of values), she found that other values gave her life more meaning. We could even stretch the growth concept further and say that because she could let go of the losses (most of the time), she was indeed reaching spiritual maturity, although along another path.

Others might say that because she still felt the losses at other times in her life that, in fact, she was refusing to face whatever it was that she had to accept and that this refusal was keeping her from flourishing as a full person; that she had not fully let go. However, she might respond: “I am thirsty”.

I am Thirsty: Drought and Death

Harry and his family had worked the cattle and cropping farm for 40 years as had his forefathers before him; in fact, the farm had been in the family now for five generations; Harry felt the weight of this reality in his decision making. But as the long drought wore on

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3 As Kelly (1955) would frame it, the person has to reconstruct the self and it will not seem like the same self to the traumatized person (Gordon, 1978).

4 In Chapter 2, Marek refers to Dabrowski, who considered this state as a form of ‘dissolution’. Recovery from such a mental state, according to Dabrowski, results not in a return to a previously supposedly normal ‘condition’, but necessitates achieving a higher level of mental functioning and creative output.

and their income fell annually and the bank loan increased along with the interest rates, there was still no rain. They introduced all the agricultural industry changes they could think of and others they had heard about, but still the yield fell on the crops and the cattle feed prices climbed. It did not help that nationally and internationally farmers were not appreciated nor respected as the providers of food to the world’s people whether in Australia, America, or Asia. It mattered not that the world was predicted to run out of food in 50 years, or that these effects would be felt by 2020.

When the bore water dried up and his wife had headed off to work in the nearest town about 100 kilometers away, Harry started to feel depressed; at 55, he had endured many losses but this slow death was eating away at his insides; the mail piled up unopened because he did not have the money to pay the accounts. The bank manager contacted him and asked him to come in and renegotiate the loan and to think about putting the farm on the market to pay off what was now a $600,000 loan. The previous week, the children had gone to join their mother to live in town to go to school there and his old cattle dog which had been bitten by a King Brown snake had died, and so when he came back to the farm house each night, he was tired and alone. He was torn between selling up and having nothing and sticking in there hoping that things might get better and that he could pay out the debt; but this season passed and the next one with no rain. He bought another young cattle dog for help on the farm and for company. Then his wife phoned him and asked for a divorce and, as chance would have it, the same week the bank manager phoned and said they could not wait any longer for the outstanding payments on the large loan and regrettably they would have to foreclose. He felt as if he had let down the living and the dead and was full of shame and self loathing.

A neighbor found Harry hanging by his neck from a shade tree in the back yard of the farm house over near the sheds. Near him lay his rifle and the dead body of his new young blue cattle dog, a bullet through his head.

Gow (2009) has written about the depth of agony that farmers have endured during long and deadening droughts in country like Australia, the USA and China, and the effects that this has on rural communities, as have Buikstra and colleagues (2011). It is clear that the meaning had gone out of this man’s life and life was no longer worth living, or that he felt so much shame at being a failure and letting down his present family and those who had gone before him, that he was of no worth; so he took his own life and left behind a legacy that he could not have imagined.

His son, on the 3rd anniversary of his father’s death, hung himself on a tree in a nearby forest – sucked into the slough of despond activated by the proof that life was not worth living.

Suicide is catchy. The devastation which can be widespread especially in times of slow disasters, such as long term droughts, affects whole families, their immediate communities, schools and churches. If life was not worth living for this man, is it worth living for the rest of us?

The legacy of these suicides has enormous ripples across the community and Anita Groos (Ch. 5) in “Trauma, Grief and Guilt in Suicide Bereavement” addresses some of the ways of helping those left behind to deal with the lack of answers, the threat to their religious and spiritual beliefs, and what can be done to help the bereaved and the traumatized family members and friends who may take years (if ever) to come to terms with this inexplicable loss in their lives. The triggers to trauma can be long and often not visible.
THE GLASS IS EMPTY AND I AM THIRSTY

Trauma and abuse is one of the areas about which a lot has been written in the past 30 years. Leigh Hodder and Kathryn Gow in “The Long Term Effects of Childhood Sexual Abuse” (Ch. 6) point out that the long term effects of CSA on victims are far reaching and more recent research on the impact of early trauma on the brain supports the earlier thesis about the effects on the brain of such abuse.

Julie Bennett and Ron Frey explore an even more taboo topic “The Deep Trauma of Secondary Victimisation: Parents of Sex Offenders” (Ch. 7), with respect to the effects on parents of the criminal behaviors of their sons who have committed sexual abuse. In both chapters, it is evident that the identity of the victim is changed forever.

Another perspective referring to trauma is its conceptualization as a loss; and not just loss, but shame and loss of ideals and identity and a whole range of individual and societal norms. There is no doubt that rape of adults and children in war is diabolical, even if it is counted as part of the mechanisms of war; where the enemy is made to feel “less than”, devalued, annihilated etcetera. In peace, for adults, violent or pack rape can readily be seen as trauma, whereas it has been difficult for society to come to terms with the trauma of childhood sexual abuse because it is so insidious that no one wants to know. Only the victims tell us what that is like:

The participant did not tell anyone about the abuse at age 5, because she thought no one would believe her, and that she would get into trouble; she also thought the abuser would hurt her. She told her mother about the abuse at ages 13 to 15. Her mother told her she was lying. She also told a friend who told her mother. The participant then received a severe beating. (Quote from participant in Hodder’s Ph.D research.)

The chapter (3) by Linda Stocks and Kathryn Gow “The Role of Meaning and Purpose in Psychological Trauma: Insight and Reintegration” proposes a link between the effect of meaning and its impact on the brain. Cynthia Eriksson and Dow-ann Yeh, in their chapter (Ch. 4) “Grounded Transcendence: Resilience in Spirituality and Religion”, clearly believe that in “the face of tragedy, spirituality and religiousness are a complex part of resilience and resourcefulness.” Indeed the effect of specific traumas can be very detrimental to a person’s beliefs. In certain situations, exposure to trauma can lessen spiritual well-being, vis a vis the case of Maria.

Whether or not affiliating with a religion or actively practising one makes a difference in terms of coping following disasters, Catherine Pritchard and Kathryn Gow (Ch. 12) reveal that whether or not one belongs to a religious group or not does not make any difference in terms of coping self efficacy following a natural disaster.

Medical Traumas

Some physical traumas that happen to people may involve them in medical procedures and hospital visits more than the normal population. Additionally, in our modern world, medical technology offers treatments for cancer, and there are now possibilities of organ transplants, as well as the possibility of living longer with serious illnesses. While modern
advances in technology provides wonderful opportunities for people to live longer and lead more active and meaningful lives, there is still the effect of a cancer sentence in terms of psychosocial distress. Bronwyn Morris and Jane Shakespeare-Finch, in their chapter “Psychosocial Experiences of Cancer: Surpassing Survival and Recognising Posttraumatic Growth as Well as Distress” (Ch. 15), point out that for many cancer survivors, depending on the severity of the diagnosis, they learn and grow from the trauma, and that most signs of PTSD lessen about three months after receiving the initial diagnosis.

Jillian Kaisar and colleagues, in their chapter (13) “A Qualitative Study of Adversity Activated Development and Resilience in Adolescents and Young Adults with Congenital Heart Disease and their Parents”, explore the complexity of emotions and coping strategies for young people with CHD and that of parents who suffer as well. The reactions depend on a range of factors which are important to understand for health professionals and those close to them.

To outsiders who have never dealt with organ transplants, we see the opportunities and not the distress and trauma that go with the process of ‘waiting on death row’. Catherine Bart in “Contribution of Integration Personality Factor in High Stress Medical Procedures: Organ Transplant Adjustment” (Ch. 14) explains how lonely it is on death row [editor’s expression not the author’s], because “The identity of the ‘transplant survivor’ and consistent medical monitoring by transplant teams reinforce the uniqueness of their situation, while the deaths of other candidates or recipients reminds them of the fragile nature of their situation.” Her work here informs us greatly about what confronts the organ recipients and those waiting for organ donors.

THE GLASS HAS SHATTERED: I AM HERE

In war and genocide experiences, a person’s beliefs, values and reason for being often shatter. Kathryn Gow (Ch. 20) when writing about her experiences in Cambodia, focuses on what that might mean in terms of appropriate counselling approaches. The flow on effect over 30 years of war criminals not being brought to justice (as distinct from being seen to be brought to justice) has affected the whole society deeply, leaving it as a place of psychosocial dissociation (method of coping), distrust (a sensible reaction) and psychopathology (the negative impact). Gow uses the printed testimony of some of the people who went through the Cambodian genocide to give better insights into the traumatic effects on the Cambodian individuals and society.

The trans-generational impact of deep trauma, in terms of depression and distress, is evident in Cambodia, and with reference to the Nazi holocaust survivors is explored by Janine Lurie-Beck and colleagues in their chapter “Depression and Trauma among Holocaust Survivors – A Meta-Analytic Review” (Ch. 10). The understanding of how traumatic effects on one generation passes down to later generations has not been explored in any depth in psychology, although the discovery of the DNA cells as a source of continuity gave medicine such an opportunity.

Sandy Sacre reveals what returned soldiers do in their dreams and nightmares brought on by the distress of war service in “Sleep Disturbances and Nightmares in Combat Veterans” (Ch. 11). She concludes that “many factors associated with deployment, combat and post-
deployment are likely to lead to disrupted sleep patterns or exaggerated focus and concern about sleep loss and these are in turn highly likely to contribute to the development of chronic sleep disturbances and disorders.”

Disentangling cause and effect is very difficult in research and Marek Celinski and Lyle Allen attempt to do this in relation to the individual characteristics of resourcefulness and resilience in their chapter relating to traumas on “Resilience and Resourcefulness in Predicting Recovery Outcome” (Ch. 8). In this text, Celinski and colleagues introduce certain scales that they have utilised in research as rehabilitation and trauma measures: Rehabilitation Survey of Problems and Coping (R-SOPAC; the Resilience to Trauma Scale (Research Edition) (RTS-RE) and the Resourcefulness for Recovery Inventory (Revised Edition) (RRI-RE). They argue that “resilience represents an ability of the self to absorb and deal with trauma and adversity, and is the flip side of catastrophizing and generalized distress which lead to a breakdown of defences and result in being overwhelmed”. In the chapter on predicting therapy outcome following psychotrauma and physical injury, they also present evidence that resilience is instrumental in facilitating recovery from trauma.”

Since the increase in claims for PTSD following accidents, wars, and natural and manmade disasters, a lot of research has been concentrated on determining predisposing characteristics for PTSD, as distinct from resilience. In their chapter (9) “Social Support, Sociotropy and Autonomy as Contributors to Traumatic Stress Disorders”, Richard Hicks and Sandra Lorensini report on work they have done with respect to the relationship of aspects of sociotropy and autonomy with traumatic stress disorder.

There is No Glass: Detachment. Buddhist philosophy, along with many of the eastern traditions and true meditation, teaches us that if we can only detach from earthly concerns, then we can stay at peace and experience joy; that means giving up all earthly values in many ways and not being concerned with what happens to the things we own or even with our family members and friends. Detachment is not, however, the same as dissociation or suppression or forgetting. Teaching mindfulness (see Marra Ch. 17) may, however, be very helpful in treating some clients suffering from specific traumas.

LOOKING THROUGH THE GLASS MORE CLEARLY

Assisting and Facility Changes Post Trauma in Individuals

This text features various modes of therapy for individuals who have been traumatized in different ways, and chapters on EMDR therapy (Solomon and Shapiro), Mindfulness and DBT (Marra), Hypnosis (Gregory), and Psychodrama (McVea) are depicted as some of the ways in which therapists might be able to help people who have been traumatized for a range of symptoms and behaviors. Readers might note that behind each therapeutic approach is a philosophy of healing, an understanding of the mind and the psyche which is being tapped into in different ways by these distinct modes of therapy. Each of these chapters offers key resources to both therapists and clients.

Roger Solomon and Francine Shapiro in “EMDR Therapy and Adaptive Information Processing: The Development of Resilience and Coherence” (Ch. 16) outline how EMDR therapy can be utilised and note that the “AIP model helps explain why some people have a

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strong sense of resilience, coherence, resourcefulness and self-empowerment and others do not. Thus, it follows that EMDR therapy may be used to help clients regain these personal attributes when they have been impaired by a traumatic event or other disturbing life experience.” EMDR therapy has been utilized successfully with traumatized war veterans and offers appropriate help to trauma victims.

In his Chapter (17), “The role of Mindfulness in treating trauma clients through Dialectic Behavior Therapy”, Thomas Marra notes: “Extreme traumas emotionally and behaviorally paralyze the individual, leaving volitional behavior impaired and psychological comfort compromised. Trauma causes neuronal, neuroanatomical, and psychological impairments that ill-equip the patient to overcome past experiences and make negative feelings linger. With Mindfulness practice, the patient is able to decrease secondary emotional reactions that increase emotional intensity, increasingly expose themselves to the current environmental events that may prompt new and different emotions, and thus decrease the negative feedback loop of memories, somatic arousal, and intensity of affect that make past trauma present realities for the patient.”

Bruce Gregory in “Utilizing and Integrating Mathematics and Physics in Treatment for Recovery from Trauma and Abuse” (Ch. 18) makes a case for the utilization of principles from mathematics and physics because they “can support the use of new, stronger containment in the treatment of trauma and abuse by utilizing principles of the polarity approach for symmetry breaking, safety, and new forms of comfort that are required in the face of deeper, broader and more complex natural disasters.” The material is both challenging and fascinating.

In action mode, Charmaine McVea (Ch. 19), “Activating Spontaneity to Heal Childhood Trauma”) believes that “Client qualities have a major impact on therapeutic change (Lambert and Barley, 2001), and in psychodrama, as in other therapies, the healing process begins well before the therapeutic intervention, when the person recognises that they are ready to face a deeply troubling aspect of their functioning.” Hudgins (2002, in McVea, this volume) calls this “restorative functioning and suggests that a protagonist needs to be able to access personal, interpersonal and transpersonal resources to process traumatic material therapeutically.”

In Chapter 20, “Treading carefully: Avoiding Minefields in Therapy in Cambodia”, Gow warns that preparedness to “descend into hell” is necessary to confront the devils and ghosts, and immense compassion, understanding, and forgiveness for real or supposed participation in the cause of the sufferings of others is essential.

Within the four sections of this book, we trust that you will find something of value that adds to your knowledge, skills, and understanding of individual trauma, both in terms of its impact and/or a person’s recovery following trauma.

REFERENCES


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Overview: Conceptualising Trauma as a Deep Wound…


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Chapter 2

Challenge-Resilience-Resourcefulness as the Essential Components of Recovery

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Abstract

This chapter presents a conceptual framework which embraces three consecutive components of the therapeutic process in post trauma conditions; the first stage entails the absorption of the trauma content in which resilience, that represents the threshold for psychopathology, allows the viewing of the newly created situation as a challenge (i.e., as a life task assigned to the individual and/or as a question to be answered through an individual’s action); such a mindset creates an opportunity for the discovery of one’s autonomy which, together with a need for self-development, would lead to a broader use of the resourcefulness of the self (either pre-existing and underutilized, or which still needs to be acquired or further developed). At the final stage, an individual who has suffered traumatic emotional disintegration is expected to achieve a secondary integration based on discovered values and personality ideals on one hand, and the requirements of the new situation on the other. The Resilience to Trauma Scale - Research Edition and Resourcefulness for Recovery Inventory – Research Edition are presented as newly developed instruments which identify strengths and weaknesses of resilience and availability of personal resources (or relative absence of same) in trauma clients.

Keywords: trauma, disintegration, challenge, resilience, resourcefulness, recovery

Introduction

This chapter presents a perspective that adversity and losses should not necessarily be psychotraumatic, as long as people are able to cope with them. By contrast, not being able to cope usually means that the event caused disunity between intention, purpose, and sustained

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level of activity which manifests as out-of-character emotional reactions (potentially even
harmful to the individual’s interest); these reactions usually intend to release the inner
tension, rather than being an expression of a more holistic understanding of one’s own
situation and condition. If such a regressive way of functioning continues over an extended
period of time, the trauma state becomes a chronic condition which would likely interfere
with various aspects of social roles and with the pre-traumatic way of life in general. In order
to understand some ubiquitous ways of dealing with traumatization, firstly I will present the
mechanisms of regressive disintegration followed by a description of how recovery becomes
possible.

Conceptualisations of Trauma

The commonly accepted understanding of trauma, as applied to clinical practice, is based
on the definition from The Diagnostic and Statistical Manual of Mental Disorders, Fourth
Edition, APA (2000) which regards a traumatic event as being caused by witnessing or
confronting a situation that involves actual or threatened death or serious injury, or a threat to
physical integrity of self or others, following which a person’s response involves intense fear,
helplessness or horror (p. 463).

Another perspective referring to trauma is its conceptualization as a loss. In this case, the
emphasis is moved from the immediate recognition of an event as threatening, to a longer
term perspective with consequences pertaining to loss of bodily functions, material status,
social positions and preferred interactions, etcetera, which are experienced as losses only
when the full or broader impact of the event becomes more evident. Harvey (2002)
recognized that losses become meaningful because of the person’s prior emotional investment
in some objects regarded as desirable.

In Celinski and Gow’s (2005) prior conceptualization of trauma, the focus was on the
internal processes as it was originally proposed by Everstine and Everstine (1993) who regard
trauma as the manifestation of impaired defence mechanisms. They explained that under
usual circumstances, a person’s sense of stability is protected by an integrated system of
defences such as repression, denial, and rationalization which are modified to meet the
demands of a wide range of life events and experiences, and which provide resilience that is
useful in deflecting many assaults on the person’s integrity; defence mechanisms are also
needed to promote recovery from emotional wounds.

Celinski and Gow (2005) pointed out that the defence mechanisms become important to
people by the sheer effort that is invested in maintaining an ego-based image of reality that
allows for a sense of importance, power and control over events. There is a further tacit
assumption that the established order and routine should continue, and the longer these exist,
the greater is the sense that reality is familiar, manageable and secure. This state of mind
almost inevitably represents an over-inflated sense of confidence in the accuracy of the
mind’s representations of reality and in having a sense of control over life. The reason for
these being regarded as some milder form of delusion is that the mind cannot take into
consideration and integrate all the relevant, but discrepant, information and ensure
uninterrupted functioning; the need to achieve some consistency in our functioning, while
facing conflicting ideas and states of mind, is accomplished through defence mechanisms that
allow for continuation or for re-establishing involvement with the external world if this was

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disrupted. In other words, the need for internal cohesiveness and subjective comfort usually prevails over a sense of chaos, disunity and anxiety, but the price for this is that often the recognition of truth suffers.

These prior formulations of trauma have been further extended in the current chapter with the insights provided especially by Frankl (1958; 1966), Mandler (1997) and Antonovsky (1990). The main concepts inspired by these three authors’ thoughts as being relevant to the experience of trauma are: values, inner cohesiveness, and a sense of unity with the world within and outside. A sense of unity with the social environment is possible because of social intelligence (Palucka, et al., 2011) and empathy that enable us to understand other people’s thoughts and reactions; hence emotional and social intelligence support continuity of functioning as well as being ourselves; these are also resourceful qualities. The importance of taking all these constructs into consideration is quite obvious from the clinical and general practical perspectives, as they refer to life narratives which are prevented by a traumatic event from expressing some value (Celfinski and Allen, 2011a).

Mandler (1997) referred to two definitions of values as organizers of people’s activities which are especially relevant to our current conceptualizations of trauma as a disruption of inner cohesiveness and unity with the outside world.

In Rokeach’s definition, values are described as enduring, prescriptive and proscriptive beliefs in the preferability of modes of actions and of the end-state (p. 88), whereas Kohler’s definition regards value as a recognition of demands determined by the Gestalten – the inherent patterns of our physical, neural, and phenomenal worlds. In Gestalt, there is recognition that facts or events do not just exist or happen separately, but they relate in the specific context to other facts giving the impression of their naturally belonging there and forming a larger or more complex structure unified by an underlying principle (i.e., a symmetrical arrangement).

In my interpretation, there is no better understanding of the Gestalt than our body image. Each part has no separate existence and it is of little value apart from the whole body where it fits with the acceptance of their natural belonging. Some parts are, however, more important than others for the survival of the whole organism or for giving it some purposeful direction (i.e., heart or nervous system). Thus, the value of the part is determined by their position within the broader structure of the whole system. From this perspective, trauma leads to the Gestalt being broken or disturbs its internal balance and then people rightly feel like something valuable is missing without which their sense of completeness and familiar adequate functioning cannot be restored, and a feeling of disunity and discrepancy develops. A mechanical clock is another good example of the humanly designed Gestalt, in that even if only one little screw is missing, the whole structure cannot deliver very important and valued information about our daily timetables.

Everstine and Everstine (1993) noticed that the more intense the person’s experience of the event, the greater the trauma may be. In this respect, it may be further commented that the type of experience and the severity of ensuing psychopathology which a person would have to endure depend on the meaning of a personal narrative and the value that a person was expressing through his/her own deeds at the time when the traumatic event occurred.

To give an example, let us consider an imaginary scenario which includes various narratives that are an expression of certain value-oriented activities; the point being made here represents the relationship between the severity of trauma and the degree of emotional...
involvement in a specific activity. I can imagine how traumatized I could have been, had I found myself in the following situation:

The accident happened when I was going for a new job interview. The job which I had hoped to get seemed to me to offer the fulfillment of my professional expectations. I was aware that this job was part of the newly created economic opportunities after a long recession and could make sense of my immigration to a new country considering that, due to political instability, I had left my well-paid and respectable position in my native country.

Let us further consider in my imaginary scenario what could have been the meaning of various narratives that led to the accident and that would also likely cause serious emotional reactions after my accident in which I suffered only minor injury and I expected to recover in a few days. As the economy grew, I managed to observe increased opportunities for myself and was very hopeful that I would find suitable employment. When I received an invitation for an interview for this job, I felt that my dreams had finally come true. My whole life and professional experience suited the job description very well and I was almost sure that I would be recognized as possessing the appropriate skills. This job would make sense of my decision to emigrate from the country, where although I felt fulfilled professionally, I considered that the government policies were oppressive and incompatible with my views.

Thus, we may recognize first how multi level narratives pertaining to my professional aspirations and expectations, along with broader narratives referring to economic and government policies, impinged directly on my job seeking activities that ended in the accident; these narratives manifested as nervousness before my departure and in fear that I may be late, and also prompted me to take certain streets which would allow me to drive faster, while I was not yet familiar with the city and was less relaxed than usual. Each narrative had its meaning and value to me, and disturbance on one level resulted in other narratives being prevented from manifesting as intended which meant that the most important narrative that could lead directly to my employment was interrupted. Thereafter, I would likely be angry at myself and the circumstances, preoccupied with what I did wrong, worried whether the opportunity was lost and if the job have eventually gone to somebody else; indeed, I may have become depressed. Personal experiences and emotional reactions from a similar event would be different for somebody else whose accident (that also occurred on the way to the job interview) stopped this person from exploring alternative employments because he was totally dissatisfied with the steady job that he already had.

**Cognitive Discrepancy, Regression and Disintegration**

According to Celinski and Gow’s (2005) understanding of trauma, the individual’s response to discrepancy triggers the natural mind’s tendency to reconcile opposite views that were internalized and creating discomfort. The prospects of reconciliation through regression along the control-helplessness mind continuum offer an easier way out, wherein helplessness manifests as a suppressed ability to act against the pressure of the unfavourable circumstances or a person’s own medical condition, especially if the more cognitively advanced solution is not readily available.

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If regression occurs, logic and knowledge sometimes become impaired or “forgotten”. As “amnesia” is only partial, and awareness of discrepancy creates discomfort, people seek conflict resolution in doubting their previous values or in finding justifications for their suspension from the perspective of a powerful majority or the prevailing views, or start to also mistrust other values and their own judgements. There is a further question of how deeply destructive this could be. In the example given above, an immigrant may question the very purpose of coming to a new country and, even more generally, the value and sense of life which destroys well-intended and thoroughly planned initiatives. The conclusion of such soul searching may be: “I was wrong with my decisions, I was too optimistic, I deluded myself with my dreams, I lost everything I ever wanted to achieve and there is nothing which may replace what I lost; therefore, I am incapable of understanding reality and/or dealing with it; even further, I may feel that I lost the meaning and purpose of life and value of my own existence.” In the end, the discontinuity of the important narrative and ensuing discrepancy created a sense of disunity (alienation) with the outside world and with one’s own self, compared to what existed before trauma.

Grove and Panzer (1991) noted that there are multiple levels on which traumatic experience acquires its meaning. One is a descriptive or narrative level which usually contains metaphors and symbols related to the inner process linking external situations with internal feelings. However, there is also an epistemological level that enables a person to discover “how the person knows what he or she knows”. It refers to familiar attributions, concepts and ideas that reflect the physiological or mental state in a certain familiar symbolic manner. Underlying the previous two is the ontological level which interprets reality, defines morals, beliefs, and societal rules, and understands the nature of being that comprises the sense of self. Grove and Panzer (1991) explain that “the ontological level is like a great underground stream. It is the source that breeds many different epistemological experiences and has far-reaching implications. It is a common denominator of many experiences” (p. 30). By becoming a victim of, for example, war, rape or serious accident, a person’s prior perspective of the self and reality is shattered which creates a need for addressing various existential issues on the ontological level further described by Grove and Panzer (1991) as specific therapeutic techniques.

**Resilience and Resourcefulness Constructs and their Measurement**

Such an understanding of trauma provides a distinct perspective on resilience, personal growth and generally the meaning of life: people’s sense of “normal” functioning is supported by an inner cohesiveness and naturally occurring positive bias regarding the value of life and one’s own mastery over it (Celinski and Pilowsky, 2008). If these personal characteristics continue unchallenged, these may help people achieve their highest goals that are beyond the reach of others who are self-doubting and hesitant. However, genuine resilience starts with the appreciation of reality as mysterious and unpredictable, where the meaning and purpose of life are constructed through painful efforts and in spite of seemingly overwhelming evidence to the contrary. Resilience represents tolerance and a high threshold for development of psychopathology under the pressure of the circumstances. Those who succeed have acquired the dialectic understanding and integration or at least some balanced perspective on the opposite forces that represent the dynamics of life, especially between a desire for
comprehensibility, order and stability on one side, and the developmental forces opening
people to novelty, exploration, challenge with a sense of freedom and hope in manageability,
on the other.

Based on these considerations, it is a therapist’s expectation that traumatized people will
follow the natural mind’s tendency to establish some new Gestalt (understanding of
themselves in relation to past experiences and present reality). The basic question is about the
organizing principle around which a new Gestalt is developed; will it still be based on faith in
the meaning and value of life and oneself, and value of efforts, or will the opposite views
prevail? Depending on the answer, different narrative trajectories will be followed as
documented in Celinski and Allen’s (in press) chapter: “Resilience and Resourcefulness in
Predicting Recovery Outcome” that is presented in our Mass Trauma book. In that chapter,
positive outcome from therapy for psychotraumatic and physical injuries was predicted based
on fundamental values, intentionality, hope, sense of self-efficacy and trust in health
professionals that were identified on the initial assessment (prior to the beginning of
treatment) by administration of the Resilience to Trauma Scale – Research Edition (Celinski,
Salmon and Allen, 2007) and the Resourcefulness for Recovery Inventory – Research Edition
(Celinski, Antoniazzi and Allen, 2007). Given the predictive significance of these
psychological constructs for recovery, therapeutic efforts should aim at the initial
identification and further strengthening of these resilient and resourceful characteristics so
that they become the organizing principles for the new post-traumatic Gestalt.

The new Resilience to Trauma Scale – Research Edition presents in a structured manner
the ways in which trauma is experienced, comprehended, and dealt with: for this reason, this
instrument may serve both as a guideline for clinical interviews and as a reference for
therapeutic interventions.

In this measure, from the cognitive perspective, trauma manifests in a personal reaction
to the perceived discrepancy between “how it should be” and “how it actually became” which
is undesirable and unexpected; at the very worst, such a contrast would result in cognitive
dissonance with no subjective vision of how to make some sense of it all again. In more
severe cases, from the cognitive perspective, trauma causes the loss of meaning
(understanding) and value and purpose of one’s own existence. Behaviourally, at its extreme,
trauma represents destruction of heuristics which refer to experience-based techniques for
problem solving, learning and discovery. The most fundamental heuristic that is applicable to
the new situation is the trial and error approach (en.wikipedia.org/wiki/Heuristic), but such an
approach lacks certainty and exposes an individual to potential new failures or traumas, and
people become discouraged from “trying again”. Emotionally, the perception of extreme
vulnerability and expectation of further traumas or negative events manifest as the negative
bias in that the adverse situation of the present is projected onto the future which causes an
extreme level of anxiety known as catastrophizing.

Behaviourally, at its extreme, trauma represents destruction of heuristics which guide us
through life corresponding to a sense of helplessness giving rise to the future being
visualized in a fatalistic way as an inability to change the situation for the better.

The prospect of recovery in such instances depends on accepting any human value as the
starting point in order to establish some connection with the life outside and the unity within,
so that some sense of inner integration and manageability may be restored. In this respect, a
case of a truck driver who accidentally killed somebody in a traffic accident may be a good
example. When I started to treat this man, he was very depressed, withdrawn and suicidal. His

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recovery began with his following advice that he start to talk to his dog whom he took routinely for a walk, as he claimed that only his dog understands him (this sounds strange but, in my view, a therapist may utilize whatever opportunity presents itself with the client to promote better functioning). Subsequently, he gradually managed to establish some connections with his young orphaned grandchildren and built a playhouse for them. He managed to forgive himself, knowing that nobody blamed him for the person’s death and he returned to driving a truck some months later.

In Celinski, Allen and Gow’s (in press) chapter in a companion book on mass trauma (Assessing Resilience in the Aftermath of Mass Trauma), we document the mediating impact of resilience on symptoms of anxiety, depression and PTSD which supports the perspective that the impact of trauma is filtered through internal processes (overall labelled as resilience). In turn, a description of Resourcefulness for Recovery Inventory – Research Edition (RRI-RE) and its mediating effect on symptomatology was presented in a previous volume in Celinski and Allen’s (2011b) chapter: Resourcefulness as the Art of Succeeding. In essence, the theory underlying the RRI-RE views recovery from physical and emotional conditions as the ubiquitous process that begins with assessment of both the degree of victimization and of the potential for development of the opposite health-promoting personal characteristics, in cases of a physical and/or psychological trauma or any negative health condition. This instrument measures 18 bipolar dimensions (e.g., control/ controlled; positive/ negative cognition; intentionality/ lack of direction; broadening awareness/ not informed; acceptance/ non-acceptance; integration/ disintegration, etc.). In this context, being a victim would be reflected on this inventory as a profile with a prevalence of endorsements on the negative sides of the bipolar dimensions that may have become a person’s “destiny”. By contrast, endorsements that changed the profile towards the “health-promoting pole” represent a person’s ability to “choose” health over illness that is reflected in the person’s cognitions, emotions and behaviours. This is in line with Antonovsky’s work (1990) and with Antoniazzi, Celinski, and Alcock’s (2002) study that describe factors promoting recovery. In the latter study, these factors were identified by asking patients from a large rehabilitation facility, as well as rehabilitation professionals, about factors promoting recovery.

At this time, I consider our original conceptualization of trauma (Celinski and Gow, 2005) as having been supported by subsequent studies and chapters in this book, and our other three books in the series.

In essence, trauma represents an individual’s psychological reactions to a perceived discrepancy that causes very uncomfortable tension between “how it is” and “how it should be” which refers to what worked in the past and has spontaneous tendency to be continued into the future. At the same time, in the very experience of trauma, there are also opportunities for re-evaluation, restructuring and recovery, if individuals switch to such a mind orientation.

**Traumatization as Mental Transformation**

Figure 1 outlines the process of traumatization and victimization which commences with an individual believing that one’s own understanding of self and reality is correct and sufficient for adequate functioning. It ends with a person feeling overwhelmed by forces beyond one’s control and by one’s own inability to change the undesirable situation which
constitutes the essence of victimization. At the core of this process lies the unavoidable inadequacy of the cognitive schema which has not allowed the foreseeing of possible ways in which the undesirable event and subsequent loss may have been prevented. Also, the inadequate cognitive schema has not permitted the choosing of the optimal action to minimize or to counteract the undesirable impact.

On the narrative level, a trauma establishes a sequential link between an event and a person’s reaction, similar to the way that classical conditioning results in one-trial-learning. Subsequently, a person may become re-traumatized by the reminders of the original traumatic event which elicit a sequence of mental states leading from relatively good functioning to being overwhelmed by fear, a sense of dread, expectation of dying, being injured or being humiliated and feeling helpless to prevent undesirable consequences.

Figure 1. The Nature of Psychotrauma.
The re-experiencing of a trauma through flashbacks represents a “split-off” experience from the rest of the personality (Van der Kolk, 1996; Van der Kolk and Fisler, 1995) leading to a further disintegration of the self. As a trauma has a tendency to expand its negative impact by its reassociation with new situations and ideas, a natural way of coping with the re-experiencing of the trauma is through avoidance of any circumstances, thoughts, or images, which may trigger the sequence of unpleasant experiences thereby further locking up the person’s own recuperative powers.

As a consequence, he or she becomes withdrawn, apathetic, and depressed – a state which typically is described as the ‘numbing’ stage of ASD (Bryant and Harvey, 1997) and PTSD. With compulsive repetition of the whole sequence, a sense of inevitability develops which leads to chronicity (see next section for elaboration on this point).

**Trauma and Resources of the Self**

In Celinski and Gow’s 2005 article, we described some basic mechanisms showing how the mind deals with adversity. In this respect, Schiffer (1978) is referred to as explaining how the simultaneous presence of the two incompatible images - one reflecting the current state, and the other the pre-traumatic state of affairs - results in a sense of loss which people wish to compulsively undo. To this end, a concept of resourcefulness is helpful as facilitating the “split off” experience to be reintegrated with a broader awareness of the self and the reality outside to create a new Gestalt. Repetition compulsion continuously reminds us to make such an effort. If we succeed, personal growth is usually achieved. This is, however, also a painful process which people would prefer to be spared (starting with the admission: “I was wrong”).

In analysing this problem in his book, *The Trauma of Time*, Schiffer (1978) advocated that repetition compulsions, regarded as a natural activity of the mind “designate, a passive reproduction compelled by unconscious instinctual forces which had remained outside the organization of the ego” (p. 27). This mechanism brings forward the memory of the trauma in the way of flashbacks and images in order to force the mind to develop a creative response to reality (Van Der Kolk, 1996).

Nature itself helps us to survive and grow through trauma by not allowing it to be easily forgotten. The Zeigarnik effect described in various experimental and clinical reports including research on those who are intellectually challenged (House and McIntosh, 2000), refers to the mind’s ability to remember better the tasks that were interrupted, in comparison to those that were fully completed allowing them to be forgotten. In explaining this phenomenon with respect to prospective memory of an incomplete task that required rearranging of letters on a given word to produce a new word (anagrams), Mantyla and Sgaramella (1997) stated that the observed enhancement of memory performance attributed to interruption was due to a possible increase in the level of activation of the underlying intention (in the case of PTSD, this refers to the intention to complete the action interrupted by the traumatic event) which, in turn, increases the individual’s sensitivity to identifying the target event (in the case of PTSD, it would represent hypervigilence with respect to any reminder of the original traumatic event). Conversely, completion of the task (or closure) is the necessary condition for forgetting (Ietswaart, 1995) and is in line with the major premise of psychoanalytic therapy that aims to bring to awareness “unconcluded actions” in order to
accomplish some resolution and thus to permit psychic growth (rather than to remain fixed on the unresolved issues).

Referring to the records describing the experience of a man who survived a concentration camp ordeal, Schiffer (1978) stated that “if he were alive today, perhaps he might have yielded to the suggestion that in his recurrent dreams of return, indeed in his very writing about them, he was driven to capture the macabre, to relive events enforced upon him in the hope that they would become transformed, and thereby allow him a mastery over their traumatic impact” (p. 2).

A traumatized person, according to Schiffer (1978), is one who is living a present, filled with the horrors of the past that have become projected onto the future (p. 48). The more compulsively the individual clings to his/her inadequate and incomplete pre-traumatic view of self and/or reality (our schemas are always inadequate and incomplete, otherwise we would have been able to prevent undesirable events or minimize their negative impacts without professional help), the more intense becomes the feeling of dissonance between the actual state of affairs and how “it should be”. This results in psychopathological manifestations such as depersonalization which metaphorically means “What I have become is not me” or derealization which is a denial that reality has changed and is experienced like a dream-like state. Schiffer (1978) regarded these phenomena as the mind’s magical attempt to “kill the time” in order to maintain an illusion of the self’s stability and continuity.

An experience of flashbacks could reflect the desire to complete the “interrupted action” in accordance with the original intention, undo the loss, or to “rewrite the history”; for example, a man hit by a truck while crossing a street, and who subsequently experiences flashbacks about the event, is believed to seek through resurfacing memories of the event, a strategy enabling him to complete the crossing of the street in a safe manner, or to magically change the narrative leading up to the accident. These desires, along with constant and painful reminders of what was lost, constitute a person’s very basic motivation to rewrite the story which creates a milieu for therapeutic intervention. A lack of ability to actively utilize “the writing skills” keeps the person in a continuous state of helplessness and inadequacy. Therefore, in terms of recovery, a traumatized person’s state of mind needs to be similar to that of an army general after a battle defeat. The generals usually do not abandon the hope for either retaliation or for changing their defeated status; rather, through countless re-analyses of the battlefield lessons, they transform their failures into valuable experience enabling them to be better prepared when the opportunity arises. If generals have done their work properly, the sense of unavoidable defeat has been replaced with new energies, hope, and the development of measures which may increase the probability of a future victory. Quoting Eissler, Schiffer (1978) observes that “just as the mind can anticipate future contingencies, so it can work in reverse; thus, an individual’s discovery of activity can have a retroactive healing effect by dissolving the past trauma” (p. 40).

According to Schiffer (1978), repetition compulsion acts in the ultimate service of maturation and restructuring. Elements from both the trauma and self become resynthesized through the ego’s manipulation; this results in false recollection because rather than being the mirror images and impressions of a bygone actual event, the human memory recalls events in accord with the changes undergone by the remembering ego, the latter being no longer identical to the one which initially experienced the event (p. 45).

Therefore, in order to achieve a successful resolution of traumatic experiences, the ego’s more mature and more advanced knowledge, adaptive skills and reality-oriented intentions
should revisit the past traumatic memories enabling for better understanding of the motives, cognitions and emotions, and for reintegrating them with the current level of resilience and resourcefulness. In the end, from this creatively re-sensitized image of the past experiences with the current ego content comes a broader understanding of oneself and reality, and a clearer orientation for future developmental activities. Specifically, recovery requires a change in one’s way of thinking from sequential-fatalistic to hopeful and to being broadly aware of simultaneously existing various behavioural options related to the original intentions that were abruptly interrupted by the traumatic event (see Figure 2). A simple example may be that a person who was painting a high rise building and was seriously injured when he fell from the scaffolding, may subsequently compulsively visualize grabbing at the stable metal poles just before he falls; an alternative visualization could be checking the balustrade before commencing painting and leaving the job site to report unsafe work conditions.

In the process of undoing the loss, the passive repetition compulsion of the traumatic experience has to be reviewed regarding its multilevel meaning (Groove and Panzer, 1991) with a particular focus being on its ontological significance, in relation to the resources of the self. These resources are primarily to be sought as various types and levels of freedom (Celinski, 2004) that allow a person to intentionally influence his/her internal and external environment and to “complete” the interrupted task.

In his book, Freedom and Destiny, Rollo May (1981) emphasises the major dilemma of the human mind and human existence. May postulates that the purpose of therapy is not happiness or removal of anxiety, but “to help people become free to be aware of and to experience their possibilities” (p. 20). According to May, “Problems are the outward signs of unused inner possibilities” (p. 20) … Any good therapy – is a method of increasing one’s awareness of destiny in order to increase one’s experience of freedom” (p. 23). May defines “destiny as the pattern of limits and talents that constitutes the ‘giveness’ in life. This may be on a grand scale like death, or on a minor scale like the gasoline shortage…it is in the confronting of these limits that our creativity emerges” (p. 89). “The first and fundamental challenge for a person in therapy is to confront his fate as it is, to reconcile himself to the fact that he did receive a bad deal, to know that justice is irrelevant, that no one will ever make up for the emptiness and the pain...The past cannot be changed – it can only be acknowledged and learned from. It is one’s destiny. It can be absorbed and mitigated by new experiences but it cannot be changed or erased” (p. 35). May further remarks that to have an impact on destiny, one has to become aware of and acknowledge one’s destiny which is followed by a need to confront and challenge, and eventually rebel against it.

“We know in psychotherapy that times of despair are essential to the client’s discovery of hidden capacities and basic assets…There is surely value in the client’s experience that he has nothing more to lose, so he may as well take any leap that is necessary” (May, 1981, p. 51)...“In the freedom of being…new discoveries about oneself, new flights of imagination, new visions of what the world and living in it might be” (p. 58) become possible. Dr. May quotes Bernard Russell who said that: “in the realm of the mind, there are no limits” (p. 62) and concludes that in therapy the central purpose is to help the patient discover, establish, and use his or her freedom. (p. 64).

A real life representation of these ideas may be found in a metaphor referring to Robinson Crusoe’s situation (Dafoe, 1998) when, after his ship was wrecked, he was thrown by the waves (forces beyond his control) on to the beaches of an uninhabited island. It was then his choice and his responsibility to either make for himself a life on the island or to wait
in passivity to be rescued, or more likely to die (as the rescue came only many years later). “The freedom to act confirms only the responsibility to act” as Dr. May says: “In this sense, freedom and responsibility are united” (p. 100).

However, these two concepts create moral and cognitive challenges for a traumatized person, as they imply the necessity of accepting the ownership of the problem which was imposed against his/her will and of making an effort to find solutions which otherwise would not be provided. In this sense, one of the best metaphors was presented as a dream by a female client who became psychotraumatized as a result of a car accident: “It is like having been raped and made pregnant, and now I have to take care of a child I did not want.”

Figure 2. The Dual Nature of Recovery.

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Taking responsibility first requires acceptance of the traumatic experience as a novel situation which is the source of learning inspiration and provides a possibility for an intentional and desirable self-transformation (Rossi, 1996, 2002) leading to changes even at the level of our genes that shape our physiological expressions. In other words, if traumatized individuals wish to give themselves an opportunity to more effectively deal with the traumatic situation and its sequealae, they have to regard it a challenge (a life task demanding that some life question be answered or controversies be resolved). This process can be facilitated by skillful clinical interventions that commence with emotional processing of the traumatic experience but will ultimately require the matching of the experience of tragedy with personal resourcefulness. Broadly speaking, resourcefulness refers to coping with adversity through strategies already known to an individual or through learning new suitable skills; it is about focusing on the kind of self-help that makes people “strong”, rather than disintegrated (Rosenbaum, 1990).

A practical application of these ideas was tested in Casey, Gow et al.’s research (2011) which utilized a previous version of our scale, Resourcefulness for Recovery Inventory - Research Edition (Celinski, Antoniazzi and Allen, 2007). In that study, the RRI-RE was used to assess progress made through the treatment of Australian army Vietnam veterans diagnosed with Post-Traumatic Stress Disorder in the chronic stage. Whereas previously there had been no measures which had indicated improvement following these programs (although it was obvious from their subsequent life choices that they had made positive steps), this study documented a significant improvement by comparing pre and post-treatment measurements on 17 out of 18 RRI-RE psychosocial variables that reflected the participants’ attitudes, emotions and behaviours with regards to their own recovery. It is also interesting that the rehabilitation programme did not address directly the issues represented by the scales, but aimed at educating participants about PTSD and sharing experiences, and targeted some specific symptoms with emphasis on normalizing experience along with anger and anxiety management, relaxation, assertiveness and problem-solving, relapse prevention, community support and reintegration. The study concluded that the veterans’ benefits from such a treatment consisted primarily in their being able to more broadly utilize their resourcefulness which could not be attributed solely to a sense of personal control as measured by the Recovery Locus of Control (Partridge and Johnston, 1989; Rotter, 1966).

The findings from Casey, Gow et al.’s study are consistent with the literature describing resourcefulness as a process and an outcome of post-traumatic positive adaptation with examples being: recognition and management of uncertainty; the integration of affect and cognitions; and the recognition and acceptance of human limitations (Linley, 2003).

Regarding victims of sexual abuse, DiPalma (1994) listed personal characteristics (which refer to resourcefulness) that were helping them to cope: determination, a sense of responsibility and ability to imagine and make sense of creativity, and an intention to succeed along with their general resourcefulness. Learned resourcefulness is also reported to be inversely correlated with anxiety and depression (Zauszniewski, 1997 and Zauszniewski and Martin, 1999).

In Celinski and Allen’s (in press) chapter (Resilience and Resourcefulness in Predicting Recovery Outcome) presented in this volume, we provide further evidence supporting the importance of resilience and resourcefulness in shaping recovery from psychotraumatic conditions.
RECOVERY AS A DEVELOPMENT PROCESS

In the present chapter, I postulated that along with the discovery of one’s own freedom, a person’s natural desire for betterment of life engages developmental processes that, if discovered by the person and enhanced through therapy, represent the second most important resource available to traumatized people. It is conjectured that discovery of freedom and the desire for progress could be seen to constitute the essence of any therapeutic process allowing a shift in the mindset from focusing on dysfunctional and helpless aspects of the self - to active utilization of potential resources. Similarly, psychoanalytic therapy that is based on the developmental principle, regards success in therapy as a cognitive and emotional shift from oral and anal stages, to genital stages. There is also some common ground with Maslow’s (1970) non-psychodynamic theory which postulates that people who have been thrown back to the situation where the main priority is survival, have to first direct their attention to regaining some security level and trust in other human beings, before their self becomes capable of healing and posttraumatic growth (Tedeski and Calhoun, 1995). In the end, they are expected to discover a new ontological meaning (Grove and Panzer, 1991) within a rearranged view of the world. There is an inspirational similarity of these ideas with Dabrowski’s (1996) theory of human development and of positive disintegration, as described in the next section, which originated in a different cultural and political environment.

Kazimierz Dabrowski (1996), a Polish psychiatrist and a founder of the theory of positive disintegration, conceptualized human development as advancing across three levels: on the basic level, there is a group of factors which involve physical and constitutional characteristics and potentialities. A person’s behaviour is characterized as automatic, impulsive and rigid, and is controlled by primitive drives and externality. There is no internal conflict but external conflicts are the rule. The overall picture is of little differentiation. This state may be compatible with the post-traumatic experience of regression and overwhelming helplessness in the early weeks or even several months after a trauma, and represents lower level integration imposed on the individual by the forces of nature or by a powerful and restrictive social environment (e.g., concentration camp).

The second level represents all the social and environmental influences from other persons, individually or as a group. They constitute a pattern of behaviour which is more complex and advanced because the stereotypes of the former level have been breaking down, a process that Dabrowski (1996) labels ‘unilevel disintegration’; people at such a developmental stage experience hesitation, doubt, ambivalence, increased sensitivity to internal stimuli and fluctuations of mood, excitations and depression with various forms of mental and psychosomatic disharmony. At this level, there is also a tendency to change from one direction to another or an inability to decide which course to take and to let the decision fall to chance. This mental state may be attributed to the middle phase of successful psychological therapy or rehabilitation (to continue with the metaphor of imprisonment, this mental state may develop after liberation when former prisoners are not sure what to do with the newly regained freedom).

The third level involves a set of factors that engage “autonomous processes which a person brings into his/her development such as inner conflict, self-awareness of choices in relation to personal growth, and ability for conscious inner psychic transformation” (Dabrowski, 1996, p. 14). Dabrowski stipulates that when the autonomous factors emerge,
self-determination becomes possible but not before. This means that an individual can transcend, at least to some degree, what is imposed on him by his constitution and by the developmental stages of the life cycle [this, in essence, is similar to the concepts of transcendence and transformation (Celinski, 2004, 2011) as underlying positive change in psychotherapy]. Where the potential for progress is limited to the first and second set of factors, these individuals would remain within the grip of their own physical/instinctual condition or would follow social pressure and their own psychological typology; such a compromised developmental potential could be described by saying “I was born that way” or “I am the product of my past” or with respect to traumatic experience: “I became a victim and cannot conceive the possibility of any change.”

Dabrowski (1996) further postulates that disintegration (and this includes the consequences of trauma) could be reinterpreted as being a positive experience (vis a vis posttraumatic growth: Tedeski and Calhoun, 1995). In this respect, he refers to Piaget’s formulation that “lack of equilibrium is a necessary aspect of development” (Piaget, 1967, p. 104). Development, according to Piaget, proceeds first through assimilation, that is, the absorption of newly encountered aspects of reality without being disintegrated (which, in our understanding, represents resilience) and subsequently through adjustment to concrete situations of available modes of functioning (which in our understanding refers to resourcefulness) that he called accommodations. The interplay of these two processes, more and more active as development goes on, is called equilibrium. Disequilibrium arises when these two processes are not balanced creating “interruption” in personal growth. If this is experienced subjectively as an incomplete task (in reference to Zeigarnik), it should trigger a need for an active, creative response. From this perspective, a traumatic disintegration may be presented to clients as a positive, even though painful, experience.

Trauma clients in their acute crises stage can present with severe neurotic or psychotic behaviours (Horowitz, 1976, 1986). Dabrowski, with reference to the 19th Century American neurologist Hughlings Jackson (1993), regarded this condition as a form of ‘dissolution’. Recovery from such a mental state, according to Dabrowski, results not in a return to a previously supposedly normal ‘condition’ but necessitates achieving a higher level of mental functioning and creative output. Schiffer (1978) described a similar process enabling the revisiting of the traumatic situation and experience with a more mature and more resourceful self.

Table 1 presents an application of Dabrowski’s (1996) conceptualizations to recovery from psychotraumatic conditions; the first stage manifests as disintegration and regression to the basic psycho-developmental level caused by an encounter with an overwhelming adversity. Subsequent stages of recovery become possible by activating developmental processes that utilize psychological constructs, ideas, motives and emotions from the progressively higher developmental levels. Within the proposed framework of Challenge-Resilience-Resourcefulness, an individual’s mental activity proceeds along the progressive-regressive continuum.

Regression represents a less complex and effective way of resilient functioning than a person is potentially capable of and an underutilization of personal resources, whereas progressive trends manifest through higher levels of transcendence and advanced transformation.
Table 1. Recovery as a Reactivation of Multi-Level Developmental Processes

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<td>1</td>
<td>Being a victim (a sense that life has become externally and permanently controlled in an undesirable manner) or that a person’s condition is unchangeable.</td>
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<tr>
<td>2</td>
<td>Accepting the situation that is not the consequence of one’s choice and that it is a life question to be answered in a creative way.</td>
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<tr>
<td>3</td>
<td>Breaking the sequence of repetition-compulsion.</td>
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<tr>
<td>4</td>
<td>Viewing confusion, ambivalence and hesitation as a welcome stage in which a person becomes more aware of options.</td>
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<tr>
<td>5</td>
<td>Focusing on a sense of autonomy and recognition of one’s own resourcefulness and values; taking responsibility for finding some solutions to the problems, even if they were not the result of one’s own fault.</td>
</tr>
<tr>
<td>6</td>
<td>Achieving recovery in accordance with previously established goals and personality ideals.</td>
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Essential for triggering the recovery process is a traumatized person’s understanding that dysfunctionality has its counterpart in resilience and resourcefulness (that can be measured by the RTS-RE which addresses both resilient and regressive tendencies, and by the RRI-RE’s bipolar dimensions). Further applying Dabrowski’s (1996) model in order to initiate progressive change, it is expected that internal experiential factors begin controlling behaviour more and more, and the client’s wavering must be replaced by a growing sense of direction according to the person’s intentions, as opposed to what is momentarily convenient. Behaviour has to be guided by an emerging, autonomous hierarchy of values and aims associated with supporting emotions. Self-evaluation and reflection should be in constant use.

Individuals are expected to search for ideal examples and models around themselves or from within, and to start to differentiate between what is more and what is less optimal functioning for them. Critical awareness of self has to be continuous, as the whole personality structure becomes transformed by this process. It is further anticipated that as a person progresses in recovery, an attitude of disquiet, feelings of shame and guilt, an inferiority towards the self, and dissatisfaction with the self, should naturally occur as an essential part of the process. At the same time, however, a person should exhibit more tranquility, systematization and conscious stabilization of personality. While tensions and conflicts are not as strong as at the initial stage of recovery, the sense of autonomy along with the internal hierarchy of values and aims, guide the process much more decisively towards achieving the personality ideal (or some more desirable psychological condition).

In essence, referring further to Dabrowski’s (1996) original formulations, resourcefulness associated with developmental factors promoting such dynamic shifts in the mindset involves conscious discrimination and choice, inner psychic transformation, self-awareness, self-control, education and auto-psychotherapy. As a final result, integration is achieved which is characterized by a new organization and harmonization of personality with disintegrative activities being only present in retrospection. According to Dabrowski (1996), the final developmental achievement is the secondary integration characterized by “responsibility, autonomy, authenticism and personality ideal” (p. 20). There are no internal conflicts at this level and no opposition between “what I am and what I would like to be” (p. 20).
cognitive and emotional structures and functions are fused together into a harmonious and flexible whole.

In specific terms, this outcome may be reflected on the RRI-RE as optimal endorsements on the positive pole of the scale that are expected to be associated with a desirable health status, whereas endorsements on the negative side of the bipolar dimensions are minimized. It is an interesting question about just how much experience of negativity is needed to optimally stimulate a traumatized person to become active and creative but not to undergo crushing disintegration (and regression) from which people may not return to active participation in life.

**CONCLUSION**

While the major impact of the trauma rests in diminishing of the ego functions, and cognitive and emotional regression that manifests in prevalence of “split off” unmodulated responses from the non-ego functions (Celinski, 2001), the recovery process has as its objective the rebuilding of functions of the ego and the self by connecting the traumatic experience with the sense of freedom and desire for progress. Unless a traumatized person makes an active effort to incorporate trauma related meanings into a broader, flexible and, at the same time, reality-oriented and activity-oriented self (in essence, manifesting resilience and resourcefulness), the impact of trauma may keep a person in a state of permanent disintegration and regression. Rebuilding the self is based on the principle that our intentions lead to desirable outcomes through mind and body transformations; this starts with withstanding the impact of the traumatic event (which represents resilience), embedding the initial experience into a new and broader context (Spiegel and Cardena, 1990), and matching it with personal resourcefulness which has some representation in “reframing” techniques. If this process is successful, creation of new meaning of the self and reality is achieved, and new priorities would emerge with an intention for their implementation. Trauma clients need to be constantly reminded that both within an individual’s life and throughout human history, people have been forced to continuously find and develop new personal resources in order to respond to enormous challenges in their lives.

The role of the therapist is to present the perspective that the negative impacts of trauma may be minimized, if the crisis is regarded as a life task and a question to be answered in a creative way. In this manner, we rise to the challenge. Such a mental attitude offers a learning experience and forces people to seek solutions from a range of resources that will make better coping possible. However, such an expectation of the client’s responsible dealing with the trauma can only occur after rapport and trust have been well established, and the person feels safe and secure. In the end, the recovery schema is based on: acceptance of the traumatic event as having been forcibly imposed on a person; on acknowledging its meaning as a behaviour changing “corrective experience”; on regarding the new life situation as a challenge that requires a creative response to undo losses (while continuing to view life as worthwhile and meaningful); and on activity to change life in the desirable direction through taking manageable steps. To further test the practical usefulness of the Challenge-Resilience-Resourcefulness conceptual framework, our readers are encouraged to apply these constructs to clinical situations and life related experiences.
ACKNOWLEDGMENTS

This chapter is dedicated to the victims of industrial accidents who are clients of the Workplace Safety and Insurance Board, Ontario, Canada. Over many years, I learned from them how to better understand and help those who had to face challenge and deal with the situations, and medical conditions for which there is little preparedness in “normal life”.

I am also indebted to Dr Kathryn Gow for her substantial contribution to the former article on which this chapter was based (Celinski and Gow, 2005) and for her further guidance in this particular chapter.

REFERENCES


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Chapter 3

THE ROLE OF MEANING AND PURPOSE IN PSYCHOLOGICAL TRAUMA: INSIGHT AND REINTEGRATION

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ABSTRACT

This chapter proffers the idea that the role which meaning and purpose play in an individual's life is a critical factor in the gaining of insight and the reintegration phase after the crisis point has passed in any trauma. Models of trauma in the literature are drawn on to explore the possibility of there being a non-pathological approach to understanding trauma. While the authors cannot prove that the links they highlight do, in fact, operate, they ask the reader to keep an open mind to these possible connections, which while they involve concepts that wait to be proven, nevertheless deserve some consideration in determining the treatment of trauma victims. The key role of ‘being’ and meaning in a person's life is addressed, and the possible loss of meaning because of traumatic events is explored.

Keywords: trauma and meaning, conceptualising trauma, phenomenological meaning

INTRODUCTION

This chapter outlines a conceptual approach for understanding psychological trauma, so that it can be applied clinically to groups of people who are suffering chronic psychological trauma. The approach attempts to cross the divide of many other models of post traumatic stress, and links the phenomenological aspect of meaning with the neurological function of the brain in its normal response to threat to the organism. The hypothesis that underpins the conceptual approach outlined in this chapter has been that while the basic threat to ontological security, or the threat of sliding into non-being, remains unresolved (that is, a safety threshold

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has not been reached), the response may remain in the control of the phylogenetic ancient brain structures.

The pursuit of a non-pathological approach in understanding psychological trauma recognises that the arbitrary line drawn between normal and disturbed processes has led to unresolved trauma remaining unrecognised in the clinic and/or being diagnostically mislabelled (Briere and Conte, 1993; Herman, Perry and Van der Kolk, 1989; Saxe et al., 1993). More importantly, it recognises that trauma can affect people at every level of functioning: biological, psychological, social and spiritual (van der Kolk, 1996). A central tenet of the approach relates to the potential changes to prefrontal cortical functioning of the brain in long term trauma sufferers.

The notion of a fundamental change in brain activity in chronic psychological trauma has brought together research in traumatology and research in various psychiatric illnesses. It seems clear that the same behaviours noted in the chronic response to trauma, that is, lack of control, fear of the environment (especially new environments), and loss of identity (Herman, 1992), are also evident in some of the psychiatrically ill. Stampfer (1990) and Muller (1985) have suggested that the 'negative symptoms' of psychiatric illnesses are manifestations of a failure to assimilate traumatic experiences and that this failure results in continuing dysfunction of higher integrative functioning, mediated by the prefrontal cortex of the brain, or as Muller (1985) described it, prefrontal shut-down.

While this chapter refers to trauma in general, it will be necessary to consider: (a) the research to date that has centred on post traumatic stress disorder; (b) the importance of meaning structures for development and thereby healthy psychological functioning; and (c) the adaptive response to threatening events by the central nervous system and in particular, the brain. These three foci form the foundation of the proposed mapping of the conceptual approach.

**HISTORICAL NOTIONS OF PSYCHOLOGICAL TRAUMA**

From the 16th century, substantial reports of distinct psychological responses to trauma and the possibility of associated pathological outcomes have been documented (Trimble, 1985). Over time, these responses have been assigned different labels. During the American Civil war, they were referred to as soldier's heart (Trimble, 1985), while the literature of the first and second world wars referred to them as war neurosis, traumatic neurosis and shell shock (Kardiner, 1941). In 1980, they were classified in the DSM-111 as Post Traumatic Stress Disorder (Trimble, 1985), and in the 1990's traumatic events came to be defined as distressing events that are outside the range of usual human experience (DSM-IV).

**Contemporary Approaches to Psychological Trauma**

Studies of the processes of resolution of psychological trauma have centred upon the symptomatology of Post Traumatic Stress Disorders, and several prominent models of such resolutions representing disparate views have emerged (Wilson and Raphael, 1993). These models mainly concentrate on either conscious or unconscious motivational processes.
concerning affect regulation and self schemas, psychodynamic approaches (Creamer, Burgess and Pattison, 1990; Horowitz, 1976), psychobiological models of disordered arousal (Kolb, 1987; van der Kolk, 1985), or psychoformative models that concentrate on construction of meaning and the reformulation of the trauma's impact on the self structure (Lifton, 1993). These models are now briefly described.

Cognitive Approach. Horowitz's (1976) psychodynamic model has been reconstructed and combined with a cognitive approach (Creamer et al., 1990) and is concerned with cognitive functions of schema about self and others. Horowitz (1976, 1986) postulates that schemas summarise past experiences into holistic composite forms, thus allowing incoming information to be measured against existing composites (i.e., concept of self and world) for a goodness of fit. Emotions are viewed as reactions to incongruencies between internal and external information and serve as motives for defence and control. Severe emotional responses to traumatic events would unconsciously motivate defensive behaviour because of the poor goodness of fit into the self schemas (Horowitz, 1976). However, there are also unconscious motives to resolve the incongruence. Experimental studies have supported the hypothesis of an unconscious motive towards behavioural repetitions of the traumatic response, irrespective of conscious intention, and have confirmed that the manifestation of intrusive and repetitive thoughts would occur most frequently following stress (Horowitz, 1976).

Psychobiological Approach. Contemporary models bear increasing resemblance to Janet's (1923, cited in van der Hart et al., 1995) adaptation approach to psychological trauma, in that effects of psychological trauma are combined to result in biological change (Kolb, 1987; van der Kolk, 1988; van der Kolk and Saporta, 1991). A psychobiological model postulates that hyperarousal impairs neuro-physiological processes, interferes with information processing, verbal memory, and various functions of consciousness and results in somatic encoding of trauma segments (Kolb, 1987; van der Kolk, 1996). The phasic post-traumatic symptoms of hyperalertness and hyperactivity to all stimuli and traumatic re-experience of the trauma, are commonly reported in the literature on rape, combat and sexual abuse trauma (see van der Kolk and Van de Hart, 1989). The maladaptive use of dissociation is considered to be the underlying pathology (Modai, 1994). However, some cultures currently utilise this method within the context of Buddhism and mental control as the way ahead (see Bit, 1991, on the Cambodian killing fields) and it is considered in these countries to be an adaptive approach to "getting on with" one's life and that of the community.

Psychoformative Approach. A model based on psychoformative theory is concerned with how the self structure is affected by trauma. Lifton (1993) proposes that injury to self may lead to a form of psychic numbing (a splitting dissociation from the pain of that injury) which is an attempt to adapt to the overwhelming experience of the traumatic event. It is only later, in the relative safety of another country or another situation, that one can bear to tell one's real story (see Pran, 1997, "Children of Cambodia's Killing Fields").

In contrast to the stance of a biological approach (see van der Kolk and Saporta, 1991) that describes psychic numbing (a diminished capacity to feel) as an adaptive dissociative response, Lifton (1993) postulates that psychic numbing may be paralleled to death-linked images of denial, the trauma being an insult and threat to the entire self. Lifton sees the advent of the dissociated state, and the lack of feeling due to the numbing, as associated symptoms of posttraumatic stress disorder (PTSD). Further, he proposes that it is these responses that interfere with the normal ability to remember and integrate memories; that they

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interfere with the capacity to fantasise and symbolise, which is essential for finding new meaning. Lifton (1988) sees the recovery process as the individual's struggle with issues of his/her connection and separation, a struggle for a sense of being 'on the great chain of being'. In essence, Lifton (1993) postulates that the struggle to regain meaning is at the basis of the trauma response. Shay's (1995) descriptions of the forever-lost Vietnam Veteran soldiers, who cannot reconcile betrayal on all fronts, are poignant examples of the individual's need to make sense out of what appears as incomprehensible madness.

**TRAUMATOLOGY**

The demarcation between posttraumatic stress disorder and other disorders has been challenged, in that the phenomena of response to trauma has been reformulated as a continuum experienced by all people, across the human life span. This hypothesis suggests that repeated lesser traumas can elicit similar responses to those which emerge from major trauma, and that chronic unresolved states of psychological trauma can manifest in a wide array of behaviours, from somatic imbalances to various manifestations of psychological discord (Everstine and Everstine, 1993). To varying degrees, these behaviours are then recognisable among many people throughout the clinical population. Donovan (1991) suggests that:

> a paradigm shift is required if the critical thinking necessary to any genuine scientific undertaking is to prevail over the turf battle currently being waged within psychiatry and between modern biological psychiatry and psychology. Such a paradigm shift is necessary to accommodate the increasingly repeated reports of a high incidence of antecedent trauma in the lives of patients traditionally held to have genetically transmitted psychiatric disorders (p. 433).

An apparent shift has been initiated to encompass a more comprehensive perspective on psychological trauma. In an effort to reformulate theoretical models, this shift has, in resistance to the constraints of the DSM criteria, changed focus and renamed the research paradigm as the study of traumatology (Everley and Latting, 1995). An example of this is Everley's (1995) neuropsychological model, which embraces the phenomenon of challenge to world-view, as an indicator of psychological hypersensitivity, and the neurophysiological adaptation response to trauma as an indicator of neuro-sensitivity. Since the approach proposed in this chapter is supported by a neuropsychological framework, theoretical models such as Everley's will be returned to in a later section. However, at this point, it is appropriate to explain in a systematic way, the development of the proposed conceptual approach to psychological trauma and the three interlocking systems of the mapping of that approach.

The overall aim in creating a developmental approach to the study of psychological trauma is to encompass, or account for, aspects of the models described above, that will also reflect a basic capacity to adapt (Everstine and Everstine, 1986). It appears that such an approach would have to include physiological, psychological and existential aspects of the human experience to account for the findings of the above mentioned researchers.

The question therefore becomes, how can an adaptation paradigm produce a model that can account for the creative capacity to adapt (Janet, 1923 cited in van der Hart et al., 1995)
and also account for the dysfunctional behaviour of those suffering unresolved psychological trauma? An integral feature of the development stage has been the exploration of a hypothesis which sees the machinations of psychological trauma as a "narrowing of consciousness", a term first used by Janet (1889) to describe the trauma experience, where energy is deflected away from goal-directed behaviour and redirected towards survival behaviour. This will be considered as a normal adaptation response to traumatic events which have challenged the status of being or meaning for the organism (Smith, 1993). It is considered that the energy will remain deflected until some sense of "being on the great chain of being", or safety and security has returned, been recreated or reconstructed (Lifton, 1993). The proposed approach, then, has its basis at the most profound level of the human experience - meaning (Laing, 1965). Being, safety/security and meaning/purpose are the three interdependent levels of developing strength with adaptation and these three levels will form part of the conceptual map being proposed.

The notion of "meaning" as a central feature to the understanding of the trauma response is not new. James (1890) stated that survival requires some extraction of meaning from experience, so that one can anticipate and control the environment. Lifton (1993), over many years in trauma research, has emphasised the importance of meaning in understanding the trauma response.

Frankl's (1958) concepts of the "will to meaning" and "existential vacuum" are widely understood and increasingly accepted (Dyck, 1986; Lifton, 1993). These concepts are difficult to contain within the empirical domain of inquiry and this has consequently discouraged scientists from doing so (Lifton, 1993), and yet their importance is unequivocal. In Bee's (1987) study to determine the most fundamental issue for the human race, 60% of respondents talked about some aspect of life meaning.

Greater degrees of meaningfulness have been correlated with positive world-view and the presence of a transcendent goal (e.g., desire to transcend the self) (Phillips, 1980). Empirical evidence confirms the notion that meaning in life, interdependent with the notion of purpose (Shapiro, 1988) can predict psychological well being (Yarnell, 1971; Zika and Chamberlain, 1988). Yarnell's study found that individuals with greater purpose in life see themselves less at the mercy of luck and more in control of the situation, than those with less purpose. In a study on the victims of criminal assault, Kushner et al. (1993) found that the determinant of psychopathology was the challenge to basic beliefs and values about fairness and safety in the world, rather than lack of perceived control of the traumatic event. In other words, there is more chance of a chronic response to trauma (which has been labelled as psychopathology), if there has been a challenge to existing meaning structures, including those relating to safety of the self in the world (Reiker and Carmen, 1986). Such a view also makes sense when we consult the literature on the post war experiences of the Vietnam Veterans in the western world and victims of the holocausts of the last century.

Shapiro (1988) maintained that meaning is not the ultimate organising concept for understanding life, and that existence (being) is more fundamental: that first we exist, then we are human beings, whether or not we have purpose and meaning. However, if the traumatic event is perceived as a threat to existence, then it can be said that it challenges the fundamental meaning structures around which the cognitive schema of self and identity revolve. It will therefore impact on the integration and development of the personality (Horowitz, 1976) since the view of the self has to be reconstructed to incorporate the new

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experience (Reiker and Carmen, 1986). Moreover, as van der Kolk (1996) argues, the impact of trauma on personality integration has been neglected in the study of post traumatic stress.

A hierarchical model of meaning is not being suggested here. Meaning structures, while seemingly described in levels, nevertheless are part of a dynamic system with change in one aspect affecting another, motivated by what Frankl (1958) describes as the "will to meaning". It is suggested that the meaning structures may also be simultaneously independent, such that the first is primarily experienced on an existential level, the second primarily on an existential and physiological level and the third primarily on a cognitive level (Laing, 1965). For example, a new experience can challenge an existing cognitive meaning level without challenging the levels of being, safety or security, whereas the resultant change at the cognitive level, as part of a dynamic system, will affect the other levels by strengthening or weakening them. It is suggested that weak structures at any level will deconstruct more easily in response to a major threat to meaning, such as a traumatic event. As long as people can make new meaning structures after trauma, then their symptoms reflect a chronic response to trauma and can be explained as natural reactions not requiring professional help (van der Kolk, 1996). The whole process of changing meaning structures and the self schemas that revolve around meaning structures, will therefore be reflected in levels of personality integration (Bee, 1987).

A secure sense of connection with people is the foundation of personality development (Herman, 1992). Although the change in personality in the chronic trauma response is often referred to as personality disintegration in a pathological sense (Everstine and Everstine, 1988), all development of human potential can be reflected in both changes in personality and separation of old systems of meaning. When new experiences demand a new construction of meaning, we must inevitably deconstruct the self (Bee, 1987). Bee describes the process as the "old self partially given up but new equilibrium not yet reached ..... feels dislocating, and leads to statements of "I am not myself", and can be accompanied by despair" (1987, p. 292).

The notion of personality integration, self schemas and identity then must be added to the notion of meaning, as emergent properties of fundamental structures, if any proposed integrative model is to illuminate the trauma response.

From a neuropsychological perspective, a new equilibrium after trauma would require the higher order cognitive function of integration, to facilitate the creation of new self schemas (Stuss, 1991b), which Lifton (1993) describes as the capacity to fantasise and symbolise as essential processes in arriving at new meaning. A neuropsychological paradigm then, could provide the link between the process of de-construction or loss of meaning (probably at varying levels), its impact on integration/disintegration of personality, and the universal adaptive response to the inherent threat of the traumatic event - survival (Lifton, 1993). The third system represented in our untested model relates to the neurophysiological response to threat to survival. The PFC (prefrontal cortex) Executive Function is the mechanism for higher order cognitive processing, while the Hind Brain Fight/Flight is an expression of survival processing (see Everley, 1995, Van der Kolk, 1996).

A theory developed by Smith (1988; 1993) that the post trauma stress response is best seen as an ontological condition, serves as a complementary framework for this chapter's conceptualisation of psychological trauma. Smith's theory draws on Laing's (1965) proposals regarding mental suffering. Laing (1965) believed that there is a close relationship between the psycho-philosophical concept of ontological insecurity and the psycho-physiological phenomena of trauma and shock. In "The Divided Self" Laing writes that:

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Individuals with a primary ontological security are characterised by a sense of living in the world, feeling really alive, a sense of continuity existing in time and space, with identity and autonomy never in question; a belief that the self is valuable and worth protecting from harm (Laing, 1965, pp. 39-47).

Laing (1965) further believed that for some people, the experience of living is so painful that they are left in the opposite position of primary ontological insecurity. These individuals feel more unreal than real, and may be so tenuously linked to the rest of the world that personal autonomy and identity are always in doubt. Coupled with this assertion is the conception that other people are a perpetual source of terror, engulfment or invasion. Laing (1965) postulated that man, as a person, encounters 'non-being' in a preliminary form as partial loss of the synthetic unity of the self, along with partial loss of relatedness with "the other", and in an ultimate form, a total loss of relatedness with self and other, or chaotic nonentity.

This might be seen to reflect Lifton’s proposal that the fundamental concern for trauma sufferers is with being on the great chain of being. Further, these elements reflect Frankl's construction of meaning as concerned with being at a fundamental level of existence and then the emergent levels of meaning and purpose (Shapiro, 1988). Thus ontological security may reflect the strength of those meaning structures, with an ontological threshold as the barrier between the feelings of being and non-being (Smith, 1991). Eriksson and Yeh (in press) explores the role of spirituality and religion in coping and surviving trauma and points out that exposure to trauma can lessen spiritual well-being, which Celinski and Gow (2005) believe, in turn, can lead to a total breakdown of the human being.

While the major impact of the trauma rests in diminishing of the ego functions and in triggering “split off” unmodulated responses from the non-ego functions, the recovery process has as its objective the rebuilding of functions of the ego and the self, by connecting the traumatic experience with the sense of freedom and desire for progress. Unless a traumatized person makes an active effort to incorporate trauma related meanings into a broader, flexible, and at the same time, reality- and activity- oriented self, the impact of trauma will keep a person in a state of permanent disintegration.

Laing’s (1965) notion of ontological insecurity might be seen to be acknowledged by major researchers and clinicians working with various trauma victims, although described in different terms. For example, Herman describes the traumatised in terms of "diminished sense of connection both within self and with other people, distortion in the sense of reality ... reduced to elemental concerns of survival" (1995, p. 97). If someone is plunged towards ontological insecurity after a threat to being or meaning, then the main response will automatically be concerned with survival.

A Neuropsychological Perspective of Meaning and Survival

From a neuro-psychological perspective, the inherent processes of the central nervous system, in its response to any stimuli threatening to the sense of self in the world, may be seen to be linked automatically and adaptively to the levels of meaning as being and safety and security. Relatedness of self to others, and the elements of prediction and causality require both the survival systems of the central nervous system, and the effective cooperation

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of the highest organisational principles of the brain; that is, the executive function and self referencing function (Prigatano, 1991; Stuss, 1991b).

In a review of neuropsychological studies, Everley (1995) concluded that post trauma responses involve neurological hypersensitivity, a lowered threshold for psycho-physiological excitation within the limbic system and its numerous efferent pathways. Everley, in his model of psychological trauma, incorporates the notion of challenge to world view with the neurological survival response to trauma and goes some way towards integrating a biological approach with a psychoformative approach to trauma.

Everley put forward an "epiphenomenological construction model for a two factor neurocognitive primary process theory for post-traumatic stress" (Everley and Lating, 1995, p. 29). The traumatic event could be interpreted in either of two factors: neurological hypersensitivity or psychological hypersensitivity. These two factors may be conceptualised as encompassing both the normal physiological response to the threat of traumatic events, which involves the brain and central nervous system, and to some degree the underlying phenomenon of meaning which depends on safety, security and the overall sense of self in the world.

The great value in Everley's extended (1995) model of psychological trauma lies in his suggestion that his two factor theory can account for a wide range of symptoms not limited to the DSM criteria, and that a chronic response to trauma, as in PTSD, is best seen as a Spectrum Disorder, with the two elements being conceived as "dimensionally dynamic phenomenological constituents that exist on a continua" (Everley, 1995, p. 31). As static components, Everley suggests that this model allows the clinician to determine both the level of neurological arousal and psychological discord in order to determine treatments for the recovery process.

Since the notion of neuro-sensitivity has been introduced for consideration, it is necessary to explore the survival responses of the nervous system, in particular the brain, and to defend a neuropsychological paradigm that will serve as a complementary framework for the proposed approach.

**Survival Response and Dissociative Behaviour.** The complete human nervous system and physiology can be seen to work in harmony to support ontological security (built on meaning structures) in its efforts towards survival, autonomy and environmental adaptation (Smith, 1993). In a normal emergency situation, a person buys time for the cortex to carry out its valuable rational function, to appraise the situation, decide what needs to occur and to implement the behaviour needed to complete the chosen course of action (Carlsen, 1994). It implements this by temporarily inhibiting the disruptive effect of pain with the psychological mechanism of displaced attention and intrinsic pain inhibition (van der Kolk, 1985). If the instinctive phylogenetic reactions of fight or flight fail to resolve the situation, the medulla in the brain stem has no other option but to shut down on all higher brain activity and render a person unconscious. This allows the brain stem to function unimpeded in an attempt to stabilise heartbeat and circulation and to regulate normal breathing activity without the intrusive effect of pain or misguided conscious responses (Carlson, 1994; Janssen, 1985). Then the part of the brain which primarily facilitates survival takes over. This can be seen as a temporary change in the mediation of behaviour.

The mechanics of the overall adaptive system involves a synthesis of physiological and psychological processes; that is, the psychological process of displaced attention (dissociation) is coupled with the production of endogenous opioids and non-opioids which
chemically block the perception of pain (Van der Kolk and Saporta, 1991). In physiological terms, a biological imbalance occurs when the heightened arousal is sustained for an extended period and the cycle of the response to trauma and loss of functioning becomes traumatic; that is, the very symptoms of trauma become traumatic for the individual (Janssen, 1985). In cognitive terms, this occurs when the trauma response results in the adaptive response of dissociation (misplaced attention) becoming a habitual response (Van der Kolk, Van der Hart, and Marmar, 1996). Smith (1993) describes it as a state of semi-conscious awareness. Indeed, research has shown that peri-traumatic dissociation behaviour can explain 29.4% of the variance in PTSD symptoms at six month follow up (Shalev, Orr and Pitman, 1993). That is, if the response to a traumatic event includes dissociation, there is more chance of that person developing the symptoms of PTSD (Van der Kolk, 1996). Phillips (2000) teaches that as long as the individual is able to engage in normal flight or fight mechanisms, then they will have a greater chance of not developing PTSD symptoms after a trauma or traumatic events.

Explanation for the possible change in mediation of behaviour is offered by Seligman's (1975) classic model of learned helplessness, which explains the absence of effective escape or cessation of behaviour in the traumatised person and explains why dissociative responses may be maladaptive in the longer term (Herman, 1995). A marked decrease in expectation of controlling the event leads to a rigid cognitive set wherein response and escape are not causally related (Seligman, 1993). However, the notion of neo-phobia (fear of the new) more clearly illustrates a change in mediation of behaviour in the chronic response to trauma (Smith, 1991).

Mitchell et al. (1984) maintained that neophobic perseveration resulted after animals no longer used "pain and pleasure" as reinforcers, but had reverted to a more primitive form of non-associative learning. This form of learning is independent of the hedonic law of effect governed by pleasure or pain, and operates on a continuum of novelty and familiarity (Mitchell et al., 1984). Mitchell and his colleagues (1984) found that traumatised animals will continue their exposure to trauma by repeatedly making a familiar choice, rather than exploring a novel alternative which could end their experience of pain. Smith advances the idea that if an organism becomes fixed in this primitive learning mode, then it has restricted the role of the neocortex to simply ratifying the subcortical mediation of stimulus and dissociative response, with the consequence that beliefs, held at the unconscious level, about helplessness and existence become inaccessible for modification (Smith, 1991, 1993). Seligman explains this mechanism as learned helplessness.

The concept of neophobia has been used to explain the reported behaviours of childhood sexual abuse survivors who become repeat victims in adulthood, and the victims of domestic violence who seem unable to break destructive habits (Smith and Jones, 1993). A long term maladaptive response to trauma, then, may reflect to any degree, a continuing neuro/physical conflict of perseveration in phylogenetic learning (unconditioned stimulus / unconditioned response species typical learning), subcortical mediation of behaviour and a corresponding loss in neocortical capacity to guide behaviour rationally (Kolb, 1987). This introduces the idea that, in a chronic response to trauma, there is a possibility that hind-brain structures play a disproportionate role in what is usually a reciprocal relationship between it and cortical functions (Janov, 1980; Kolb, 1987; Smith, 1993). If there is a change in relationship between brain communications, then it seems feasible that it will be reflected in changes to prefrontal functioning as Stampfer (1990) has intimated.
Potential Change in Mediation of Behaviour

Neuropsychological studies support the possibility for resultant change in mediation of behaviour in the response to trauma. Southwick, Krystal, Johnson and Charney (1995) found that under conditions of acute and severe psychological trauma, the organism adaptively mobilises multiple neurobiological systems for the purpose of survival. In addition to the stimulus-affected alteration of different neurochemical systems due to acute trauma, several brain structures, most notably the amygdala, hippocampus locus coeruleus and the prefrontal cortex become activated. Southwick et al. (1995) suggested that these structures are markedly affected by uncontrollable stress, are functionally and neuroanatomically interrelated, and may mediate many of the systems of PTSD. Indeed recent research by Schuff and Neylan (2008) has demonstrated that brain images of returning soldiers from Iraq and Afghanistan, who had PTSD, indicated that the hippocampus (seat of short term memory and emotions) had atrophied. Additionally, because of the increased blood flow to the prefrontal cortex, they were poorer in conflict resolution and decision making. Similarly, McGowan and colleagues (2008) detected that there were differences in the epigenetic markings (chemical coating influenced by environmental factors) in the brains of people who had suicided, with consequent influencing of behaviour such as decision making. Prolonged stress and trauma then appear to have a marked effect on our decision making capacity as well as short term memory and emotional expression.

Smith’s (1991) proposal that a change in the learning process occurs (a reversion to phylogenetic learning) finds support in the literature. Kolb (1987) hypothesised that cortical, neuronal and synaptic changes occur in an unresolved response to trauma, as the consequence of excessive and prolonged sensitising stimulation, leading to depression or habituated learning; that is, recurrent, intensive emotional arousal will both further sensitize and concurrently disrupt those processes related to learning and habituation, including synaptic change. Kolb (1987) postulated that the constant symptoms of PTSD are due to the changes in the agonistic neuronal system which impairs cortical control of hindbrain structures, and that these changes appear to occur at synaptic connections without gross neuroanatomical rearrangement. However, as Janov (1980) postulated, although lower brain structures escape from inhibitory cortical control, through connections, they repeatedly reactivate the perceptual, cognitive, affective and somatic aspects of the original trauma. Thus the ongoing process would involve what has been termed repetitive compulsions to integrate the trauma information (Everstine, and Everstine, 1988).

Interestingly, Smith (1993) submits that in terms of a reversion to phylogenetic learning, it may be the striatum, which is far older than the cortex or the limbic system, which is involved in mediating the dissociative response. The striatum has been implicated in the mediation of non-associative habituation of a response to a stimulus (Mishkin and Appenzeller, 1987) and instrumental learning (Perez-Ruiz and Prado-Alcala, 1989).

Janov explained the change of mediation of behaviour described above in terms of a “breakdown in the integrative capacities of the brain” (1980, p. 3). That is, if the reticular formation (part of the hindbrain/old brain) which supplies the energy of feelings becomes disconnected from higher integrative functions, the energy is experienced as "amorphous" tension. For example, childhood pain being stored in the limbic system can only be diffused
by a frontal connection. Although it is always pushing to get through to conscious awareness (motivation of repetition compulsion for completion and restoration of full consciousness) (Janet, 1923 cited in van der Hart et al. 1995), the frontal-limbic system is waging a war to keep the pain repressed (Janov, 1980) - which Janet described as a process of narrowing of consciousness. Could it be then that, if the level of ontological security does not return to a threshold that enables the risk of integrating the threatening information, then the protective capacity of the hindbrain will stay in control?

**Integrated Approach to Psychological Trauma**

An adaptation paradigm for understanding the trauma response would recognise that: (1) the narrowing of consciousness is a central tenet in an adaptive response (Janet, 1923), with its primary mode being that of dissociation; (2) the most basic of adaptive responses is in response to existence and being, around which meaning structures are built in a developmental fashion (Lifton, 1993); (3) the phenomena of hyperarousal, repetitive intrusions or the repetitive compulsions are signs of an adaptation process in play (Everstine and Everstine, 1993; Janet, 1923); (4) if change to cortical function is described in terms of loss of integrative capacity, then the prefrontal cortex must be implicated (Kolb and Wishaw, 1995); and (5) any change to meaning structures or the capacity to integrate self referencing information will automatically affect self schemas and personality.

This approach is explained thus: If a new experience challenges the structures of meaning on the first two levels (being and safety and security), the neurological system will activate survival responses with appropriate levels of dissociation. This is the period of buying time. The block to the pain of the attack on meaning structures will gradually lift, as bit by bit, the new painful information is released for integration into existing cognitive structures. This occurs via the prefrontal cortex system, where some degree of narrowing of consciousness (a gradual integration of information) occurs. With the new information, the integrative function of the prefrontal cortex facilitates the process of change. This is integrated into the self schemas and a feedback loop of the whole process strengthens or weakens the existing meaning structures. Then a new experience, without a threat to survival levels of meaning, would be integrated without interruption via the prefrontal region and processed in the same feedback loop described above. However, if the trauma response has severely threatened the sense of being in the world, of safety and security of the self (or threatened the threshold of ontological security), then the full protective capacity of the survival response will be activated and can be measured in levels of hyperarousal (Kolb, 1987; Lating and Everley, 1995). The dissociative responses will be fully taken up, and perhaps sustain the adaptive response of misplaced attention to avoid the reality of pain.

This approach can account for Smith's (1993) idea that when children are traumatised, they have much less chance of ever gaining high enough thresholds of ontological security to be able to risk new experiences; that is, their foundation of meaning structures is so weak that many new experiences will be interpreted as traumatic, encouraging perseveration in neophobic behaviour (Smith, 1993).

A narrowing of consciousness and any resultant interruption to the integrative capacity of the prefrontal cortex, in itself, would contribute to the symptomatology of chronic psychological trauma (Stuss, 1991a). Such a condition would affect self awareness, in terms
of integration and continuity of the self (represented by the notions of self schemas and identity) (Prigatano and Schacter, 1991; Stuss, 1991b). Indeed the trauma literature is replete with reports of the chronic response to trauma in terms of the shattered self and personality disintegration. It may be that the time spent in this neuro-physical conflict will determine much of the symptomatology in a chronic response to trauma, as Southwick et al. (1995) suggest. The symptomatology of one side of this neuro-physical conflict, that of hyperarousal of the chronic emergency stance, is well documented (e.g., van der Kolk, 1996). There are reports of many behaviours of trauma sufferers that reflect a lack of some integrative capacity in cognitive processing, and these reports add weight to the inclusion of this process in this approach for understanding psychological trauma.

The Role of the Prefrontal Cortex of the Brain

Studies on the role of the prefrontal cortex, in particular its role as part of the heteromodal cortex, bring together the notions of consciousness, self awareness, and environmental autonomy. These studies detail the behaviours that might be expected if diminished capacity occurs. According to Fuster (1989), the prefrontal cortex plays a critical role in the temporal structuring of behaviour. Drawing neural energy (i.e., drive or arousal) from subcortical and limbic centres, the prefrontal cortex is crucial in the integration of sensory information and motor responses into novel, complex and purposive sequences. In studies on the subsequent behaviours of frontal brain damaged patients, Stuss (1991a) and Prigatano and Schacter (1991) concluded that when intelligence was not impeded, patients could return to work, but they had impaired judgement for facts in relation to their own life, a lack of application of knowledge to decisions of the future and a disturbance to selective attention (that which directs, emphasises and unites) (Stuss and Benson, 1986). Stuss (1991b) has named some disorders as disorders of self awareness, that is, a loss of the sense of continuity of self.

Mesulam’s (1985) model of the heteromodal cortex of the brain, of which the prefrontal cortex is the major part, might explain why awareness of the self would change as a result of prefrontal inactivity or change in levels of consciousness. Mesulam (1985) suggests that the function of the heteromodal cortex is in balancing the approach to the external environment with the awareness of the intrapsychic processes necessary for insight, foresight and abstraction. Mesulam named this function environmental autonomy. Impairment of this function would result in a change in behaviour to one of distractibility, distance from intrapsychic processes and/or hyperarousal to environmental stimuli.

This idea can be expressed in cognitive terms. Golberg, Podell and Lovell (1994) postulated that a disruption in the balance between the two types of cognitive control, that is, those that guide behaviour by internal cues and those that guide by external cues, both operating in concert and in dynamic balance, would lead to two extreme types of behaviour: (1) perseveration, an inability to extinguish the representations evoked in the context of a prior cognitive task, that is, diminished ability to switch behaviours in response to changing demands, and (2) environmental dependency, where behaviour becomes dependent on incidental external factors. Environmental dependency reflects a diminished capacity for internally generated planning to guide behaviour. Golberg, Podell and Lovell (1994) found
extensive perseveration and environmental dependency in some frontal neostratial disorders, even in the absence of macroscopic structural lesions.

It appears that the prefrontal function is worthy of more study in the area of psychological trauma. The symptomatology of PTSD may reflect some disturbance in the function of the heteromodal cortex, as Stampfer (1990) has intimated. Ross and Pearlson (1996) reported that schizophrenia is a disorder of the heteromodal cortex, and Stampfer (1995) noted that the negative symptoms of schizophrenia are undistinguishable from those recorded in chronic psychological trauma.

In 1996, van der Kolk published a model which implicates the prefrontal cortex in terms of its connections with the subcortical process of memory in PTSD. Van der Kolk reported that Positron Emission Topography (PET) scans on the brain have shown that the hippocampus (which is part of the integrative function, connected with the prefrontal cortex and involved with learning and memory) has been found to become less active in people with PTSD. This appeared to confirm Smith's earlier contention that a change in learning process occurs in the chronicity of the trauma response; further, that decreased activity in Brocas area, a frontal brain structure responsible for translating personal experience into communicable language, is turned off when trauma-laden stimuli are produced. Also, the limbic system, in particular the amygdala (a subcortical structure) responsible for emotional arousal, shows heightened activity. If we focus on one part of van der Kolk's (1996) model - the interference with hippocampal functioning under extreme stress - then we can understand one way in which a change in prefrontal function may be occurring. Van der Kolk (1996) suggests that this change to normal processing results in the experience of emotional states on a somatic level, rather than as verbally-coded experiences.

**CONCLUSION**

The hypothesis that has underpinned the conceptual approach outlined in this chapter has been that while the basic threat to ontological security, or the threat of sliding into non-being, remains unresolved (that is a safety threshold has not been reached), the response may remain in the control of the phylogenetic ancient brain structures.

If this is the case, mediation of behaviour is controlled to some degree by the subcortical structures which are concerned with presence and avoidance of extinction. Subsequent behaviour will be marked by emotions being severed from events, and possible impairment to coordinated and purposeful activity, coordinated functions of discrimination and judgment, organisation, and control of aggressive impulses.

Such a notion is of concern and worthy of research since all these behaviours are noticeable in the clinical population of people suffering from post traumatic stress (Herman, Perry and van der Kolk, 1989). Since these behaviours are requisite attributes for life in our society (Smith, 1993; van der Kolk, 1996), any diminished capacity can contribute to inappropriate labels (e.g., bludging, malingering) for those unable to resolve psychological trauma (Everstine and Everstine, 1993).

This chapter outlined a proposal, based on the work of several researchers and theorists in the literature on trauma, that the normal adaptive response of neuro-physiological arousal

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responds and is maintained in accordance with the traumatic events’s impact on the levels or structures of meaning.

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Chapter 4

GROUNDED TRANSCENDENCE: RESILIENCE TO TRAUMA THROUGH SPIRITUALITY AND RELIGION

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ABSTRACT

Spirituality is an important aspect of human life and often provides a foundational framework for an individual or a community to conceptualize human existence. Spirituality and religion can contribute to the development of resilience after a traumatic event by offering resources to encourage thriving, meaning making, and coping with life’s varying circumstances. In this chapter, key terms will first be defined, including the distinction between spirituality and religion. The basic human need for meaning and coherence and its relationship to spirituality will be discussed. The chapter then highlights general positive effects of religion and spirituality. Specifically, responses in the aftermath of trauma and tragedy from the context of spirituality and religion are described across a few types of traumatic exposure: abuse and interpersonal violence, cancer, and combat exposure. Spirituality is a dynamic process with inward and outward foci, and the chapter provides a framework of spiritual development as a useful lens to understand the human experience. Key areas of empirical research are considered within the perspective of this developmental framework, including religious coping, the importance of the religio-cultural context, the reality of spiritual crisis, and potential for posttraumatic growth and transformation.

Keywords: resilience, trauma, spirituality, religion, development

INTRODUCTION

Spirituality may be understood as an awareness of that which transcends the individual and the here and now. However, even in looking beyond oneself, spirituality is grounded to

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present life in meaning, ritual, and values. In the face of adverse circumstances, spirituality represents an aspect of resilience that touches individuals, communities, and cultures. Individuals report increased well-being and physical health when personal spiritual practices are higher, and making meaning is one component of individual post-traumatic recovery. However, spiritual practice and belief are generally not only a personal variable; religious traditions provide a framework of belief and tradition that offer solace and support. The empirical literature investigating spiritual and religious variables presents a complex mix of resilience and risk.

Exposure to trauma can lessen spiritual well-being; yet, individuals who report an internalized spirituality also report greater resilience after adversity. A key to understanding the unique role of spirituality is to take into account the dynamic nature of spiritual development, which relates to both one’s awareness of transcendence and one’s connection to a like-minded community. Spiritual development moves inward and outward through awareness of transcendence (a personal and internal beginning), the socialization to a spiritual community (a movement to the external), to the challenge of questioning the structure, the doctrine, and even the divine.

After this struggle, a re-internalized spirituality offers flexibility that allows for questioning and mystery, as well as a renewed sense of connection to community. Each stage of development highlights specific aspects of spiritual resilience that have been supported by research: religious coping; support and community; and posttraumatic growth and action.

**Resilience after Trauma**

“It is a miracle...When I look at him I believe in God and I think things will be okay.”

These are the words of Rondlie Daniel, a survivor of the January 2010 earthquake in Haiti, speaking about her 8-month-old son who was found alive after 5 days of being trapped in the rubble of their home (Wilkinson, 2010). There are moments of terror or tragedy, where it may seem like the only option available is an outcry for some transcendent intervention or a plea for rescue, for healing, or for protection. At the point of crisis, humans often need to believe that there is something else available, some other reality beyond the here and now. In addition to the personal cry for meaning, the community itself seeks support and familiarity in the ritual of spiritual tradition. Stories from Haiti also describe groups of Roman Catholics praying and celebrating mass in the streets, as their churches were demolished in the earthquake. Some of the church buildings even held bodies that had not yet been recovered (Wilkinson, Mozingo, & Ellingwood, 2010).

So, what of those who were praying and did not survive? What of the losses and devastation even in the midst of cries for protection? In the face of tragedy, spirituality and religiousness are a complex part of resilience and resourcefulness. In this chapter, we will present theory on the mechanisms of resilience in spirituality and religion, as well as review empirical research clarifying the associations between spirituality, religion, and response to trauma.

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DEFINING THE TERMS

To begin the dialogue in this chapter, it is important to clarify the terms and their use; these constructs are complex and may also be fraught with preconceived biases or prejudices. First, we will attempt to use a general understanding of spirituality as “an individual’s understanding of, experience with, and connection to that which transcends the self” (Drescher et al., 2004, p. 330). This definition allows an approach to spiritual reality that can be connected to a theistic perspective or not. Hill and Pargament (2003) include the qualifier of “sacred” in their definition of spirituality that acknowledges the “otherness” of spirituality; that the desire to experience and connect beyond oneself is associated with experiences that are deeper than day-to-day existence. Religion is then the context where the “search for the sacred” (Hill & Pargament, 2003) takes place. Religion, in comparison to spirituality, is a process that has a historical and cultural context; it includes a set of formal or informal beliefs, traditions, and practices that may be shared by a group (Bowler, 2010).

It may be tempting to dichotomize spirituality and religion and emphasize spirituality as “good,” and religion as somehow “bad.” However, the practical expression of the two constructs is that they are intertwined. The community or individual religious context influences the perception of the sacred, and conversely an individual’s awareness of what is beyond the self may draw a person toward a particular religious community or tradition that is coherent with his/her experience. In order to investigate how religion and spirituality influence others aspects of human experience, researchers turn to many different ways of operationalizing these variables. Empirical research measures the associations between religious and spiritual behaviors (such as attending religious services, prayer, and participation in rituals), beliefs (such as ideas about one’s relationship to the divine or transcendent), community relationships (support or strain from a religious community), and values (how the individual orients his/her life toward spiritual or religious values; Hill & Pargament, 2003).

THE HUMAN NEED FOR MEANING

For thousands of years, humankind has turned to various spiritual and religious communities as sources of strength, protection, relationship, ritual, and meaning in response to tragedy and loss. The drive for a “sense of coherence” has been identified as an overarching framework to understand this human pursuit. The sociologist Aaron Antonovsky (1979, 1987) developed an understanding of this quest in the context of the life experience of survivors of concentration camps in the horror of World War II. His framework suggests that when humans can understand the events in their lives (comprehensibility), can emotionally engage with the problems and see them as challenges (meaningfulness), and can have access to the resources they need to move forward (manageability), they are able to hold a “sense of coherence” that allows for growth and survival in the face of stress and tragedy (Almedom, 2005; Peres, Moreira-Almeida, Nasello, & Koenig, 2007).

It is not surprising that a similar frame of internal meaning and external resource has been identified by researchers concerned with spiritual and religious development. Fowler and Dell (2006, p. 36) use the general term of “faith” to describe the process by which humans create
the constructs of belief, values, and meaning that: (a) help create “coherence and direction;” (b) connect them to others in “shared trusts and loyalties;” (c) base their beliefs and values into a “larger frame of reference;” and (d) allow humans to be resilient and resourceful in the face of life and death challenges by providing a sense of “ultimacy” in their lives. In this way, the development of faith is the process of creating a sense of coherence for one’s life.

Religious communities or traditions can be one context where “faith” may develop; they can contain a complex set of beliefs, behaviors, rituals, and relationships. Therefore, understanding the role of spirituality and religion in human resilience cannot be simplified to a question of “did it work?” in almost a “magical” way. The transcendent nature of spirituality suggests mystery and something “beyond” oneself, but the grounded reality of day-to-day behaviors and relationships in spirituality and religious traditions can create a foundation of resilience for human kind.

Crawford, Wright, and Masten (2006) offer a framework to understand the ways that spirituality contributes to resilience. Their work is particularly in the context of children and adolescents, but the overarching framework parallels the constructs of Antonovsky’s (1979, 1987) sense of coherence and Fowler’s development of faith (Fowler & Dell, 2006). The four general areas of “processes” are: “attachment relationships, social support, guidelines for conduct and moral values, and personal growth and transformational opportunities” (Crawford et al., 2006, p. 358). This framework is invaluable as the idea of “processes” communicates the dynamic nature of how spirituality intersects with individual and community experience. Individuals can grow in their intimate connections to both a transcendent being, as well as human relationships, and they can find a community context for practical support, ritual, and sometimes physical safety. Additionally, they can be transformed by their spiritual experiences and be challenged to live within a code of moral behavior.

THE GENERAL POSITIVE EFFECTS OF RELIGION AND SPIRITUALITY

With the theoretical potential for resilience and resourcefulness in mind, the research does point to a general positive connection between religion and spirituality and human functioning. Religion, as measured by religious attendance, is related to happiness (Myers, 2000), hope (Scheier & Carver, 1987), and optimism (Seligman, 1991). Van Dierendonck and Mohan (2006) suggest that religion establishes positive social norms that solicit acceptance, nurturance, and approval from others, as well as prescribes healthier lifestyles that may lead to positive health outcomes. Indeed, religion as measured by organizational and nonorganizational religious activities, intrinsic religiosity, self-rated and observer-rated religiousness, is associated to positive physical and psychological outcomes (Koenig, George, & Titus, 2004). Intrinsic religiosity (the religious faith is pursued as an end in itself) is connected with positive psychological variables including internal locus of control, intrinsic motivational traits, sociability, sense of well-being, responsibility, self control, and tolerance (Bergin, 1991). Peak experiences, frequently associated with spiritual faith, are associated with elevated self-confidence and a more profound sense of purpose and meaning (Kass, Friedman, Lescrman, Zuttermeister, & Benson 1991; Savage, Fadiman, Mogar, & Allen, 1995). However it is not surprising that positive affect is associated with spiritual
experiences, as positive affect has often been considered as a defining characteristic of a mystical experience (Noble, 1987; Spilka, Hood, & Gorsuch, 1985).

Positive psychology actually considers the constructs of hope, optimism, and spirituality to be subsumed under a common classification of transcendence, as they all have an orientation toward the future (Baumeister, 2005; Peterson & Seligman, 2004). World religions, particularly those considered as “salvation religions,” promote both of these outlooks of hope and optimism (Ciarcocchi, Dy-Liacco, Deneke, 2008). Hope is conceptualized as a cognitive process with two components: one being an agency in pursuing goals and the other being a personal confidence in the pathways by which to pursue and follow through goal-directed behavior (Ciarcocchi et al., 2008). Religious association is connected with significantly elevated levels of hopefulness, and a loss of hope is correlated with suicidal ideation (Kunzendorf & Buker, 2008). A hopeful outlook is related to a tendency to find meaning in traumatic or difficult life experiences (Affleck & Tenne, 1996; Nolen-Hoeksema & Davis, 2002).

In general, life has seasons that may have a pessimistic tone; however, for the religious person the end of the story of life will usually be deemed as quite optimistic in regards to the afterlife (Bassett et al., 2008). Religions may promote spiritual optimism, which has two factors of the “here and now” as well as about the “end of the story.” Particularly, the “end of story” spiritual optimism may be associated with the elevated purpose of life related to conversion (Paloutzian, 1981), and both spiritual and secular optimism are associated with functional coping strategies and intrinsic faith (Bassett et al., 2008).

A review of the literature on how religion and spirituality are associated with physical health also demonstrates the complex ways that humans are influenced by these phenomena. There is evidence that attendance at religious services is associated with longer lives for healthy people, and that aspects of religious or spiritual involvement offer some protection from cardiovascular disease (Powell, Shahabi, & Thoresen, 2003). However, in the same review, Powell and her colleagues (2003) acknowledge that there has been a consistent failure to prove the hypotheses that the depth of religious experience protects against cancer, that religious involvement speeds recovery from acute illness, or that religion and spirituality limits the progress of cancer.

SPIRITUALITY AND RELIGION IN RESPONSE TO TRAUMA AND TRAGEDY

Research within populations who have survived traumatic experiences provides a natural context to examine the ways that spirituality and religious participation contribute to a positive response after hardship. This research is varied and extensive, and reviewing of the empirical studies indicates the complexity of the topic, and the variety of responses possible. A recent review of the published literature that assesses religious and spiritual variables in survivors of child abuse and child sexual abuse report equivocal findings in this area; out of a total of 34 studies, 14 showed a decline in religious or spiritual factors in survivors of abuse, 12 demonstrate a combination of growth and decline, and 7 included evidence that religion and spiritual act as a buffer to the development of posttraumatic stress disorder (Walker, Reid, O’Neill, & Brown, 2009). While Walker and colleagues do acknowledge that the differences
are often associated with the type of analysis, positive outcomes in qualitative research and negative in quantitative, there are interesting complexities inherent in the comparison of studies. For example, studies suggest that child sexual victimization is associated with lower religious participation (Finkelhor, Hotaling, Lewis, & Smith, 1989; Hall, 1995). However, within a group of survivors, those who did attend religious services reported lower levels of emotional distress (Elliot, 1994). Survivors of abuse report more anger at God and a sense of personal shame, as compared to those without an abuse history (Kane, Cheston, & Greer, 1993), and survivors of abuse report a more negative view of God and a distant relationship with God (Pritt, 1998; Ryan, 1998). Empirical research with individuals facing cancer also asks the question of how religion and spirituality contributes to coping with life-threatening trauma. Illness represents a different type of trauma exposure, as the person needs to create a sense of meaning out of events that do not involve an act of violence or an identifiable perpetrator. In their thorough review of research on the use of spirituality and religion in coping, Lavery and O’Hea (2010) state that cancer patients frequently report that prayer and church attendance are very important parts of their coping activities, and they identify religious faith as an important source of support. Qualitative research indicates that cancer patients use their religious beliefs to make sense of the development of the illness, sometimes assuming that a moral failure has led to the cancer as a punishment (Aquino & Zago, 2007). Yet, the research participants also use their spiritual and religious beliefs to create hope for future, and a belief that the eventual outcome is controlled by a divine presence (Lavery & O’Hea, 2010). Quantitative research also demonstrates mixed relationships between religious coping and adjustment. Coping based on a relationship with the divine as judgmental or punitive (negative religious coping) is associated with more emotional distress and physical pain; whereas positive religious coping, or feeling as one is working in cooperation with a loving divinity, is connected with overall quality of life, but is not clearly related to positive emotional adjustment (Lavery, & O’Hea, 2010).

In combat veterans, a population with a different type of interpersonal trauma history, exposure to combat is associated with a reduction in spiritual well-being (Fontana & Rosenheck, 2004). In particular, difficulty forgiving oneself and others is associated with higher levels of PTSD (Witvliet, Phipps, Feldman, & Beckham, 2004). Then the emotional distress itself is associated with spirituality, as indicated when Croatian war veterans with chronic PTSD report lower spiritual well-being and existential well-being scores as compared to those without chronic distress (Nad, Marcinko, Vuksan-Cusa, Jakovljevic, & Jakovljevic, 2008). Recent theory has suggested that the experience of combat can create a type of religious or spiritual injury, as the soldier witness, acts, or fails to act in ways that challenge deeply held moral beliefs (Litz et al., 2009). It appears then, that the nature of the trauma (being a victim of violence, being the survivor of an illness, or being a participant in violence) contributes to how the individual conceptualizes spirituality or religious involvement in the aftermath. The personal or community beliefs about meaning, forgiveness, and morality can either promote or limit how resilience is developed and lived out.

The Dynamic Nature of Spirituality

However, the complex findings of the associations between spiritual variables and trauma experiences cannot be explained only by the type of trauma reported; an additional layer of
this relationship between spirituality and tragedy is the dynamic of growth that can happen in spiritual and religious experiences. Researchers and theologians theorize that human beings move through a process of spiritual development and that the spiritual life is not static. There is an inward and outward movement of spirituality as the individual creates meaning and develops awareness on the inside, attaches that to a community on the outside, and returns to re-evaluate the internalized awareness of the transcendent. In this way, the religious and spiritual life is rich with relationships, experience, activities, and personal transformation.

A person’s faith may be best understood as a dynamic, ongoing process: “Faith is a dynamic activity. Consequently, the spiritual dimension of the human person grows and develops in stages, not unlike the physical body or the personality. Faith is epigenetic; it unfolds throughout the lifecycle, changing and advancing in virtue” (Wilson & Moran, 1998, p. 170). In the aftermath of tragic or traumatic experiences, an individual or a community are confronted with the question of how they will make sense of the experience. How will this event become part of the story of life? The task of telling this story in the spiritual context needs to take into account what the individual’s spiritual story is prior to the traumatic experience, how spiritual faith is embedded within the experience, and what the story has been in the time following the event (Wilson & Moran, 1998). For some survivors of traumatic events, this story may move toward a “happy ending,” where the experience of loss or violence becomes a part of a narrative that holds on to hope, or a greater awareness of meaning and value of life (Linley, & Joseph, 2004; Tedeschi & Calhoun, 1996). For others, the experience may lead to a rejection of earlier beliefs and a reduced sense of spiritual well-being. It is not always clear why the spiritual story may be positive for some, and negative for others. Considering the dynamic or developmental aspect of spirituality may offer a heuristic to consider the current research findings assessing religious and spiritual variables in association with trauma and resilience to trauma.

A Framework of Spiritual Development

Growth in spirituality and religious practice moves between internal and external expressions. This growth can be experienced through relationships, changes in beliefs or values, the development of meaning, and then also meaningful actions. The movement is not linear, but may be described through understanding phases of a process or periods of particular focus.

One phase, and perhaps a beginning phase, of spiritual development is a state of specific awareness of the divine or transcendent (Hagberg & Guelich, 2005). This phase emphasizes a simple but profound step of allowing for a transcendent force in one’s life; the acceptance of transcendence creates an openness to greater meaning, awe, and need (Hagberg & Guelich, 2005). There is now a larger set of ideas about how the world works, as the transcendent is perceived as offering an understanding for events and stresses that is beyond the “seen.” This is a more internal experience of spirituality.

Another phase or stage in the process of spiritual development is a move to a more external experience of spirituality or religion. In this phase, the individual joins a community; it is a time of “learning and belonging” (Hagberg & Guelich, 2005, p. 53). One learns the language, the rituals, and the traditions that contribute to finding one’s place in a particular
community. This may be a formal religious community, or it may be an informal community of spiritually like-minded individuals who create a context for relationship and belonging.

The connections to resilience and resourcefulness in this phase of spiritual growth are multi-layered. First, there are the relationships and social support that are available through one’s involvement in a religious community; this support may be both emotional, as well as practical support. Next, the traditions and rituals available in a spiritual community become an opportunity for ritualized expressions of emotions such as grief, anger, and betrayal. Also, important “answers” to questions about meaning and purpose come from the leader of the religious community, from the “cause” that the community may be serving, or from the system of beliefs (Hagberg & Guelich, 2005).

Once an individual becomes socialized into the religious community or tradition, another step in spiritual development is a phase of productivity or leadership. In this stage, the individual is able to become a “unique” part of the spiritual community by participating in a way that uses her/his specific talents or capabilities (Hagberg & Guelich, 2005). This is also a new role as one contributes to the spiritual and personal well-being of other people. This phase of productivity contributes to resilience and resourcefulness in a variety of ways; for instance, the individual has access to the language and ritual of the community to express the range of emotional reactions related to the experience. There is also a community to provide practical, emotional, and spiritual support to the individual as a response to the event. In addition, the tradition’s value of continued growth or transformation will encourage an increased maturity in beliefs, and a clearer understanding of the tradition’s constructs of the transcendent. However, if the leader has religious or spiritual questions after a traumatic event, there may be significant risk for the individual’s well-being if the religious community does not allow for the expression of doubt, or if the leader fears that her position of authority may be seen as weakened by spiritual concerns. The leader may also model an “unquestioning” spirituality that limits the growth or doubts of others.

When critical moments of uncertainty come, one can enter a crucial point of spiritual development when the outward focused learning, working, and serving, shifts back to an internal re-evaluation. For many, this can relate directly to the need to be resourceful. A tragedy may strike, a loss occur, or a victimization take place, and the person needs to shift to accessing the resources and means to cope effectively with the experience and its aftermath. For some, the move to inward reflection and search for authenticity can create a difficult conflict, as ideas about one’s spirituality and/ or spiritual community may not fit with one’s lived experience anymore. For some individuals, this spiritual journey takes them to a crisis point - “The Wall” (Hagberg & Guelich, 2005, p. 114). This time of re-evaluation of one’s beliefs or connection to the divine can be a profound time to challenge incoherence in one’s spirituality. However, it may also be very disorienting, as the questions may lead an individual away from their spiritual community.

Facing a crisis and doing the challenging spiritual work to seek coherence can bring an individual to a new phase of development. In this phase of spiritual life, there is a new external focus in engagement with the community and the world, but it is based on a different sense of peacefulness and groundedness in one’s connection to spirituality. There is more tolerance of truths from other spiritual traditions, and more openness to the perspectives of others. In addition, there is an increased ability to tolerate the mystery or uncertainty of the divine (Hagberg & Guelich, 2005). For the individual who has moved through a time of

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questioning or crisis, this renewed and re-internalized sense of spirituality and religious doctrine also allows for flexibility in integrating a traumatic event with views of the divine.

KEY AREAS OF EMPIRICAL RESEARCH CONSIDERED IN THE DEVELOPMENTAL FRAMEWORK

The phases of spiritual development described earlier highlight the potential for resilience and resourcefulness at each phase of spiritual experience. It is intriguing to consider the areas that have been emphasized in the empirical literature as key aspects of spiritual and religious functioning and trauma response within this framework.

Religious Coping

In the phase of recognition of the transcendent, the primary emphasis is on how one relates or views the divine; this focus on the relationship highlights the importance of one of the most researched constructs of how religious and spiritual experiences intersect with human response to trauma: religious coping. Pargament and his colleagues have been researching and refining the construct of religious coping, to clarify not only whether individuals use their religion to cope, but “how” they use their religion in their coping (Pargament, Smith, Koenig, & Perez, 1998). This research led to a conceptualization of two types of religious coping: positive and negative religious coping. Positive religious coping is understood as those coping activities that demonstrate a cooperative, compassionate connection with the divine, and an effort to let go of anger, find forgiveness, and move toward growth. On the other hand, negative religious coping is based on coping actions that center on a view of the divine as punishing, abandoning, or limited in power (Pargament et al., 1998).

A meta-analysis of studies of religious coping and various stressful or traumatic situations determines that, in general, there are key relationships between the two types of religious coping and mental health outcomes (Ano & Vasconcelles, 2005). First, for positive religious coping (relating to a loving, compassionate and forgiving divine presence), there is a moderately strong positive relationship with measures of positive adjustment such as well-being, hope, growth, optimism and satisfaction. There is a moderate inverse relationship between positive religious coping and measures of negative adjustment, such as depression, anxiety, and posttraumatic stress symptoms. When examining the set of studies of negative religious coping (relating to the divine as absent, abandoning, or punishing), there is no significant relationship between negative religious coping and positive adjustment measures. However, there was a very strong positive statistical relationship between the use of negative aspects of religious coping and negative adjustment, suggesting that there is a risk inherent in relating to a divine presence conceptualized in a distant or vindictive way. This type of coping can lead to greater distress!

Limited research has been conducted on the antecedents of negative religious coping. Pargament (1997) suggests that conditions such as personal factors (such as personality, religion, or demographics), nature of the stressor (such as the number of stressors, timing of...
event), as well as characteristics of the larger context of the stressful event can contribute to
the type of religious coping employed. Negative religious coping, along with extrinsic
religiosity, is found to load unto a neuroticism-coping factor (Maltby & Day, 2004), which
indicates that individuals who utilize negative religious styles may also have a tendency to be
anxious, worrisome, moody and unlikely to engage or acknowledge stressful experiences.
Similarly, trait anxiety is correlated with negative religious coping (Pargament, Zinnbauer,
Scott, Butter, Zerowin, & Stanik, 1998). The personality disposition can be both directly and
indirectly impacting the choice to utilize negative religious coping, by coloring the perception
of the situation (Lazarus & Folkman, 1984). Therefore, a person who may be highly anxious
may consider a stressful event to be more dangerous, leading to a higher level of anxiety
regarding the situation and employing more negative forms of coping (Endler, 1997). A
general construct of negative disposition, which includes negative affect, trait anxiety, and
pessimism, has been found to correlate with negative religious coping (Schottenbauer,
Rodriguez, Glass, & Arnkoff, 2006).

There are questions of cultural and religious diversity in the research on religious coping.
The religious coping measure was developed for a Judeo-Christian perspective of the divine.
This limits the ability to generalize to other polytheistic or atheistic traditions. The total
sample for the meta-analysis described earlier was 85% Protestant or Catholic, and 65%
Caucasian (Ano & Vasconcelles, 2005). However, there are examples of the concepts of
religious coping proving meaningful in non-Western and other religious populations. Ai,
Peterson, and Huang (2003) use Pargament’s (1998) constructs of religious coping to
investigate the relationship between positive and negative religious coping and the constructs
of hope and optimism in a group of Muslim refugees from Kosovo and Bosnia who had
relocated to the U.S.A. In general, this group reported higher positive religious coping than
negative religious coping. In addition, trauma severity predicted higher negative religious
coping which negatively predicted hope. Religiosity was positively associated with positive
religious coping, which was positively associated with optimism (Ai, Peterson, & Huang,
2003). More research is needed to clarify the ways that the relationship with the divine is
conceptualized and used in various cultural and religious contexts. It will be important to
recognize the nuances of how attachment to a divine figure or figures contributes to recovery
from, or resilience to, trauma.

The Importance of the Religio-Cultural Context

Religious coping is not the only area of spirituality research with limited cross-cultural
investigation. Yet, the international community recognizes the importance of the religio-
cultural context in planning psychosocial interventions in areas of humanitarian crisis. The
Inter-Agency Standing Committee Guidelines, which are developed to guide psycho-social
programs, highlight the need to both partner with local religious leaders and traditional
healers in community interventions, as well as to facilitate the necessary resources for
traditional practices and rituals (such as burials and cleansing practices) in post-crisis settings
(Inter-Agency Standing Committee, 2007). These practical guidelines hinge on the idea that
an individual or group’s way of understanding emotional pain can be seen through the lens of
supernatural or spiritual models. Igreja (2003) describes an intricate system that has
developed in Mozambique in the midst of the civil war. A “Gamba” spirit takes over the body

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of a person, who then works in a context of spiritual healing and restitution. The whole family of this person is affected by the spirit's influence, and the work of the spiritual healing becomes a method to counteract guilt and revenge in the community (Igreja, 2003). In a very different context, Bhutanese Buddhist and Hindu refugees understand their traumatic experiences as the result of bad Karma; therefore, by practicing regular rituals, they may be able to persuade the gods to help them (Shrestha et al., 1998). These are specific examples of the way that the religio-cultural context influences the system of beliefs about the divine, as well as the necessary behaviors.

In addition to the specific belief system and ways of relating to the divine, the specific system of beliefs and behaviors is also an important contextual issue. Two intriguing examples of the importance of the systemic nature of religious or spiritual functioning also come from international settings. First, in a qualitative research study of Tibetan torture survivors, Tibetan Buddhism is reported as important in coping. Belief in Buddhist karma and the noble truths, and having a “spiritual attitude” were described as helpful (Elsass & Phuntsok, 2009, p. 6). In addition, the practice of meditation, while reported in other literature as having specific salutatory effects (see Seeman, Dubin, & Seeman, 2003), is only included in helpful coping by these torture survivors when discussed in the context of the whole of Tibetan Buddhism (Elsass & Phuntsok, 2009).

Second, in a study of the effects of exposure to chronic terrorist threats on Israeli citizens, Hobfoll, Canetti-Nisim, Johnson, Palmieri, Varley, and Galea (2008) note the differences in functioning dependent on the extent of the individual’s religiosity. Those reporting traditional practice as Jews were three times more likely to report clinical levels of posttraumatic stress disorder as compared to secular Jews, or religious or very religious Jews. The authors suggest that those following a traditional practice follow some religious laws, but do not commit to a complete practice. The acts of terrorism may be more of a threat to their belief system, as compared to secular Jews, who do not consider religion as part of making meaning out the event, or as compared to religious Jews, who may use their religious beliefs to comprehend the events and not allow the beliefs to be questioned (Hobfoll et al., 2008).

**The Reality of Spiritual Crisis**

Whether it is personal loss or large-scale terrorism, making sense of crisis events is a human task. The reality of entering the developmental phase of doubt and crisis is not a place to be avoided. A number of developmental frameworks have emphasized the necessity and instrumentality of a crisis or struggle in the promotion of growth and maturation in one’s personal life, perhaps even a necessary ingredient to resilience (Erikson, 1968; Fowler, 1981; Parks, 2000). Erikson defines a crisis, not as a tragic dissolution of the self, but instead a transitional point. Fowler emphasizes the need of disequilibrium to encourage changes in faith and belief patterns. Parks uses the analogy of a “shipwreck” for college students in their process toward “gladness” that leads to a clarified sense of faith and meaning that is rooted in a better grounded reality. Such moments may be spurred on by relational trauma; awareness of death, suffering, and social injustice; intellectual challenges of a previously held faith; and disturbances in one’s comprehension of the functioning of life and the world. Moments of shipwreck are best served in the context of a “hearth,” (Parks, 2000, p. 154) a setting that
promotes equilibrium, stability, motion, and would spur us toward positive change. Existing social networks, or an outside supportive community, can offer space for reflection, dialogue, and consolation.

Spiritual crises are associated with a number of negative outcomes, such as poorer physical health (Bryant & Astin, 2008) as well as depression, anxiety, negative mood, low self esteem, suicidal thoughts, feelings of being overwhelmed, and stress (Hill & Pargament, 2003; Pargament, Murray-Swank, Magyar, & Ano, 2005). Perhaps connected to lower psychological and physical functioning, participants reporting spiritual struggles have also reported decreased confidence in their personal, social, and intellectual abilities (Bryant & Astin, 2008). On the other hand, spiritual crises have actually been identified with positive outcomes such as greater open-mindedness (Hill & Pargament, 2003). The difference in outcomes is suggested by Bryant and Astin (2008), confirming Parks’ emphasis on the necessity of having a “hearth.” Students who did not have a religious tradition, an affiliation to a campus religious group, contemplative spiritual disciplines, or faculty support of their faith, declined spiritually due to their spiritual struggle, compared to those who had such supportive systems. Regarding intrapersonal dynamics in spiritual crises, traits of anger and neuroticism are associated with the experience of spiritual struggle (Pargament et al., 2005). In addition, the process of comprehension and meaning-making influence the experience or crisis, as those who have difficulty acknowledging the troubling aspects of existence (e.g., evil and suffering), or who may have an insecure spiritual attachment to a distant or unpredictable God, have a propensity for spiritual struggle (Pargament et al., 2005).

**Potential for Posttraumatic Growth and Transformation**

However, for many people confronting the religious and spiritual questions about tragedy results in a refined or strengthened sense of spirituality. Researchers have identified positive changes in spirituality and religious faith as components of stress-related or posttraumatic growth (Tedeschi & Calhoun, 1996). Survivors may report a stronger sense of the transcendent or a closer relationship with the divine. In addition, religious activities, positive religious coping, and intrinsic religiousness all demonstrate a positive association with growth in other areas such as an appreciation of relationships, a sense of personal mastery, and an awareness of new life opportunities (Linley & Joseph, 2004).

Trauma may have a deleterious impact on the spiritual life of the victim; an individual who has experienced an extremely stressful event or a trauma may engage in evil actions out of an impaired judgment. Spirituality and religion may benefit the individual in two manners - in a positive direction by offering transformative experiences that would promote growth, and by providing an antidote against negative experiences.

In general, religiosity has been found to promote thriving and positive development. Dowling, Gestdottir, Anderson, von Eye, Almerigi, and Lerner (2004) report that religion and spirituality are positively associated with thriving, a construct that represent the presence of healthy behaviors and a lack of risk behaviors. King and Furrow (2008) found that religiosity promotes moral outcomes (empathic concern, altruism, and perspective taking) through the mediator of social capital resources which include social interaction, trust, and shared vision among adolescents. Furrow, King, and White (2004) also find positive associations between
the constructs of religious identity and personal meaning, as well as religious identity and prosocial concern. Dy-Liacco, Piedmont, Murray-Swank, Rodgerson, and Sherman (2009) report that the positive relationship between spirituality and religiosity with psychological flourishing is a phenomenon can translate into, and be found in, other cultures.

A meta-analysis of 39 empirical studies has found that religious activities and intrinsic religious orientation have both been positively correlated with growth after a traumatic event (Linley & Joseph, 2004). VanOyen Witvliet, Hinze, and Worthington (2008) conducted a study on Christian young adults on unresolved injustice, and report religious commitment as positively correlating with a higher level of dispositional forgiveness interpersonally, a lower level of rumination, inhibition of revenge seeking behavior, and the cultivating of empathy and forgiveness.

Trauma can also lead to positive prosocial responses. The construct of posttraumatic growth must be “sustained over time… and translated into growth-related actions” in order to help reduce psychological distress (Hobfoll, Hall, Cannecci-Nisim, Galea, Johnson, & Palmieri, 2007, p. 362). The thoughts are not enough; true transformation requires a movement toward actions that are cohesive with the individual’s meaning of the experience. A prevalent posttraumatic phenomenon, “altruism born of suffering” (Staub, 2003, 2005), has now been explored. Staub and Vollhardt (2008) explain that altruism born of suffering develops after an individual has suffered due to a trauma event The individual may undergo certain experiences that would promote psychological change, including healing, social support, self-promoted action, and guidance from others toward healing. This may then lead to changes in the view of self, others, and the world, as well as psychological changes that facilitate altruistic action. This can result in the outcome of altruism born of suffering. Religious institutions can often facilitate the process, as Christian trauma victims have found increased social support through their church membership (Harris et al., 2007). The religious community may also be a place to find altruistic role models who may encourage the trauma victim to react in an altruistic manner. There is also the opportunity for benefits at a societal level, which can contribute to individual well-being. A sample of U.S.A. residents reported that they experienced positive social changes such as increased religiousness, increased political involvement, and more positive social behavior in the community after the 9/11 terrorist attacks (Poulin, Silver, Gil-Rivas, Holman, & McIntosh, 2009). Those reporting a perception of increased national religiosity reported more positive affect and less emotional distress, even three years after the attack.

**CONCLUSION**

Overall, the empirical research makes explicit what thousands of years of human experience have borne implicitly, namely that the tragedy and stresses of life create hurdles that humankind needs to overcome, and we turn to community, meaning, and actions to cope with and overcome this adversity. Spirituality and religious traditions offer systems of belief, ritual and relationship that can support this process of making meaning and finding community support. However, the empirical research investigating these phenomena indicate just how complex and dynamic the relationship between spirituality and resilience truly is. First, there is the individual or community understanding of the nature of the divine; positive
religious coping (divine as loving, cooperative, forgiving) and negative religious coping (divine as punitive, judgmental, or ineffective) have consistently shown differential effects on the well-being of trauma survivors. Thus, when considering whether someone is using their faith in a divine presence to cope with trauma, an important question is how the person views that relationship.

Another important part of the resilience puzzle is the context of the beliefs and rituals. As a person develops spiritually, there is the opportunity to become integrated or socialized into a spiritual or religious community; in this way, a community may hold a construction of meaning, and the rituals for coping and transformation within a network of supportive relationships. Finally, the research also supports the importance of growth through struggle. Just as individuals grow physically and cognitively over time, an individual can grow spiritually; confronting spiritual struggles or tragic events can become a critical time for growth leading to transformation. Spirituality and attention to the transcendent creates a foundation for comprehending and engaging with the challenges of life; therefore the relationships and rituals of religious traditions can be a place to support the transformation that moves a person from ideas to resilient actions and from victim to survivor.

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PART 2: TRAUMA AND STRUGGLE
Narrative

**FAMILY TRAUMA OR CHALLENGE AND RESILIENCE IN THE GALAPAGOS ARCHIPELAGO**

*Elizabeth Tindle*
Consulting Psychologist, Brisbane, Australia

Savour every word until satiated
Travel with me through rough terrain
Over bare black lava flows
and belching volcanoes.

Whilst I, remember stories
From decades ago
That have been mothballed
In the crevices of my memory.

A debriefing of danger and audacity.
In retrospect, I feel a certain disbelief
And shame in my own rash foolishness
Playing ‘fast and loose’ with DEATH.

I am sitting on a large boulder on the volcanic Island of Fernandina, one of the youngest and most western island in the Galapagos archipelago in Ecuador. I am observing the moment by moment behaviour of a few flightless cormorants incubating their eggs on their nests. We are very close to the coast and the constant sound of the breaking waves of the Pacific Ocean is heard in the background. It is breeding season and the cormorants are incubating their eggs, with both male and female sharing the task. A male drags himself out of the brine where he has been fishing and jumps from boulder to boulder with an algae or other gift from the ocean to present to his sitting mate. She takes it in her razor sharp bill and seems to make a fuss over deciding where to place it in the nest, picking it up a number of times and replacing it until

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* Material in this narrative was presented at the APS Conference at the Charles Darwin University in Darwin on September 25th 2009.

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she is satisfied that it fits in the right spot. She may swap the incubation role at this point or
continue huddling down again on her eggs. I note every detail in my observation file.

We are studying the impact of tourists on the breeding success of flightless cormorants,
and this area of the island of Fernandina, called Punta Espinosa, is a popular tourist site.

A tourist ship arrives at Punta Espinosa and a group of US tourists disembark and start
walking the tracks. The leader of the group is Giovanna Holbrook from Gainesville Florida.
She approaches and asks how things are. I have met her on previous occasions. I tell her that I
am seven months pregnant.

She asks me if I have everything I need for the expected newcomer. I tell her that I have
nothing, the seriousness of the situation not having dawned on me yet.

Amazed at what she hears she says that she can send a whole lot of essential baby items
down to Ecuador for me. I thank her and the conversation ends. After my four hours of
observations have ended, I clamber back to base camp over lava hills and dales.

Photo 1. Camp at the Observation Post on the island of Fernandina.

Some weeks later, our boat arrives to return us to the island of Santa Cruz where our lava
stone cottage and the Charles Darwin Research Station are situated.

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We pack up our simple camp site and load up our gear onto the small pangas which transport us out to the fishing boat. We have a three day trip back to the harbour of Puerto Ayora, on Santa Cruz and because the boats are lacking navigation equipment, we have to anchor at night. I suffer from sea sickness under normal circumstances. It is even more important in this advanced pregnant condition not to risk violent vomiting, so I spend most of the journey supine, flat on my back.

The tiny vessel wends its way through the many islands and islets steered by our Ecuadorian skipper (patron) and his mariner. They decide to have a change of diet from the usual fish caught on the trailing line attached to the boat’s stern.

We drop anchor near the island of Santiago and the three men Bob, Skipper and Marinero, take off to do some goat running like Robinson Crusoe and his companion Man Friday in the famous classic by Daniel Defoe. I remain on the gently rocking boat. They return some time later bearing their quarry and are eager to start cooking dinner. Although keen to satisfy my healthy appetite, I feel slightly repelled at the thought of eating a female goat which was able to be run down because it was carrying a kid. Yes, she was a pregnant female like me and had been too heavy to run as fast as the others and thus she had become vulnerable. Wasn’t that just how I felt in my heaviness - vulnerable, slow, and potentially nauseous?

Within a few weeks of arriving back home on Santa Cruz, a large boat from the Ecuadorian mainland docked at Charles Darwin Research Station quay. It unloaded many pre-loved baby items for our expected child. The reality of what it means to have a baby on these distant islands hits me, as I hold up the tiniest baby suit I have ever seen. Could a human infant really fit into something as minute as that?!
Our home in the village is a one roomed lava stone cottage with a corner partitioned off for shower and ablutions. I am too advanced in my pregnancy now to take another trip away, so I decide to stay home alone when Bob goes away on the next observational trip. I continue my work managing the Charles Darwin Research Station library for visiting scientists from around the world. When in our cottage, I start painting a large picture of ‘a pregnant me in the raw’, with the assistance of a tiny hand mirror. It’s challenging, but seems to be taking shape alright.

Whilst sleeping one night, I hear the sound of a rat entering the room through a fly screen high above my head. He seems to be running and scuttling along the ledge which circumnavigates the room, although in the pitch darkness I see nothing. I fumble to find a candle and match to give a modicum of light. I feel for a “weapon” and put my hand on a small hammer. I follow the sound which leads me to the shower room and have a fleeting glimpse of him disappearing inside a crate stored on a chest level shelf. I attempt to wedge him in by filling every orifice of the crate with objects. It doesn’t work. He emerges through a small hole and attempts his escape. As he is on the point of taking off again, I come down heavily with my hammer, but just manage to inflict an injury on his rear end near his tail. He jumps at me and then he frantically jumps haphazardly in all directions landing on the wall leaving large splotches of his blood at irregular intervals. He runs out of the “room” and takes refuge under the sink. At this point, I decide that it is useless going in pursuit. I will save that for another night. I go back to bed in the blackness and sleep fitfully.

The following night, I decide that I will play the waiting game. I take out my crocheting and sit in a comfortable chair in total silence, close to the spot where I think the rat has hidden. I set a cage trap near by, containing a piece of ripe banana. It is not long before the rat emerges. He investigates the food and trap for a while before taking the bait. The door snaps shut and I carry him out doors and decide to dispose of him the following morning. I can now sleep in peace!

Everything has gone exceptionally well with the pregnancy. I have no morning sickness or days of illness. I swim every day and have done lots of utilitarian walking and climbing. As I am returning from the library, I meet David whose partner Johanna is slightly more advanced than I in her pregnancy. David tells me that Johanna has had a tragic occurrence. She has lost her baby and the placenta has not emerged. As there is no telephone on the islands, David had used the ham radio to contact a young Doctor on one of the other islands, San Cristobel. The doctor operated on Johanna by cutting her the length of her abdomen, gangrene had already set in and Johanna is dying. I feel weak at this tragic news and have to ask a passing boy to carry my bags for me.

As a direct result of this tragedy, the Director of the Research station makes a unilateral decision and decides to send me to the mainland to give birth. This decision is to save both my life and that of our son. I was not to know that only by means of a Saturday afternoon emergency Caesarean section, our child’s survival would be possible. Like many women in primitive environments, I would have died in child birth. I sometimes reflect on what might have been when I look at this six foot tall son today, had the Director not taken such decisive action as a result of Johanna’s tragedy.
Galapagos Birth

“Thanks be to God”, the surgeon said,
“Gracias a Dios” as I lay and bled.
“He’d arrived whole and healthy, alive and well!”
After hours of tense torment in a theatre of hell.
Yanked from my guts, he’d tenaciously held on,
Caught in a corset of muscle and tendon.
Conceived near a crater, where cormorants breed,
In islands straddling the equator. Paradise indeed!
At the edge of the world, this new life began,
Where Darwin discovered the origin of man.

On the same day that the Chilenian surgeon, Dr Wagner, removed the stitches from my abdomen after the operation, Bob, baby, and I board a flight to the Island of Baltra in the Galapagos Islands. This small island served as an airstrip during the Second World War and had been occupied by the American air force. No life survived there after their sojourn, as every moving creature had provided target practice for the servicemen.

We wait for a motor boat to convey us across the strait to the village of Puerta Ayora on Santa Cruz. None arrives. We are informed that all available outboard motors have been earmarked for use during the visit of Ecuadorian Government Officials to the Islands. We continue our wait throughout the heat of the day. I have one small bottle of water. Many of us crowd into the single, small shelter that provides a little respite from the burning heat. I sit there bracing the elements with my 10 day old baby. After a number of hours, a motor boat appears. Everyone piles in keen to get a seat on the first crossing. The women and children are left behind and have to wait for its return.

On the other side of the passage, a rickety old bus waits to take us across the hilly island interior to the village. Fumes escape into the interior of the bus, but we push on until we eventually arrive at the village of Puerto Ayora. We walk to our cottage and are thankful to be home.

Some research on women with post partum depression has compared their experience with being alone on an uninhabited island in the middle of the ocean. However, I found the experience of caring for a baby in such an environment, both a joy and a challenge.

After a hard earned rest, we begin the challenge of caring for the baby with no fresh water or electricity. Nappies we wash in the brackish water provided by the village corporation who fills our tank twice daily. We collect fresh water from the roof of the research station and boil it before drinking. Some time later, both Bob and I have infestations of parasites: amoebas, ascaris and hookworm.

I take the baby to the library daily and he usually sleeps in his cot in the corner. Only a few scientists visit the library, so there is usually no one to disturb us. The timber cot was made by the Ecuadorian carpenters in the Research station joinery. It is ideal, as it dismantled for travel on the fishing boats and could be easily reassembled at camp.

Very soon, it is time to travel to the Island of Santiago on a small hired fishing boat to continue our observations of flamingos in their breeding lagoon. It is steamy hot and I have to take the baby with me into a tiny cabin below deck. Neither of us can settle and do not have any sleep. It is unbearably hot. I feel desperate for sleep and decide to put him in the small
carry cot on deck. I wedge the cot, with handles, as snugly as possible between two large plastic water bottles (chimbuzos). I sleep soundly, but upon wakening I suddenly realise what a risky move that had been. Everything on deck is vulnerable to the elements and could be washed overboard in a moment. Fortunately, the weather remained clement and the seas calm.

**Anchored on the Equator**

- Hot steamy night in the fishing boat cabin
- Gentle Rocking in the tropical Doldrums!
- Exhausted and desperate for sleep,
- I put him on the dishevelled deck.
- Rash decision!
- A tiny cot wedged between sturdy water bottles.
- I sleep soundly.
- In my ignorance I leave all to nature.
- Oblivious to a brewing storm
- Threatening choppy seas.
- It passes leaving silence
- But for the gentle sound of the distant surf.
- Refreshed, I return to check the deck.
- A moment of angst overwhelms me.
- A sigh of relief.
- Safe!!

We anchor at a sandy beach edged with mangroves. The first item to disembark is the carry cot and baby. I land on the beach and run up the incline, cot in hand. I place it high up the beach and under the mangrove fronds for shade. Whilst we continue unloading the camping gear and food from the boat, I notice that a hawk is watching our arrival with interest. Galapagos hawks are very curious birds. No sooner than I turn my back, I hear a scream from the cot. I turn around in time to see the hawk flying away from the cot with a mosquito net dropping from its talons. I run as fast as my legs will carry me up the beach only realising the hawk’s intension as I take in the sight before me. The Ecuadorians tell me that hawks go for the eyes of young goats - a delicacy for them. The thought of having a blind son, because of my ignorance, fills me with horror.

We assemble camp and in due time begin our observation of flamingos at the lake about a half an hour walk from our base camp. Our main camp is on a coastal lagoon called Sarten which is Spanish for frying pan. It is round and blue. Between the camp and the flamingo lagoon, there is some very treacherous sharp ropey lava to cross en route. Returning from the lagoon is more difficult than going there, as there is no light to guide us. We have no sense of direction in the pitch darkness and it so easy to walk in a complete circle.

We resolve the “lost in blackness” dilemma by setting up another small camp near to the inland lake returning in the daylight to the base camp near the beach. We sleep under a mosquito net, or in a two-man tent, when working beside the flamingo lagoon. We have to cover ourselves from head to toe when doing our observations, as this is thick mosquito
breeding territory. It is hot and humid. Flamingos form their cone shaped nests from mud in shallow mosquito infested mangrove lakes.

**Galapagos Hawk**

Baby on the beach,
Shaded by mangrove.
Hawk on the prowl
Ogling
Spots young eyes,
Tender and tasty.
In a split second,
It swoops
Razor bill ready
To gouge.
Talons tense
Aims for the eyes
Baby screams.
I race up the beach
Hawk turns tail and alights on a log
Foiled by a flimsy mosquito net.

Having a baby at camp means that we have to try to find sufficient shade at all times. We have to be constantly moving the cot around the outside of the tent depending on the position of the hot sun in the sky. During the day, the inside of the tent is a “furnace”. We also have to check the sheets thoroughly to ensure that there aren’t any scorpions or giant centipedes snuggled there. One bite from a scorpion could produce a very high fever in an adult and might even be fatal for a baby.

I am the complete source of Paul’s food. If anything happens to prevent my feeding him, we are in trouble. We have no radio contact, nor a boat. We certainly are not prepared for medical or other emergencies. Since having had the stitches removed from my abdomen, I have not seen a doctor again and there is no post-natal care for either the baby or me. I have no fear.

As is usual for parents of new babies, we have to get used to the daily washing of cloth nappies. Where else would I do that but in the vast Pacific Ocean. I wade out from the beach and throw all the nappies in the sea. They bob around with the rise and fall of each incoming wave. I lather each nappy with a coarse blue soap called “macho” especially manufactured for salt water washing. When finished, I collect them up and one by one put them in a small bowl of fresh water for a final rinse before hanging them over the branches of the surrounding mangroves to dry.

Fresh water is a scarce commodity on the volcanic islands which means that we have to carry dozens of large plastic containers with us to camp. We treat ourselves to one beaker of fresh water each for cleaning our teeth, but we bathe in the sea.

I am sitting at camp painting with the baby on my lap, skin to skin. Feeding is on demand. He doesn’t need to cry. At night in the tent, we place the cot beside the inflatable mattress. In the darkness in the early hours of the morning, I sense that the baby is awake.
take him onto the lilo and change the wet nappy in the darkness. I place the safety pins between my teeth so as not to lose them in the blackness. I have a plastic bag for the wet nappy and a dry one is within reach. All this is done by touch. I feed him and put him back in his cot until daylight and the working day arrives.

I leave baby Paul with Bob at base camp beside the lagoon, Sarten, and begin my walk across the sharp lava in my sturdy hiking boots toward the flamingo study area. On my way, I realise that I am being fired on by who knows whom? I dodge from boulder to boulder to try to avoid the bullets. Heart pounding, I finally arrive at the safety of my “hide”.

Some time later, we are told that the Ecuadorian Navy had been having a shooting practice from a ship off the coast of Santiago thinking that the island is uninhabited. They did not check with the Research Station to see which scientists were working in the field.

Throughout the following months, the baby thrives and becomes quite chubby. When in the village the women quiz me on what I am feeding him on because he is “el gordito” (little fat one) and I am so “delgada” (thin). I tell them that it is milk and fruit that he eats. I am amazed at how the female body can adjust the milk production to the daily needs of the child provided other foods are not introduced. They ask if he is walking or talking yet. I tell them that he is not walking (at 13 months he walked), but that he is talking a great deal. We are now thinking of planning for a second child and know that fertility remains low whilst feeding on demand. At fifteen months he is weaned, and I become pregnant with our second child. I am now forty years old.

We continue our studies (from 1976-1979) of the flamingos and cormorants for another seven months, but decide that we will return to a safer environment to give birth to the second child. It is with some sadness that, after 3 years, we say goodbye to our friends at the Research Station and those in the village of Puerta Ayora and start the marathon journey back to civilization.
Chapter 5

TRAUMA, GRIEF AND GUILT IN SUICIDE BEREAVEMENT

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ABSTRACT

This chapter uses the words of the bereaved and examines the experience of people attending suicide bereavement and pain management groups offered by Lifeline Community Care Brisbane, Australia, between 2007 and 2009. The discussion is based on the feedback provided in 20 face-to-face interviews. Group participants reported the following elements as being particularly helpful in their suicide bereavement group experiences: recognition of the traumatic nature of the death; normalising of their thoughts and emotions, and providing hope for the future by being with others bereaved by suicide; acknowledging their guilt and fear, and the need to talk about the grief experience; and support for the process of trying to make sense, or meaning, of the death. For participants in the pain management group, the most salient feature was the recognition of the fact that they had become stuck in their pain and loss experience, but could engage in a process of healing and forgiveness which could lead back to greater engagement with themselves and their life. Support structures and practitioners need to be prepared to re-visit the loss story many times and acknowledge that it is never too late for those bereaved by suicide to seek group based or other counselling support.

Keywords: suicide bereavement, trauma, grief, guilt, trauma adjustment

INTRODUCTION

This chapter examines the experience of people attending suicide bereavement and pain management groups offered by Lifeline Community Care Brisbane, Australia between 2007

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* Lifeline is part of UnitingCare Community.

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and 2009, in the context of recommendations of clinical responses for people bereaved by suicide (Flynn, 2009; Jordan, 2009; Lifeline, 2009a, 2009b; Sands, 2009). Group participant feedback has been explored to provide further information on the bereavement and grief journey, to help inform practice in terms of what people bereaved by suicide were seeking from service providers and found helpful in their group experiences, in order to add support to the recommendations of other practitioners, expand the discussion to address timing of support services, and to generate further consideration of the traumatic elements of suicide bereavement. The chapter takes a practical perspective to assist practitioners working in this area and acknowledges that the bereaved are the experiential experts in this situation. Thus, the focus throughout this discussion is on what people bereaved by suicide tell us.

Suicide Prevention and Service or Community Responses in Australia

Suicide is extremely devastating for those affected by it and a range of coordinated population and community based suicide prevention strategies have been introduced in Australia, including the National Youth Suicide Prevention Strategy in 1995, National Suicide Prevention Strategy in 1999, and Living is for Everyone (LIFE) Framework (Department of Health and Ageing [DoHA], 2007). These prevention strategies seek to foster collaboration across multiple sectors and have focused on normalising help-seeking behaviour and reducing social stigma surrounding mental illness. Australian figures from the later 1990’s indicated that annual suicide deaths exceeded deaths by motor vehicle accidents, which together accounted for more than half of all injury deaths (Australian Bureau of Statistics [ABS], 2002). Throughout the period 1999 to 2008, the male age-standardised suicide death rate was approximately four times higher than the equivalent female rate, resulting in a ranking of suicide as the tenth leading cause of death for males in 2008 (ABS, 2008). However, it has been acknowledged that statistics have tended to under represent the extent of suicide (DeLeo, 2007). Recent process improvements for Australian data indicate 2,191 deaths from suicide registered in 2008, with the median age at death for males being 42.4 years and for females being 43.5 years (ABS, 2008).

The revised LIFE framework (DoHA, 2008) aims to improve understanding of suicide, raise awareness of appropriate ways of responding to people considering taking their own life, and of the role that people can play in reducing loss of life to suicide. Groups identified as high risk for suicide include males (particularly aged 20-54 and over 75 years, and in Aboriginal and Torres Strait Islander communities), people with mental illness, individuals with substance dependence problems, people in contact with the justice system, people who have attempted suicide, rural and remote residents, gay and lesbian communities, and people bereaved by suicide (DoHA, 2008).

A long recognised need is the provision of support and services for family members and others affected by a suicide death and the concept of postvention as prevention is receiving increasing support (e.g., Andriessen, 2009; Cerel, Jordan, & Duberstein, 2008). The DoHA has funded several related initiatives including the StandBy Response Service which is offered through Lifeline Community Care Brisbane and in a number of other locations (LIFE Communications, 2010) to provide crisis intervention, support and referral for people bereaved by suicide. In Brisbane, these referrals have included three group processes offered by Lifeline Community Care. The groups that were offered for people bereaved by suicide
during the research period were two structured psycho-educational and therapeutic groups: the suicide bereavement group and subsequent pain management group which offered another approach and acknowledged that the grief and loss experience can be a lengthy process; plus a monthly peer support and professionally led suicide bereavement support group.

At the national level, DoHA has also supported collaborative work on best practice standards for suicide bereavement support groups (Lifeline, 2009a, 2009b). The project developed two documents to guide practice and created a national model and evaluation framework able to provide guidance for services developing and running suicide bereavement support groups (Lifeline, 2009a, 2009b; LIFE Communications, 2010). A LIFE newsletter (LIFE Communications, 2010) outlines this and related research and projects with a focus on bereavement and suicide prevention. A wide range of services, community agencies and suicide specific or other bereavement support groups now exist in various locations.

A special edition of Grief Matters: The Australian Journal of Grief and Bereavement also considered suicide bereavement and brought together practitioner research and experience in responding to those bereaved (Flynn, 2009; Hall, 2009; Jordan, 2009; Sands, 2009). Suicidal death has been described as usually sudden, unanticipated, untimely, often violent, and subject to stigmatisation by the community (Moore & Freeman, 1995). Others have suggested that while such a death is sudden, it is not necessarily always unanticipated (Australian Psychological Society [APS], 1999). Few studies have evaluated suicide specific interventions (Jordan & McMenamy, 2004), and a needs assessment noted that there is little research on the natural coping efforts used by people bereaved by suicide (McMenamy, Jordan, & Mitchell, 2008). Several articles also highlighted the gaps in effectiveness research and understanding of the needs of people bereaved by suicide in a support group context (Cerel, Padgett, Conwell, & Reed, 2009), common definition and nomenclature problems (Andriessen, 2009), and emphasised the need for more intervention studies (Robinson et al., 2008). Cerel et al. (2009) identify that it is important to evaluate support groups to determine the most helpful approaches and benefits gained from participating in such groups.

METHOD

Participants

Past participants in suicide bereavement and pain management groups conducted by Lifeline Community Care Brisbane in 2007-2009 were invited to participate in face-to-face interviews as part of two research and evaluation processes. The research involved informed consent processes for research participation and follow up post group sessions and for the interviews. The research was approved by the Blue Care Human Research Ethics Committee and Queensland University of Technology Human Research Ethics Committee as meeting the requirements of the National Statement on Ethical Conduct in Human Research.

Response rates for follow up interviews for the suicide bereavement groups were 76% (n = 17) and for the pain management groups 100% (n = 7). Five of these participants were involved in both groups and interview processes. The majority of group and interview participants were female with only two male participants to date. For those interviewed, the most common relationships to the person who died were parent (50%), sibling (30%), partner

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or another relationship (20%). The length of time since the bereavement ranged from less than one year to eight.

Suicide bereavement group participants were predominantly self-referred resulting from wide community advertising via print media and radio. The pain management group was offered to previous suicide bereavement group participants as a follow up process and included two new participants referred through other contacts with the service. Both group processes were specifically designed for people bereaved by suicide, had psycho-educational and therapeutic content, were structured and involved two facilitators per group with seven or fewer participants. Group participants had the option of attending all of the weekly sessions for the six to eight week program offered in each instance. Group sessions for the suicide bereavement group covered the following issues; the grieving process and traumatic loss, physical and emotional feelings, coping strategies, honouring a life, and looking toward the future (Stafford & Groos, 2010). The pain management group was based on the forgiveness process developed by Luskin (2002). Group participants were also offered the opportunity for individual therapeutic interactions or counselling sessions with group facilitators.

**Procedure**

Interviews were conducted by one researcher (Groos) in the participant’s home or at a Lifeline Community Care Brisbane office. An in-depth semi-structured interview format (Miller & Crabtree, 2004) sought to elicit stories and group experience based narratives. However, individual concerns often steered the direction of the interviews which presented an opportunity to gain insight into the complexity of the suicide bereavement experience and generated data surrounding a large number of concepts. The introductions and interviews took up to one hour ($M = 35.5$ minutes, $SD = 10.6$, $n = 20$), were audio recorded and transcribed verbatim. Participant quotes have been modified slightly here to improve readability and flow.

Interviews were analysed using a Grounded Theory process of inquiry (Glaser & Strauss, 1967) and are described in more detail elsewhere (Groos, 2009; Groos & Shakespeare-Finch, 2012; Groos, Shakespeare-Finch, & Aganoff, 2010; Stevens & Groos, 2010). The intention of this method is to generate a theoretical framework by constant comparison of data which may come from a number of sources (Glaser & Strauss, 1967). These findings and additional participant feedback have been used here to seek to support and add to the clinical insights and experience summarised by a number of practitioners working in the area of providing support after suicide bereavement (Flynn, 2009; Jordan, 2009; Lifeline; 2009a; Sands, 2009).

**Results**

In this section, the feedback from the participants has been integrated with theory and reflection and is interspersed with discussion of the research findings.

Suicide bereavement is distinct from mourning other types of death in terms of the thematic content of the grief, social processes surrounding the bereaved, and the impact on family systems (Jordan, 2001). Flynn (2009) also discusses the complex and unique features
of suicide bereavement which make it different from other grief experiences. She explores the impact of suicide on the bereaved person’s identity and sense of self, the perceived failure to prevent the death, the search for an explanation, stigma, social networks and family relationships, plus an increased risk of suicide. Flynn (2009) also highlights that for young people, developmental issues of identity, autonomy and independence can be profoundly impacted by a suicide in the family.

Tedeschi and Calhoun (2006) emphasise that self-disclosure and rumination are important processes for persons responding to losses, and that the reaction of the person receiving the disclosures can have critical impacts on the likelihood of positive outcomes. The people who are seen as most helpful are often those that have had similar experiences and can act as possible role models (Calhoun & Tedeschi, 1999). Jordan (2009) also emphasises the importance of contact with others bereaved by suicide and a group experience can be a particularly effective way to facilitate this. Participants in the suicide bereavement and pain management groups run by Lifeline Community Care Brisbane have said that they “just wanted to be with people who had been through the same experiences” or that “you don’t really get this unless you’ve been through it”. Other similar comments about the group experience included:

“The thing I found most helpful was for the first time in two and a half years, I sat there and everyone knew what I was going through… it’s not the actual personal story [that’s important], it’s the people left behind and... that’s where it’s just much easier [in the group] because there is no explaining that has to be done.”

“[The group] makes you realise that you’re not by yourself, you’re not the only one that’s going through those things… and it also helped with just understanding… why I was feeling different. Because I had lost my brother and mother and father before, but to disease, and it was such a different process totally.”

**Table 1. Recovery Tasks Suggested for People Bereaved by Suicide and those Supporting them**

<table>
<thead>
<tr>
<th>Recovery Tasks and Clinical Goals for People Bereaved by Suicide (Jordan, 2009, pp. 5-7)</th>
<th>Responses or Tasks for the Bereaved (Barlow &amp; Morrison, 2002, p. 32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Containment of the trauma</td>
<td>Talk about the death scene and circumstances</td>
</tr>
<tr>
<td>Creation of a survivor narrative and meaning-making from the death</td>
<td>Accept the reality of the death</td>
</tr>
<tr>
<td>Learning to dose exposure to the loss/trauma</td>
<td>Accept the reality of stigma</td>
</tr>
<tr>
<td>Managing changed social connections</td>
<td>Neutralise guilt</td>
</tr>
<tr>
<td>Repair and transformation of the bond with the deceased</td>
<td>Resolve anger</td>
</tr>
<tr>
<td>Memorialisation of the deceased</td>
<td>Develop a personal understanding of why</td>
</tr>
<tr>
<td>Restoration of functioning and reinvestment in life</td>
<td>Take control of social interactions</td>
</tr>
<tr>
<td></td>
<td>Restore a sense of dignity to the deceased’s memory</td>
</tr>
<tr>
<td></td>
<td>Rebuild family relationships</td>
</tr>
<tr>
<td></td>
<td>Repair the shattered sense of shame and self-worth</td>
</tr>
<tr>
<td></td>
<td>Remove the existential crisis around the death</td>
</tr>
</tbody>
</table>

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Barlow and Morrison (2002) suggest stages of disintegration, devastation, and renewal, noting that the search for “why” the suicide occurred may become a relentless quest, so that a task of the counsellor is to include repeatedly reviewing the death and facilitating the search for meaning. Sands (2009) also focuses on the challenges to meaning-making, relationships with the deceased and the self in her Tripartite Model of Suicide Grief which identifies the themes of “trying on the shoes”, “walking in the shoes”, and “taking off the shoes”. She emphasises that self-narrative\(^1\) plays a central role in the process of making sense of the death and that understanding, reconstructing and repositioning relationships are the central tasks or processes involved in the above themes (Sands, 2009). Janoff-Bulman (2006) similarly notes that the coping tasks confronting those exposed to trauma is often overwhelming as it requires “going through the motions of daily life in a world that now appears alien… [and] over time reconstructing a viable yet comfortable inner world” (p. 86). She suggests that the content of one of the assumptions or schemas of our cognitive-emotional systems that is shattered by a tragic and traumatic loss is the phrase “I never thought it could happen to me” (p. 84); Rogers, Sheldon, Barwick, Letofsky and Lancee (1982) note a similar disbelief that the suicide could happen.

Trauma

Containment of the trauma is the first recovery task and clinical goal articulated by Jordan (2009). He suggests that the degree of violence often involved in the actual death can create feelings among the bereaved that are similar to reactions seen after a homicide (Jordan, 2009). Trauma symptoms may include intrusive reliving of the experience including visual images, emotional impacts, concentration and physiological difficulties impacting on sleep patterns, and avoidance of reminders or other triggers that can lead to a hyperaroused state. Callahan (2000) suggests a model combining post-traumatic reaction and grief as the most appropriate in the suicide context. In his study, seeing the body at the scene of the death predicted high levels of distress (Callahan, 2000). Sands (2009) also addresses this element in some detail, whether it is actually seeing or imagining and reconstructing the circumstances of the suicide. A challenge for facilitators of a group process is to incorporate this exploration of the actual death story without causing trauma to others.

For some participants in the suicide bereavement groups run by Lifeline, trauma symptoms and dealing with this element of the loss was an enduring part of their bereavement and grief experience at that time. For example:

“It’s still there … still real, I still remember everything. That’s probably the hardest thing… it’s there every night, it sucks.”

“I couldn’t talk… I was in deep shock. There was no way of getting out [of the house]. I mean, I found him. I tried to revive him.”

“Talking about the difference between normal bereavement and suicide bereavement…. at one stage I actually used to think of it in terms of…. Okay, my

\(^1\) Self-narratives are severely disrupted by traumatic life events and generally involve examination and reconstruction of memories to explore, seek to integrate, and make meaning from, these experiences at a personal level. For a more detailed discussion of the self-narrative concept in the trauma, grief and loss context, see Neimeyer (2006).
husband died. Next step, he killed himself. Third step, he did it in a particularly horrible way. Next step, I had to be the one to find him, in spite of his best efforts. And then after that, the police didn’t clean up afterwards. I had to do that. So... yes, there is a big difference between bereavement and suicide bereavement.... when it’s not all neat and tidy in a hospital and someone else takes care of a lot of it.”

In the suicide bereavement group experience, these traumatic elements also had links to the concept of forced engagement with the group process, thinking and talking about the death while coping with enduring distress (Groos, 2009; Groos & Shakespeare-Finch, 2012). Many of the group participants described their grief and struggle with acceptance of the death as an ongoing and fluctuating process that incorporated avoidance and confrontation. For example:

“Made me realize there is no point in going along with a bloody messed up head... I’ve got to go talk about it... even if I may not want to. I’ve just got to go force myself and realise certain things.”

“I don’t go into my head very much. So when you go to a professional, they keep asking you questions and you just don’t want to... think about it. I am sick of thinking about it!”

“Talking about it actually made them [other group members] acknowledge that that person was gone”

“I say I’ve accepted it, but I don’t know if I have or not.”

These experiences and descriptions are similar to the Dual Process Model of coping with bereavement developed by Stroebe and Schut (2001), where oscillation between loss and restoration orientation can be a dynamic and important part of the coping process. In the suicide bereavement context, restoration incorporates issues that need to be dealt with, or the struggle to shape a new identity and relationships. Unfortunately, the dual process model cannot incorporate many of the traumatic and guilt related elements that appear to dominate the suicide bereavement experience. Jordan (2009) also refers to the Dual Process Model of the grieving process and the importance of dosing exposure to the loss and trauma, while the Tripartite Model of Suicide Grief more specifically focuses on the relationship difficulties of the suicide bereavement experience in regard to the person who has died and the self (Sands, 2009).

Changes in interpersonal relationships were also important topics for group participants. The groups were particularly helpful in generating significant connections and new relationships with others experiencing similar grief. The ability to talk about past and present relationships within the group enabled participants to gain perspective on interactions prior to, and subsequent to, the suicide. For many, the realisation of valuing family and friends more since the death, or investing in existing relationships, created a bridge to the concept of changed priorities for the future. Changed philosophy of life was not a key feature explored by these interviews. Janoff-Bulman (2006) suggests a shift in attention from the meaning of life to the meaning in life and that trauma survivors often “choose activities they deem worthy of their time and effort” (p. 90). This appears to have occurred for several participants in relation to changed priorities, life direction, or commitment to advocating for change in the area of suicide prevention and mental health services. While coping with daily life and the loss were continuing challenges for many group participants, some of those interviewed also
discussed a sense of moving forward and feeling stronger after the group experience, or the need to use the loss for some sense of social good.

While some authors in the coping literature (Carver & Scheier, 1994) have argued that certain strategies can be perceived as adaptive coping (e.g., approach types of coping such as seeking social support or active problem focused strategies), or maladaptive coping (e.g., avoidance behaviours such as venting emotions, denial, self-blame, and disengagement), the integration and interaction of problem and emotion focused coping can also be viewed as an opportunity for growth, acquisition of new skills, and spiritual transformation (for an overview of work in this area, see Folkman and Moskowitz, 2000). Folkman and Moskowitz (2000) emphasise that positive affect is possible in the face of stress and coping efforts. They argue that both positive affect and distress can co-occur during a period of stress. While their research is primarily focused on stress, care giving and bereavement in a chronic illness situation (Folkman & Moskowitz, 2000), the concept of “meaning-based coping” has parallels to the suicide bereavement research (e.g., Jordan, 2009; Sands, 2009).

Grief, Social and Professional Support

Complicated grief, which shares many features with depression and post-traumatic stress disorder, has been detected in relation to suicide bereavement; it carries risks of suicidal ideation (Cerel et al., 2009) and may be more common for people in a close relationship to the deceased (Mitchell, Kim, Prigerson, & Mortimer-Stephens, 2004). Cerel et al. (2008) note that “suicide is a confusing death” and such “ambiguity seems to increase the need within a social network to affix blame” (p. 39), which appears to be particularly the case for parents who lose a child to suicide. This may lead to social ostracism and self-isolation of the bereaved and as noted by Jordan (2009) managing changed social connections can be an important task for the bereaved. He particularly highlights the need for developing skills to respond to unhelpful comments. As one participant in the suicide bereavement and pain management groups has said: “I’ve learned to be careful about who you tell because their response can quite hurt you”. Calhoun and Tedeschi (2006) also note that for bereaved parents, a large component of their rumination and suffering is often focused on the disappointment endured because of reactions by people whom they had thought would be compassionate and supportive, but were not.

In relation to social networks, those bereaved often feel more pressure to explain the cause of death and reported that others treated them differently after the suicide death (Moore & Freeman, 1995). Other research found that elderly spouses, bereaved by suicide, received less emotional support for their feelings of depression and grief, and confided less in their social networks (Farberow, Gallagher-Thompson, Gilewski, & Thompson, 1992); and research on the impact of adolescent suicide has documented high rates of depression in their siblings and mothers (Brent, Moritz, Bridge, Perper, & Canobbio, 1996). Another small study has reported that many survivors felt their relationships with family members and friends became more distant after the suicide rather than leading to an increase in closeness (Dunn & Morrish-Vidners, 1987-88).

Sharing of experiences and disclosure in a supportive group context is likely to be an important mechanism by which people, bereaved by suicide, can manage elements of their enduring distress and continue along the path to adaptation and positive psychological...

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Trauma, Grief and Guilt in Suicide Bereavement

change. The suicide bereavement group experience, talking extensively about the loss, and sharing with others who had suffered a similar bereavement, held strong positives for the participants interviewed (Groos, 2009; Groos & Shakespeare-Finch, 2012). This was achieved particularly through normalising the suicide bereavement experience and is consistent with the findings of Farberow (1992), Hatton and Valente (1981), Rogers et al. (1982), and Wagner and Calhoun (1991-92). Being involved in the suicide bereavement group also generated hope for participants by observing and learning from diverse others with different experiences surrounding the suicide. In particular, participants reported gaining a sense that the pain would ease, and that adjustment or coping with the loss will improve. Most of these elements align well with the therapeutic factors important in any group experience as identified by Yalom (1995) and are captured within the Grounded Theory model for the suicide bereavement group experience under the core category of feeling normal in the group, as well as the central categories of permission and making meaning (Groos, 2009; Groos & Shakespeare-Finch, 2012).

The group experience also provided the sense that a suicide bereavement can happen to anyone, enabling participants to hear stories from others and to gain the insight that no matter how hard a person may try to prevent it, it is the loved one’s decision to suicide and it is not possible for others to keep them safe at all times. Sands (2009) also explores the issue of suicide as a self-inflicted or intentional act by the deceased which can have consequences for the grief process and stages of understanding, reconstructing and repositioning relationships. The group based experiences and permission to explore the story of loss in relation to meaning and sense making contrasts to the often perceived pressure to “move on” that those bereaved by suicide have found particularly unhelpful (Feigelman, Gorman, & Jordan, 2009; Groos, 2009; Wagner & Calhoun, 1991-92). For example: “the psychologist, mine at least was good, but she was all about moving on... and you’d almost feel guilty if you dragged it back to the bereavement… So then you’re stuck. You think… the bereavement and the loss is there every second of every day… but everyone is expecting you to move on… and you can’t”.

Guilt and Blame

People bereaved by suicide often experience high levels of guilt, blame, rejection or abandonment by the loved one, which can also manifest as a sense of responsibility or anger (Bailley, Kral, & Dunham, 1999), or shame, stigma and the need for concealing the cause of death (Sveen & Walby, 2007). The permission to disclose their fears and guilt were important functional experiences of being in the Lifeline suicide bereavement group (Groos, 2009, Groos & Shakespeare-Finch, 2012). This is exemplified by statements such as:

“You’ve got to deal with that, the unknown, the guilt that everybody carries … around why did this person die? What didn’t I do… especially as a mum, feeling like somewhere you’ve failed or whatever.”

“Because I was still actually trying to fix the problem… by trying to find the answers as to why this has happened and why I hadn’t managed to stop it… somehow circumvent what happened”

“I now live with a level of melancholy… and sadness, and a level of fear. Because I’ve got two other sons... and I am terrified of that.”

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Guilt, anger and blame are particularly strong emotions that the groups needed to help participants address and it was not until the second group process (pain management) that this process was fully internalised by some participants:

“I felt good after [the suicide bereavement group] but then a couple of months later, I felt much better but still this sadness was there, and then some of the guilt crept back. But after this other one [pain management group]… the guilt all went completely.”

“The thing about healing from a suicide is that it’s very specific, because I think that most people, who’ve lost partners or family members to suicide or their friends, have a specific grieving process that involves feeling guilty that they didn’t pick up on the clues. So that’s a very specific thing that needs to be addressed.”

“I was able to recognize… that I thought if I could find out what caused this, I might still be able to fix the problem. So when I finished all that, I suppose acceptance started a little more.”

Adjustment, Making Meaning and Recovery

Jordan (2009) highlights the importance of creating a survivor narrative and meaning-making from the death which relates to an often intensely felt need to understand why the suicide occurred. This concept emerged as a central category for the suicide bereavement group research (Groos, 2009; Groos & Shakespeare-Finch, 2012) and is summarised into the concept of a “psychological autopsy” by Jordan (2009). He acknowledges that this process of inquiry into the many factors surrounding the death cannot be rushed (Jordan, 2009), and Sands (2009) has further emphasised this by describing the two central themes of “trying on the shoes” or understanding the relationship and intentionality of the suicide, and “walking in the shoes” or reconstructing the relationship with the person who died and the self. This latter process includes the reconstruction of the death story, understanding the mindset of the person who died, and engaging with their pain and the pain of the bereaved.

The opportunity to talk with others in the group was an important part of this process of sense making. People often articulated an early period of seeking answers or trying to fix the past (“trying to blame someone”), dealing with self-blame, moving to a point of accepting that the decision was made by the deceased, acknowledging changes in self perception, and a gradual move towards greater manageability of remembering and a return to self-care (Groos, 2009; Groos & Shakespeare-Finch, 2012). The group helped participants to gain a sense that they could survive this experience and provided a process through which to develop new narratives surrounding the death. For example:

“I just think in particular in the first two years, you are just looking for every opportunity to talk about what’s happened and there aren’t enough opportunities. So… a) to be able to talk about it to someone, and b) as vividly as you are able to do in that forum, was a great relief.”

“[The group sessions] were full on. I looked forward to them, but I also knew that after them I would be really sleepless possibly and going through a lot of stuff over the next day or so… I think a lot of us ruminated afterwards, and some women found it really difficult to go home after those sessions.”
In the clinical context, Tedeschi and Calhoun (2006) and others (e.g., Treynor, Gonzalez, & Nolen-Hoeksema, 2003) distinguish brooding from reflective rumination. Calhoun and Tedeschi (1999) suggest that for growth to be possible, the individual needs to have support for the rumination process that is generated by the life crisis. Thus, a support group experience can provide an opportunity for co-rumination among participants and this was perceived as a positive or effective component of the group experience.

Repair and transformation of the bond with the person who died and memorialising them are also identified as important tasks by Jordan (2009), and Sands (2009) describes a final theme of “taking off the shoes” and repositioning relationships with the person who died and the self. Forgiving themselves and the person who died for leaving them in this way (Sands, 2009) is similar to the self-care concept developed by the suicide bereavement group experience (Groos, 2009; Groos & Shakespeare-Finch, 2012). It is also further articulated by those who participated in the pain management group process in relation to acknowledging that it was necessary to spend some time in this painful and dark place in order to emerge and work towards change.

“You have to be ready to face it, and have got through blaming yourself enough that you are [able to] look at something and say, "yes that contributed to it", but then not continue your blame but actually work on it…you have to be somewhere past the whole victim part of the thing. Because you do have to go through a stage of “it’s not my fault”… But then when you’re getting to a soul searching stage, you are going to find that there’s layers of every interaction that we all have together [and they] have a bearing on different things… So you have to allow your time and your emotions in your head to go through a process. Unfortunately, people have to be suffering enough. They have to be desperate enough to not like where they are.”

“I needed that first one [suicide bereavement group] just to… come to terms with the post traumatic stress of it all.

Then the second part, the pain management, that brought the healing in…I think that first group was really good because you just don’t know where you are and you need that chance to be in a group and talk about it… Just come to terms [with the death and grief] and do the projects… and in the second group we didn’t do that but we… really touched on the pain and how we can deal with it.”

“I totally think people, who are earlier in their grief, need the first group [suicide bereavement group]… But I think you have to have been through it, well for me, a few years of being stuck, before you can think about anything else, without sort of intellectualising it.”

“[The pain management group] certainly gave me… a much higher level of awareness of what the issues were and what I needed to tackle… I knew quite consciously that I was still very angry with my parents. I still blamed them for the death [but also knew that] they did the best they could. I knew all that intellectually… but in my body, and in my consciousness I still blamed them and I was still angry with them. And I was thinking, you’re really stuck.”

These examples from group participants exemplify that it is never too late for people to seek counselling or do work on their suicide bereavement experience and it may be necessary to invite people many times to engage in a group or other process of support.
Time for Grief and Time for Support

The suicide bereavement group study (Groos, 2009; Groos & Shakespeare-Finch, 2012) and earlier research indicate that adjustment and recovery are ongoing processes rather than a time-limited task or milestone to be reached (e.g., Farberow, 1992; Hatton & Valente, 1981; Wagner & Calhoun, 1991-92). Good timing for group involvement was specifically explored in the interviews and the majority of participants suggested that this was an individual choice based on when people felt ready for such an experience or were looking for support. There were a few suggestions that soon after the bereavement (3-6 months) would be advisable for the suicide bereavement group. Other participants in this project suggested around two years after the suicide might be a useful time, because people would have had the opportunity to deal with some of the intense grief and be ready to engage in a process that would assist further with their adjustment.

There may be many barriers to accessing professional support (LIFE Communications, 2010) and recruitment to group processes can be challenging. Participants in the suicide bereavement and pain management groups, conducted by Lifeline, suggested that no time is too late and that “a lot of people stay stuck for 20 years... because they don’t know any better”. Recruitment suggestions included “contacting people who were at least two years into their grief... and pointing to other people’s [positive group] experience.”

On the other hand, it was also suggested by participants that there could be an element of feeling comfortable in their grief, returning to it periodically, and using it as a way to honour the memory of the person who died. For example:

“[The pain management group] gave me a much deeper insight into the seriousness of it and the depth of it. Because I just... felt enormous grief and my brother died eight years ago... and [facilitator] gave me an insight, she said it was actually my way of holding on to him, even if it was pain... It was my way of not letting him go, just holding onto him, keeping him with me, and that really resonated with me.”

“I used to have a photo of him in my bedroom and I looked at him every morning and felt sad.... I took his family photo out of my bedroom and I put him over there [in the living room] with just him and me in it and I can look at that now feeling much better... I don’t really like having family photos in my bedroom but I had that there because I guess that was my way of honouring him. But I think I was doing it for the wrong reasons.”

The practitioner must be prepared to travel for a long time with those bereaved by suicide as they negotiate their complex journey of trauma, grief, guilt, loss and healing. This ideally requires a variety of support systems including crisis and practical support such as that offered by the StandBy service model immediately after the suicide death, one-to-one counselling to address trauma and other individual issues, group support to normalise the experience and provide opportunities for co-rumination and building of new narratives that include hope and a sense that “you can survive this”. Table 2 summarises some of the information that needs to be at hand in a suicide bereavement support group to address issues that may arise for people bereaved by suicide (Lifeline, 2009a). It is important that practitioners are familiar with these issues, processes and strategies, and have a good understanding of suicide bereavement, loss and trauma.
Regular risk assessment practices are also essential for those bereaved by suicide, as it is likely that at some point people will be in such despair that they are at very high risk of suicide.

Table 2. Recommendations from the Lifeline (2009a) Best Practice Model for Access to Information and Resources in Suicide Bereavement Support Group Processes

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<thead>
<tr>
<th>Understanding of Suicide Bereavement, Loss and Trauma (Lifeline, 2009a, p. 7)</th>
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<tbody>
<tr>
<td>General grief and loss theory</td>
</tr>
<tr>
<td>Trauma</td>
</tr>
<tr>
<td>Individuality of grief</td>
</tr>
<tr>
<td>Cultural differences in loss and grief</td>
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<tr>
<td>Age and gender differences in loss and grief</td>
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<tr>
<td>Statistics about suicide and suicide bereavement</td>
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<tr>
<td>Cognitive restrictions of suicidal thinking</td>
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<td>Stigma (psychosocial, legal and religious) and isolation</td>
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<td>Feelings of rejection, abandonment and blame</td>
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<td>Feelings of remorse, guilt and responsibility</td>
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<td>Feelings of anger and/or helplessness</td>
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<td>The need to understand why and the search for motive</td>
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<td>Difficulty acknowledging the cause of death</td>
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<td>Fear of hereditary susceptibility</td>
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<tr>
<td>Family dynamics</td>
</tr>
<tr>
<td>Loss of basic trust</td>
</tr>
<tr>
<td>Increased risk of suicidal ideation</td>
</tr>
<tr>
<td>Logistical and legal issues</td>
</tr>
<tr>
<td>The therapeutic process of hope</td>
</tr>
<tr>
<td>Acknowledgment of strengths</td>
</tr>
<tr>
<td>Resilience and integration</td>
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<tr>
<td>Potential for growth</td>
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<tr>
<td>Coping strategies and interpersonal tactics</td>
</tr>
</tbody>
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Sands (2009) describes this period as “walking in the shoes” which includes an element of taking on the mindset of the deceased, or as a Lifeline group participant put it:

“Some part of them [person who died] has thought, you know what, I don’t know how to change this road that I’m on, or whatever is happening and what I’m feeling. But I am going to make a decision that I can’t keep doing it this way. Well in a way, we have to make a decision like that. Only we’re not deciding to end it. We’re deciding to change it, but in a different way because we’re not in that same place that they may be. And some people definitely have been, and I have been many times along that track… Many times and maybe I had to experience that to understand him too. Understand how easily it is done. And I mean that, easily.”

This level of understanding may be a point where some of those bereaved by suicide begin to be desperate for change, realise that they are stuck and at risk, need to do something and can subsequently more deeply engage in healing and a forgiving process to return to self and life. Others may become immobilised at this point and be somewhat comfortable in their grief, over identify with the bereaved role, feel unable to honour the person’s memory in other ways, and cannot fully engage with their own life. For example:
“But, somehow you get there; no, or you don’t get there, you just keep going don’t you. That’s what it’s about.”

“But the reason she [another participant] said to me at one stage that she didn’t keep coming [to the group sessions], one of the reasons, was because she was comfortable being in that grief. She didn’t really want to move out of it… That’s kind of interesting. She actually expressed that she was comfortable just with her level of misery and she wanted to stay there. It was a comfort thing. Whereas no, I was getting quite desperate.”

“For me, it’s very easy to let yourself slip back into it and stay there. It’s kind of a comfortable place to be. And you think well that’s life, you’re stuck with it, you know. But … when you see you can actually do things to change it, it’s better. Nobody really wants to be stuck being miserable!... You realise there’s other things to you besides the grief.”

Viewing the self as a survivor is an important element of personal strength as determined by Shakespeare-Finch and Copping (2006) in an Australian Post-Traumatic Growth study and this was linked to a turning point at which the person felt a sense of independence and ability to cope. In the suicide bereavement groups, few participants were able to relate to the turning point analogy (Groos, 2009) and this may be linked to the fact that people were moving between the two states of grief and engaging with self and life. For example: “you can compartmentalise it better because you know that you’re not stuck with it. So when you want to do the whole grieving thing, you go with a friend who is into that as well. Like someone else who’s lost their son, and you do the whole grieving thing together. But you can come out of it!” This reinforces the principles of oscillation which is central to the Dual Process Model of grief (Stroebe & Schut, 2001) and, as noted by Tedeschi and Calhoun (2006), particularly for bereaved parents it is realistic that they learn to live with some level of ongoing distress. Znoj (2006) also emphasises that, based on the experiences of bereavement in the Post-Traumatic Growth context, people will recognize the pain of the loss but also move towards a sense of competence and having the resources to move beyond it, maintain a sense of self and not avoid reminders of the event. Rumination and story reconstruction in the context of sharing with others and normalising the suicide bereavement experience, and in relation to making sense or meaning from the loss, can lead to positive outcomes. Guilt can be addressed and neutralised, and self transformation engaged through the realisation that there is more to the self than the grief. As one participant put it, “there is no prescription for this” and it is essential for service providers to recognise this and the complexity of the suicide bereavement experience, and to be able to provide a range of options for people bereaved by suicide. As noted by Barlow and Morrison (2002), it is important for intervention and counselling strategies to acknowledge that there is no map or timetable for grieving in this situation. Group based programs can be particularly helpful in providing opportunities to link to others with similar experiences, which can generate hope, and to provide professionally led care and psycho-educational information. The Lifeline Community Care Brisbane experience with two different group models and processes suggests that a follow up group may be able to address different stages or aspects of the grief experienced by some participants. Adjustment following suicide bereavement appears to require some level of personal transformation, a reaffirming of a commitment to life and living by the bereaved, forgiving themselves, the deceased and others (Jordon, 2009; Sands, 2009). In this context, it is probably more appropriate to use the terminology of adjustment rather than recovery. As one participant put it, “this is such a great pain that one is never really going to get over it.”

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CONCLUSION

Suicide bereavement support groups in various formats are an important mechanism through which those bereaved by suicide can connect with others who have had similar experiences, and they can provide role models for coping and adjustment, and opportunities for co-rumination and generating new narratives and schema change. It is important to be prepared for the repeated telling of the death story and to protect against vicarious trauma for others. However, this opportunity to talk extensively and engage with supportive others seems to be an important benefit of the group experience. Offering services at a time that is right for the bereaved is also a significant challenge as the grief experience is very individual in this situation. Raising awareness among the bereaved that their grief and sense of self can improve may require repeated and sensitive engagement which is not in line with the usual practice of waiting for clients to seek services and support of their own accord. Adjustment may be a better term than recovery in this setting, as it is common for both distress and accommodation to the death to be present simultaneously and for people bereaved by suicide to be engaged in a lengthy process of both loss or regret oriented, and restoration or existentially focused, reappraisals which may last many years.

ACKNOWLEDGMENTS

I am extremely grateful to the suicide bereavement group and pain management group participants who took part in the interviews forming the basis of the information used for this chapter. Their generosity in giving additional time and sharing their experiences has helped share some insights into this very complex and painful area. We hope this feedback will be able to assist others through enhancing future group processes and the approach of service providers who assist people bereaved by suicide. Thanks also to the group facilitators who assisted with the research process, Julie Aganoff (General Manager Programs, Lifeline Community Care Brisbane) and Dr Jane Shakespeare-Finch (School of Psychology and Counselling, Queensland University of Technology) who provided supervision and support.

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Chapter 6

THE LONG TERM EFFECTS OF CHILDHOOD
SEXUAL ABUSE

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ABSTRACT

The chapter reviews a range of studies which investigated the long term effects of childhood sexual abuse, an area of trauma which has been fraught with difficulties with respect to accusations of false memories which have added to the victimisation of genuine cases who were then treated with disrespect and ridicule. The research shows that victims of CSA can suffer from phobias, fear, anxiety, hypervigilance, depression and maladaptive coping behaviours as outlined herein. Long term effects span depression, anxiety, dissociation, suicidality, relationship and sexuality problems, and substance and alcohol abuse, as well as eating disorders and other effects. However, the authors point out that while there were obviously many negative factors that exacerbated the trauma experienced by the victims of the abuse, there were also Positive Mediating Factors which are set out in the chapter.

Keywords: trauma, sexual abuse, childhood abuse, victims of abuse, mediating factors of abuse

INTRODUCTION

This particular uncle…I was in my thirties…and he wanted to come and stay with us in Sydney…I said to my brother if he stays I’m going. It hit me. Smells have triggered me for a long time and I don’t know why. The same brand of pipe tobacco that he smoked…the smell of the labour ward…it smells like semen.

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According to Blackstone’s Australian Legal Words and Phrases (www.abs.gov.au), a crime is an offence punishable by the State on behalf of the general public whose standards do not permit the offending behaviour. We adopt the definition of childhood sexual abuse proposed by Briere and Conte (1993, p. 23) as being psychologically or physically forced sexual contact between a child (16 years and younger) and a person who is more than five years older than the child. This aligns with the general definition of crime in that the general public’s standards do not condone CSA and it is viewed as aberrant behaviour by most people. While there are cross cultural differences in terms of prevalence, incidence and acceptance of CSA in different societies, this chapter focuses on western societies such as Australia, New Zealand and the USA.

**Childhood Sexual Abuse Defined as Trauma**

Van der Kolk (1997, p. 279) defined trauma as “the result of exposure to an inescapably stressful event that overwhelms people’s coping mechanisms.” Childhood sexual abuse will be examined to determine whether the term “trauma” applies. This study adopted the definition of childhood sexual abuse proposed by Briere and Conte (1993, p. 23) as being: psychologically or physically forced sexual contact between a child (16 years and younger) and a person, more than five years older than the child.

Finklehor and Browne (1985) proposed a framework to assist a more systematic understanding of the traumatic effects of childhood sexual abuse. The four dynamics they proposed, including traumatic sexualisation, betrayal, stigmatisation and powerlessness, were identified as the core of the psychological injury experienced by the child survivors as a result of the abuse. Traumatic sexualisation was defined as “a process in which the child’s sexuality was shaped in a developmentally inappropriate and interpersonally dysfunctional fashion” (Finkelhor & Browne, 1985, p. 531). This process was thought to relate to the type of abuser who enticed, rather than forced, their victim to participate, which then led to the development of sexual identity issues and sexual dysfunction for the survivor. Betrayal referred to the realisation by the child that someone they thought they could trust had caused them harm and this often resulted in anti-social behaviours, relationship/intimacy issues and the development of high levels of anger. This dynamic included both the abuser and others who refused to believe or blamed the child after disclosure of the abuse. This issue was closely related to the dynamic of powerlessness, where the child’s “will, desires and sense of efficacy were continually contravened” (p. 532). The long-term effects of this dynamic included the development of phobias, fear, anxiety, hypervigilance, depression and maladaptive coping behaviours. Stigmatisation referred to the negative affect (e.g. shame, guilt and badness) communicated to the child by the abuser and possibly others after disclosure. The negative affect was often incorporated into the child’s schema of self and the world and could result in drug and alcohol abuse, criminal behaviour, low self-esteem, self-harming behaviours and feelings of alienation and isolation. Finklehor and Browne then suggested that the long-term effects of CSA, as reviewed in the previous section, could be categorised under one or two of the trauma dynamics of their model. In summary, their model and categorisation of long-term effects supported the trauma definition of psychological injury caused by some extreme emotional assault.

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The following section provides a more in-depth examination of research undertaken on the long-term effects of CSA. The purpose of this review is to investigate the relationship between childhood sexual abuse (CSA) and the long-term effects of CSA, in order to provide a broad context for the issues under investigation by the current research and to provide further support for the classification of CSA as trauma. The long-term effects of childhood sexual abuse have received considerable attention from researchers, when compared to other aspects of childhood sexual abuse. Psychological and psychiatric practitioners have usually accepted that there is a relationship, yet the relationship has not been clearly defined or understood. One of the contributing factors that prevented definition of the relationship relates to the methodology of the research conducted. Therefore, this review also contained a critique of the methodology utilised by the various studies.

**REVIEW OF RESEARCH ON LONG TERM EFFECTS OF CSA**

The following table outlines details of over 50 studies in this field including the author, year published, methodology, sample characteristics and research findings of the single studies. Their findings are then presented and discussed in greater detail.

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Methodology</th>
<th>Sample</th>
<th>Research Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murphy, Kilpatrick, Mick-McMullan, Veronen, Paduhovich, Best, Villeponteaux &amp; Saunders</td>
<td>1988</td>
<td>Control group IES SCL-90-R MFI.</td>
<td>126 females, community sample.</td>
<td>Elevated levels of anxiety, interpersonal sensitivity, paranoid ideation, Obsessive-Compulsive symptoms.</td>
</tr>
<tr>
<td>Olsen</td>
<td>1990</td>
<td>Control group MMPI scales 4-8. Questionnaire demographics, events, effects.</td>
<td>44 males in therapy.</td>
<td>Higher levels of: Substance abuse, alcohol abuse, compulsive gambling, compulsive sexual behaviour, compulsive overworking, compulsive shop lifting, poor school performance, eating disorders, rage, violence in relationships, self-mutilation, involvement in criminal activities.</td>
</tr>
<tr>
<td>Briere</td>
<td>1992</td>
<td>Case studies used to illustrate theoretical discussion of long-term effects.</td>
<td>7 females in treatment.</td>
<td>Illustration of categories: Cognitive distortions, depression and anxiety, dissociation, disturbed relatedness, aggression, use of psychoactive substances, suicidality, eating disorders, self-mutilation.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
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<tr>
<td>Dent-Brown</td>
<td>1993</td>
<td>Control group Questionnaire re 38 indicators of history of CSA.</td>
<td>18 male &amp; female clients of community mental health service.</td>
<td>Significant differences on 13 indicators; suicidal thoughts, sexual dissatisfaction, need to please others, nightmares, flashbacks, gaps in childhood memory were the strongest findings.</td>
</tr>
<tr>
<td>Hutchings &amp; Dutton</td>
<td>1997</td>
<td>Control group SCL-90-R PSD sub-scale, Demographic questionnaire. Diagnostic interview based on categories in DSM-III.</td>
<td>12 males &amp; 71 females of adult clinical outpatient service.</td>
<td>Participants with CSA history scored significantly higher on all sub-scales of SCL-90-R, association between CSA and anxiety disorders (PTSD) and mood disorders.</td>
</tr>
<tr>
<td>Hughes, Stephens, Difranco, Manning, van der Toorn, North &amp; Taylor</td>
<td>1998</td>
<td>Semi-structured interview.</td>
<td>15 female clients of community-based sexual assault services.</td>
<td>High levels of reported experiences with dissociation, depression, phobias, anxiety attacks, PTSD, gynaecological conditions, digestive disorders, respiratory ailments, urinary conditions, and musculoskeletal conditions.</td>
</tr>
<tr>
<td>Saunders, Kilpatrick, Hanson, Resnick &amp; Walker</td>
<td>1999</td>
<td>Control group. Probability general population sample. Measures of depression, PTSD &amp; substance abuse.</td>
<td>339 females who reported at least one completed rape incident as a child.</td>
<td>Participants with CSA history more likely to report current and long-term experience of major depressive disorder, PTSD, misuse of prescription and illicit drugs.</td>
</tr>
<tr>
<td>Higgins &amp; McCabe</td>
<td>2000</td>
<td>Self-report questionnaire.</td>
<td>175 males and females from community.</td>
<td>CSA often occurs in conjunction with other forms of child abuse and neglect therefore specific symptoms difficult to determine. High maltreatment scores predicted negative adult psychological adjustment.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Methodology</td>
<td>Sample</td>
<td>Research Findings</td>
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<tr>
<td>Horwitz, Widom, McLaughlin &amp; White</td>
<td>2001</td>
<td>Control group. Double-blind interviews. Measure of stressful life events. Mental Health Diagnostic Interview Schedule.</td>
<td>641 men and women.</td>
<td>Females with CSA history had elevated levels of depression, alcohol abuse and antisocial personality disorders. Males with CSA history had elevated levels of depression and antisocial personality disorders. Results not CSA specific but a combination of physical abuse, sexual abuse and neglect.</td>
</tr>
<tr>
<td>Zlotnick, Mattia &amp; Zimmerman</td>
<td>2001</td>
<td>Control group. SCID; SIDP; SADS; SIDES sub-scale.</td>
<td>235 patients of outpatient service diagnosed with major depression (number with CSA histories unknown).</td>
<td>Elevated rates of PTSD, borderline personality disorders, multiple Axis I disorders, longer duration and earlier onset of major depressive disorder, lower Global Assessment of Functioning score, higher rate of hospitalisation, higher rate of one suicide attempt, higher rate of affect dysregulation. No differences in rate of substance abuse.</td>
</tr>
<tr>
<td>Day, Thurlow &amp; Woollicroft</td>
<td>2002</td>
<td>Survey re knowledge of CSA, long-term effects, needs of clients &amp; practitioners.</td>
<td>54 mental health professionals working in field of CSA treatment of adult survivors.</td>
<td>Identification of 7 categories of long-term effects: Mental health issues (PTSD, dissociation, depression, anxiety disorders, personality disorders, eating disorders), identity issues, challenging behaviours, relationship issues, sexuality issues, no effect.</td>
</tr>
<tr>
<td>Nixon, Resick &amp; Griffin (Study 1)</td>
<td>2002</td>
<td>History of Victimization Questionnaire (HVQ), Physical Reactions Scale (PRS). Structured Clinical Interview for DSM-III-R (SCID), Clinician administered PTSD scale (CAPS); and the Trauma interview.</td>
<td>105 female adults who had experienced physical and sexual assault two weeks prior to the interview.</td>
<td>Severity of post-traumatic panic was predicted by the level of CSA, prior history of depression and anxiety and peri-traumatic dissociation. They also found that a history of CSA appeared to have a strong relationship with the development of adult panic symptoms.</td>
</tr>
<tr>
<td>Nixon, Resick &amp; Griffin (Study 2)</td>
<td>2002</td>
<td>Similar measures as for their Study One, with the exception of measures for psychiatric, trauma history and perception of life threat.</td>
<td>93 adult females who had experienced sexual or physical assault six weeks prior to participation in the research.</td>
<td>No direct relationship between CSA and post-traumatic panic severity, although a history of PTSD was found to be a significant predictor as was the perception of a life threat. Peri-traumatic dissociation was still found to be a significant predictor.</td>
</tr>
</tbody>
</table>
Roth and Lebowitz (1988) conducted research with seven women who were seeking treatment for sexual trauma, including rape and incest. The focus of their study was sexual trauma and the psychological aspects of the experience that made coping difficult and that often led to long-term effects. Participants engaged in an unstructured interview which elicited details of their experiences, how they understood it and what it meant to them. The transcribed material was analysed for themes relating to the psychological aspects of sexual trauma and coping. Roth and Lebowitz identified 14 themes: Fear of overwhelming affect, rage, helplessness, fear, loss, self-blame, compensation, alterations in schemas of self and the world, repetition (re-victimisation), unhelpful social responses by others, legitimacy (self-perception of the event often leading to minimisation), isolation and alienation, and issues with mother (protection of child). The women who identified fear of overwhelming affect indicated they tried to dissociate from, or deny, their feelings and memories of the event. The theme of rage included the direction of rage towards a variety of people, such as the offender, self, mothers and therapists.

The participants indicated that their feelings of helplessness did not just relate to the traumatic event, but often spilled over into their relationships with other males as time progressed. The theme of fear was manifested in several ways, such as fear during the event, fear of reporting the event and fear of being reminded of the event. The last type of fear also led some women to dissociate from the memories of the event. Many of the women conceptualised the theme of loss as having something taken from them during the event, such as a normal childhood or their previous way of experiencing the world as a safe place. The compensation theme aligned with the theme of isolation and alienation, with many women using the latter as a means of safeguarding themselves against further trauma. This study was limited by sample size and lack of a recognised data analysis technique, bringing up issues of researcher bias. In addition, the researchers did not report separate results for the sub-groups of rape and incest. In summary, this research provided exploratory information about trauma related coping issues that could lead to the development of negative long-term effects for the survivors.

Murphy et al. (1988) interviewed a community sample of 391 women with histories of victimisation experiences, such as childhood sexual assault ($n = 126$), adult sexual assault, assault and robbery. Participants completed the Impact of Events scale (IES), Symptom Checklist-90 Revised (SCL-90-R) and the Modified Fear Survey (MFI). The average elapsed time for those who reported a history of childhood sexual assault to the time of participating in the research was 37 years. The participants who reported a history of childhood sexual assault evidenced a pattern of elevated anxiety, heightened interpersonal sensitivity, increased anger problems, more paranoid ideation and increased obsessive-compulsive symptoms when compared with non-victims of childhood sexual assault. The researchers also found that the SCL-90-R was sensitive to the long-term effects of sexual assault and suggested that future clinicians could use the instrument to screen clients based on typical clusters of long-term reactions to childhood sexual abuse.

Olsen (1990) administered the MMPI (scales 4, 5, 6, 7 and 8) and a questionnaire concerning demographics and information about the sexual abuse events and associated effects to a sample of 69 adult males who were in therapy. Forty-four of the men were survivors of childhood sexual abuse. The other 23 participants formed a control group. The
results suggested that adult male survivors of childhood sexual abuse demonstrated higher levels of negative long-term effects than the control group participants. The long-term effects included substance and alcohol abuse, compulsive gambling, compulsive sexual behaviour, poor school performance, compulsive overworking, eating disorders, prostitution, rage, violence in relationships, compulsive shoplifting, self-mutilation and involvement in criminal activities. When the length of time in therapy was controlled statistically, the MMPI score differences increased, despite the fact that the abuse group had engaged in therapy an average of 13 months longer than the non-abuse group. This research could not define a cause-effect phenomenon, but rather suggested a correlation between the experience of sexual abuse and the later development of behavioural, personality, and cognitive disorders in a pool of men who sought therapy for personal problems.

Briere (1992) presented seven case studies in order to build a framework for theoretical discussion about internal coping mechanisms and external long-term effects of childhood sexual abuse on survivors, based on the Post-Traumatic Stress response, which was thought to underpin the development of coping mechanisms and long-term effects. Briere categorised the long-term effects as psychological responses, behaviours and relationships. Psychological responses included cognitive distortions (self and world schemas), altered emotionality (depression and anxiety), dissociation, and impaired self-reference. The behaviours and relationships categories included disturbed relatedness (intimacy and sexuality issues), aggression, use of psychoactive substances, suicidality, tension-reducing behaviours, self-mutilation and eating disorders.

Dent-Brown (1993) surveyed 36 clients of a community mental health service, 18 of whom were survivors of childhood sexual abuse. The remainder of the participants formed a control group. Participants were asked to respond to 38 problems thought to indicate a history of childhood sexual abuse. The results revealed a significant difference between the groups on thirteen of the problems, with the largest differences being those of suicidal thoughts and sexual dissatisfaction. Other significant differences were conceptualised as the need to please others, the experience of nightmares and flashbacks and gaps in childhood memory. There were no significant differences between the groups on the remaining problems, such as marital discord, depression, insomnia and feeling out of control. This study was limited by the small sample size and the possibility that members of the control group had not disclosed a history of childhood sexual abuse.

Polusny and Follette (1995) reviewed the literature published since between 1987 and 1994, relating to the long-term effects of childhood sexual abuse. The review was conducted under categories of the long-term effects, including general psychological distress, depression, self-harming behaviours, anxiety, substance abuse, eating disorders, dissociation and memory impairment, somatisation and personality disorders. They found that survivors of childhood sexual abuse appeared to be at greater risk for the development of psychological disorders, including major depression and anxiety disorders. They found support for the association between CSA and higher levels of general psychological distress, self-harming behaviours and substance abuse, and mixed evidence for an association between CSA and eating disorders. The association between CSA and memory disturbances required further empirical investigation, as the majority of studies reviewed were of an anecdotal nature.

Jumper (1995) conducted a meta-analysis of empirical studies that investigated the relationship between CSA and adult psychological adjustment. The 26 studies used in the meta-analysis had to satisfy several criteria for inclusion in the study: firstly, the study had to
be designed as an inquiry of adult subjects regarding childhood sexual experiences and had to include a control group; secondly, the study had to include a measure of current psychological adjustment; and thirdly, the study had to give sufficient statistical information to calculate effect size estimates. The results of the meta-analysis indicated evidence that confirmed the link between CSA and psychological symptomatology, depression or impairment of self-esteem in adulthood.

Hutchings and Dutton (1997) examined the association between a history of childhood sexual abuse and severity of symptoms in an adult clinical outpatient sample of 188 males and females. Twelve of the 68 males reported a history of CSA, as did 71 of the 120 female participants. This study included a control group of the non-abused participants. All participants were asked to complete a demographic questionnaire, the SCL-90-R and the Post-Traumatic Stress Disorder subscale. Sample members also participated in a psychodiagnostic interview based on categories contained in the DSM-III-R. Participants with a history of childhood sexual abuse scored higher on each sub-scale of the SCL-90-R than participants with no CSA history. In addition, a history of childhood sexual abuse appeared to be associated with diagnoses of anxiety disorders, such as PTSD, and with mood disorders. The nature of self-report of a history of childhood sexual abuse was a limitation of this study.

Hughes, Stephens, Difranco, Manning, van der Toorn, North and Taylor (1998) interviewed 15 women, who reported a history of childhood sexual abuse prior to the age of 12 years, about their adult medical history and their perception of the impact of the abuse. The participants were clients of a community-based sexual assault service. The participants reported high rates of physical and/or psychological illnesses, including dissociation, depression, phobias, anxiety attacks, PTSD, gynaecological conditions, digestive disorders, respiratory ailments, urinary conditions and musculoskeletal conditions. The study was limited by funding constraints, time constraints and sample size.

Saunders, Kilpatrick, Hanson, Resnick and Walker (1999) conducted telephone interviews with a national probability sample of 4,008 adult women residing in the USA. Eight and a half percent of the respondents (n = 339) indicated a history of childhood sexual abuse. The researchers administered a variety of instruments designed to measure levels of depression, PTSD and substance abuse problems in the survivor and non-survivor groups. Survivors of CSA were more likely than the non-abused participants to report both past and current bouts of major depressive disorder and PTSD as outlined in the DSM-III-R. In addition, CSA survivors were significantly more likely than the non-abused participants to report misuse of prescription medication or to have used illicit drugs. The study was limited by the definition of CSA as incidents of completed rape in childhood. This definition excluded other types of CSA such as fondling and oral sex. The second limitation was based on the use of a female sample, thereby limiting the generalisation of the findings to the male population. The final limitation related to the use of self-report retrospective accounts of CSA.

Studies 2000 – 2002

A study conducted by Higgins and McCabe (2000) investigated the relationships between different types of childhood maltreatment in a community sample of male and female adults (N = 175). They also assessed the relationship between childhood maltreatment, family

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characteristics and current psychological adjustment, defined as trauma symptomatology and self-depreciation. They found high correlations between scores on the five maltreatment scales (sexual abuse, physical abuse, psychological maltreatment, neglect and witnessing family violence), with sexual abuse and witnessing family violence forming the lowest correlation. The researchers concluded that sexual abuse often occurred in conjunction with other forms of childhood maltreatment, making the identification of specific symptomatology difficult to determine. The study also found that family characteristics predicted maltreatment scores and adjustment. After controlling for family characteristics, the results indicated that maltreatment scores predicted negative psychological adjustment.

MacMillan et al. (2001) assessed long-term psychopathology in a general population sample of people who had experienced either physical or sexual abuse as children, as part of an overall investigation into the health of a particular community in Canada. Of the 7,016 men and women who responded, 4.3% reported a history of childhood sexual abuse. Participants were surveyed by completing the Composite International Diagnostic Interview and the Child Maltreatment History Self-Report. Their results indicated that a history of CSA was strongly associated with long-term psychopathology, with the relationship being stronger for women than for men. Psychopathology was categorised as anxiety disorders, major depressive disorders, substance abuse (alcohol and drugs), antisocial behaviour and psychiatric disorders. The authors acknowledged that the study was limited by the retrospective nature of the investigation.

Horwitz, Widom, McLaughlin and White (2001) examined the impact of childhood sexual abuse, physical abuse and neglect on lifetime measures of adult mental health in a sample of adult men and women (N = 641) who had documented court cases relating to child abuse and neglect, in the period 1967 to 1971. The research design included a socio-economically matched control group (N = 510), who did not have documented histories of child abuse and neglect, used to establish a base rate of pathology. Participants from both groups were interviewed 20 years after the time of the abuse/neglect, using a double-blind approach where neither the interviewers nor the interviewees knew the purpose of the interview. Horwitz et al. (2001) used a measure of lifetime events that identified 14 stressful life events. They also administered the National Institute of Mental Health Diagnostic Interview Schedule, using measures of lifetime rather than current mental health indicators. The schedule measured dysthymia (patterns of depressed symptoms), alcohol abuse and antisocial personality disorder. They found that the female victims reported more symptoms on all three outcomes, when compared to control females, and male victims reported more symptoms on the outcomes of dysthymia and antisocial personality disorder than did the male control group. The results of that study may not generalise to abuse survivors whose cases did not come before the court, and were skewed towards the lower socio-economic portion of the population. In addition, the researchers did not separate the sample into sub-groups of physical abuse, sexual abuse and neglect, and therefore their results were not abuse-specific.

Zlotnick, Mattia and Zimmerman (2001) examined differences in the rates of trauma-related disorders between patients of an outpatient service with a history of CSA and patients of the same service without a CSA history. The participants were 235 outpatients with major depression. Participants completed several questionnaires including the Structured Clinical Interview for DSM-IV (SCID), the Structured Interview for DSM-IV Personality (SIDP), items from the Schedule for Affective Disorders and Schizophrenia (SADS) and the Regulation of Affect and Impulses subscale of the Structured Interview for Disorders of
Extreme Stress (SIDES). Participants with CSA histories had more significantly elevated rates for PTSD, borderline personality disorder and multiple Axis I disorders than participants without CSA histories. In addition, a history of CSA was associated with a longer duration of the index depressive episode, an earlier age of onset of major depression, lower Global Assessment of Functioning, and higher frequencies of at least one hospitalisation. Participants with a history of CSA were also more likely to report at least one suicide attempt and a higher degree of affect dysregulation, although these were more strongly influenced by the incidence of borderline personality disorder and/or PTSD. Substance abuse was not significantly associated with childhood sexual abuse. Limitations of this study included the cross-sectional design which did not allow for conclusions of causal links between CSA and adult psychopathology and a lack of corroborating evidence regarding the reports of CSA by participants.

Day, Thurlow and Woollicroft (2002) conducted research with a group of mental health professionals, who had treated clients with childhood sexual abuse histories. A total of 54 people responded to a survey that was designed to elicit their responses to questions about their knowledge of sexual abuse and its effects, and the needs of clients and practitioners working with this client group. The survey results outlined seven categories of long-term effects, such as mental health issues (depression, anxiety, PTSD, eating disorders, personality disorders and dissociative disorders), self-harm issues (self harm, substance abuse and suicidal ideation), identity issues (low self-esteem, maladaptive coping, boundary issues, isolation, shame, guilt and victim behaviour), challenging behaviour (anger, antisocial, lack of control and attention-seeking), relationship issues (trust, parenting and difficulty sustaining relationships), sexuality (promiscuity, sexual difficulties, sexual confusion and abstinence) and no effects. Only one participant indicated that there were no long-term effects as a result of childhood sexual abuse experiences. This study was designed to access the participant’s knowledge of the long-term effects only and did not survey them for the frequency of the categories they actually encountered during their work with the client group.

Nixon, Resick and Griffin (2002) conducted one study with 105 female adults who had experienced physical and sexual assault two weeks prior to the interview. The research was designed to examine the factors associated with the development of panic symptoms following trauma. Participants completed the History of Victimisation Questionnaire (HVQ), Physical Reactions Scale (PRS), Structured Clinical Interview for DSM-III-R (SCID), Clinician administered PTSD scale (CAPS) and the Trauma interview. Study Two was conducted with 93 adult females who had experienced sexual or physical assault six weeks prior to participation in the research. Participants completed similar measures as for the first study, with the exception of measures for psychiatric, trauma history and perception of life threat. These last measures were slightly different in form and scoring from those completed by participants in the first study. In the first study, Nixon, Resick and Griffin found that the severity of post-traumatic panic was predicted by the level of CSA, prior history of depression and anxiety, and peri-traumatic dissociation. They also noted that a history of CSA appeared to have a strong relationship with the development of adult panic symptoms. In contrast, Study Two results did not detect a direct relationship between CSA and post-traumatic panic severity, although a history of PTSD was found to be a significant predictor, as was the perception of a life threat. Peri-traumatic dissociation was still identified as a significant predictor.

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In summary, the methods used in the reviewed studies included the use of control groups, psychological measures of assessment, statistical analyses or qualitative methods, such as case histories, interviews and non-recognised analyses techniques. None of the reviewed studies used a mixed-method approach to the topic of investigation. None of the methods resulted in the establishment of a direct cause-effect relationship. The studies that used quantitative methods only were limited in the depth of their investigation and the studies that used qualitative methods only were limited by a perceived lack of scientific rigour. It does not appear likely that a direct relationship between CSA and the long-term effects will be discovered in any relevant research, given the ethical and practical constraints that must be considered when designing a research program on childhood sexual abuse with adult participants.

Chances for Recovery

Adult survivors of childhood sexual abuse often experience varying levels and combinations of the long-term effects outlined in the above section, due to a variety of factors (Gilgun, 1990; Whiffen, Judd & Aube, 1999). These factors, which appear to mediate or lessen the negative impact of the abuse experience on the individual, may be termed positive mediating factors.

Positive Mediating Factors. Gilgun (1990) proposed a conceptual framework of mediating influences that included social support, resilience, protective mechanisms and vulnerability. She conducted intensive interviews with a group of 34 adult males, 23 of whom had a CSA history. The interviews were transcribed and content analysed. The results identified the presence of a confidant as the primary mediating factor for this sample, with relevant participants experiencing milder negative effects and decreased likelihood of developing criminal or violent behaviour.

Whiffen, Judd and Aube (1999) conducted research designed to examine the impact of intimate relationships on the association between CSA and depression. The sample included 60 couples, with 22 of the female participants reporting a history of childhood sexual abuse. Female participants were administered a variety of surveys designed to determine their abuse experience, levels of social intimacy, use of contact tactics, style of adult attachment and depression levels. The male participants were administered the Conflict Tactics Scale only. Support was found for the moderating effects of a positive intimate relationship on the development of CSA-related depression, although the more severely abused women evidenced an anxious attachment style that related to a negative self-schema.

In retrospect, the studies reviewed provided support for a relationship between a history of CSA and development of negative long-term effects in the adult survivors, although the exact nature of the relationship was not made explicit due to the limitations of the research conducted.
CONCLUSION

The review summarised the long-term effects of CSA as including; depression, anxiety, personality disorders, PTSD, dissociation, suicidality, substance and alcohol abuse, relationship issues, sexuality issues, alterations to schema of self and the world, eating disorders, overwhelming negative affect, self-harming behaviours, compulsive behaviours and memory deficits.

The research also indicated that the presence of a supportive person or positive intimate relationship could decrease the intensity of some long-term effects for some survivors. The relationship between a history of childhood sexual abuse and development of negative long-term effects also provided support for the classification of CSA as trauma.

The necessity to prove such a classification shows how far the pendulum has swung away from victims’ natural rights for understanding because of the major problems presented during the epidemics of “false memory syndrome”. That a victim is suspected of “telling tall tales” only adds to their isolation, injury and pain; if they are automatically interrogated as if they are liars and are shown no respect and understanding, they may never again approach a therapist/health professional to unburden themselves in the hope of recovering and getting on with their lives in some sort of constructive and meaningful way. CSA remains a focus of concern for mental health professionals and researchers in the social science field.

REFERENCES

The Long Term Effects of Childhood Sexual Abuse


Chapter 7

THE DEEP TRAUMA OF SECONDARY VICTIMISATION: PARENTS OF SEX OFFENDERS

Julie Bennett and Ron Frey
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ABSTRACT

Trauma has long been understood and accepted as a result of an event or crime that causes great distress, intense fear, or threat to physical integrity and results in changes to one’s world. However, limited research has been conducted with the notion of secondary victimisation for those in our society who have a child who has sexually offended. This chapter highlights that these parents suffer significant trauma responses to their son’s behaviours while being provided with no or limited social support. These parents report significant losses to their self-image, loss of their relationships, social isolation, a significant psychological distress such as grief, hopelessness, helplessness, shame, shock, guilt and confusion. It has been identified that social discourse plays a significant role in these parents’ concept of self and can be argued to hinder the recovery process for this group of citizens.

Keywords: trauma, secondary victimisation, parental experience, sex offenders, societal shame

INTRODUCTION

Trauma has been defined by The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (APA, 1996) as an event that involves a person witnessing or being confronted with a situation(s) that involve actual or perceived threat of death or serious injury, or threat to physical integrity of self or others. Celinski and Gow (2005) report that trauma also incorporates a significant loss in one’s sense of self. The concept of trauma has been used to understand the effects of crimes on others, in particular sexual offences. This literature has also identified the concept of secondary traumatisation. Secondary traumatisation has been
used to refer to the effects that a sexual offence has on those people who are not the primary victim, such as parents, siblings or intimate partners (Morrison, Quadara & Boyd, 2007). Furthermore, this term has been utilised to refer to the family members of those who commit such crimes, despite a limited understanding of this concept within the psychiatric profession.

As noted by Condry (2007), family members of serious offenders suffer secondary trauma responses. In particular, Condry identified that these family members suffered significant personal losses, in particular loss of their sense of self, through stigmatisation, social isolation, shame and self-blame. Celinski and Gow (2005) outline the impact of trauma on the individual, particularly the loss of self and self-identity. This notion is echoed throughout the limited literature of parents of sex offenders. As outlined below, family members experience secondary traumatisation due to the criminal behaviours of loved ones. Many family members report a significant moral impasse, between the innate love for their family member and the notion that their family member committed such crimes.

The focus of this chapter is to understand the effects that criminal behaviour, in particular sexual offending, has on the parents of those who commit these crimes and to champion assistance for these citizens who suffer great trauma due to their child’s criminal behaviours. Pithers, Gray, Busconi and Houchens (1998) report that parents of sex offenders suffer multiple levels of psychological distress, including psychoticism, paranoid ideation, interpersonal sensitivity, depression, anxiety, phobia and hostility. The authors also noted significant distress relating to a sense of competence as a parent, social isolation, stress within spousal relationships, poor health and sense of restriction in their role as a parent. Bennett, Frey and Geldard (2008) identified psychological distress such as hopelessness, helplessness, shame, shock, guilt and confusion. The authors also report parents’ sense of social isolation, changes to self-image and loss of lifestyle. Condry identifies multiple strategies that these parents utilise to defend against these psychological distresses, such as denial, dissociation, justification for the act and blaming the victim. Bennett and colleagues also identified coping strategies including minimising, social comparison, experiencing their child as being ‘good’ and wishful thinking.

Background on Sexual Abuse

Much of the research on sexual abuse has involved understanding the etiology of offenders of these crimes (Ward & Gannon, 2006). Specifically, it has focused on the role of attachment during childhood (Ward, Hudson, Marshall, & Siegert, 1995); role of the environment – in particular whether the offender was sexually abused as a child (Hanson & Slater, 1988), or raised in an abusive environment which included substance abuse problems (Langevin, Langevin, Curnoe & Bain, 2006); and psychosocial and personality factors such as lack of empathy and or intimacy deficits (Worling, 2001; Marshall & Maric, 1996; Marshall, 1989; & Overholser & Beck, 1986). Sexual abuse has also been explained as a result of sex addiction and or through conditioning of the perpetrator (Tays, Earle, Wells, Murray & Garret, 1999; Wolf, 1985 respectively). Research has further investigated the assessment of, and treatment for, those convicted of sexual offences (see Erooga & Masson, 2006 and Geffner, Crumpton-Franey, Geffner–Arnold, & Falconer, 2003 for extensive reviews of adolescent and adult offenders respectively). Research has further explored the impact of sexual abuse on victims (see Clements, Speck, Crane & Faulkner, 2004 for a

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review), parents of victims (McCourt, Peel & O’Carroll, 1998), siblings of victims (Hill, 2003), and society as a whole (Morrison, et al., 2007). However, limited research has focused on the parents of sexual offenders.

Parents of Sex Offenders

Despite frequently being cited in the literature on the etiology of sexual offending (Langevin et al., 2006; Ward et al., 1995), there appears to be a limited amount of research involving the parents of sex offenders which documents the actual experience of this group. What evidence there is suggests that having a child, whether adolescent or adult who offends sexually, is a deeply traumatising experience for the parent, and one which due to stigma, cannot be shared within the parent’s normal circle of social support (Smith & Trepper, 1992).

Duane, Carr, Cherry, McGrath and O'Shea (2002) investigated and reported on the experiences of parents during the initial discovery and treatment stage of their child’s offending behaviour \( n = 5 \) in the Northside Interagency Project in Ireland, primarily a psycho-educational support group for parents of adolescent sex offenders. Duane et al. (2002) stated that parents reported distress and trauma related to the disclosure of their child's offence. The authors further reported that parents felt de-skilled as parents due to their child's offending behaviours and to their perception of parental failure. Although they noted that women were more likely than men to feel guilt associated with their child's offence, unfortunately the authors did not offer any explanation for these findings. However, the authors presented a conceptual model of the responses of parents during disclosure of their child's sexual offending behaviours. The model suggests that parents experience a range of emotions such as shock, shame, confusion, self-blame, guilt, anger, sadness and disbelief. Duane et al. reported that there is no particular temporal order involved in the presentation of these emotions and further reported that not all emotions were experienced by all parents. However, shock and confusion were two emotional responses common throughout the group participants. The authors proposed that parents often employ defence mechanisms such as disbelief and minimisation; the authors reported such techniques helped to lessen the negative impact of their child’s behavior, but ultimately exacerbated and prolonged their confusion about their child’s offending behaviour(s).

Smith and Trepper (1992) presented an analysis of the experiences of parents of male sex offenders. The authors examined the experiences of five parents of sex offenders in the American state of Michigan, whose offences ranged from extra-familial child sexual abuse, to incest and rape. The authors reported that within this sample, eight sequential stages of adjustment were apparent, and in these steps, the effects of the trauma can be clearly observed as outlined now.

Stage One involved the parents’ preoccupation with their child’s situation. The authors reported that participants became obsessed with their child’s dilemma, to the point that the majority of the parents were unable to continue to meet their work commitments and/or unable to look after other children. The second stage involved the parents re-evaluating their relationship with their child. The parents reportedly responded in two ways: searching for extra-familial contributions to the offending behaviour and secondly to blame themselves for the offending behaviour. The third stage entailed the problems associated with seeking help and support from legal and mental health services. Smith and Trepper reported that the
majority of parents felt as though they were blamed by these services for their child’s offending behavior, further exacerbating their isolation, guilt and distress. Parents reported that these services made the situation much more difficult for them, firstly due to stereotypes that sex offending originates in poor parenting and secondly, the lack of support that parents felt they received. Such stereotypes appear to have made it difficult for mental health agencies to provide the levels of support they would have provided without hesitation to other clientele.

The fourth stage involved the parents changing their Locus of Control from external to internal. The authors reported that these parents initially externalised the cause of their child’s behaviour and other’s responses to the offending behaviour; this was reportedly manifested in parents’ initial unwillingness to seek help for themselves and their child. Over the course of time, these parents were able to seek help for themselves and their child; this was reported to be indicative of the parent’s ability to accept their child’s behaviour (internalising). The fifth stage involved the parents confronting their own moral views about the crime their child had committed. The authors reported that all parents prior to their child’s conviction had strong views about the need for punishment for such crimes. However, after their child’s conviction, these views became very different, preferring treatment (rehabilitation) as a more suitable form of punishment in comparison to incarceration.

The sixth stage involved the parents becoming more capable of addressing their child’s offending behaviour with their child. Initially, the authors reported that parents had great difficulty discussing such issues further increasing their intrapsychic stress. As time progressed, the parents appeared to be more psychologically capable of discussing these issues with their child. However, all parents still continued to find this communication very difficult, especially as some of the offenders were not willing to discuss these issues with their parents (this notion is supported by Zankman and Bonomo, 2004). In the seventh stage, the parents dealt with the effects that the initial stage of “preoccupation with the situation” had on the remaining family members. Parents reported that other family members were often ignored, despite the great impact that their sibling’s offending behaviour had had on them. The authors reported that the effect of the crime on one family resulted in the younger brother “hanging tough” (hanging out on the streets and engaging in unsavory behaviours previously not identified in this child’s behavioural repertoire) and the younger sister isolating herself from the family. Thus, family dynamics appeared to be altered due to one individual’s behavior and thus their whole family was damaged psychologically and socially, and possibly as a consequence economically.

The eighth and final stage involved the parents’ ability to focus on the future. Smith and Trepper (1992) reported that parents either became optimistic or very pessimistic about their child’s future. Parents who were pessimistic reported feeling concerned that they will need to be responsible for their child’s rehabilitation. Furthermore, parents expressed a fear that they will not be able to stop their child from re-offending, thus exacerbating the sense of shame they had already experienced after the initial offence and increasing their anxiety levels.

Smith and Trepper (1992) further argued that a parent’s denial of their child’s offending behaviours may reinforce the child’s own denial of responsibility, further reinforcing the offender’s cognitive distortions around their offending behaviour and their lack of responsibility for their actions. Smith and Trepper further argued that if the parent’s denial of their child’s responsibility is not addressed, there is a risk that it will be communicated to
other family members and to the offender, ultimately affecting the therapeutic outcomes for offenders and family members.

Families of Serious Offenders

Despite a minuscule number of studies into the specific experiences of parents of sex offenders, other research into parents whose children have committed other serious offences suggests similar outcomes. MacLeod (1982) reported an individual case study of a parental response to a child’s charge of murder. MacLeod gave an account of the parent’s response, indicating that the initial response from the parents was one of denial and avoidance of the seriousness of the crime. Then the parents started to externalise the responsibility of the crime, by indicating that the child was mentally ill; which was assumed to be the reason for his offending behaviour. In the third phase, the parents reported feelings of helplessness, exacerbated by the legal processes (limited information supplied to family) and jail visits (lack of privacy and the shortness of visits with their son). MacLeod further reported that in the fourth phase the parents became preoccupied with their son's offending behaviour and hence the other children in the family were neglected - a negative psychodramatic effect on family interactions and stability. Finally, the parents became overly concerned with the future, especially if their child was found ‘not guilty’ - how could they help him return to community life after being incarcerated for a crime he did not commit. If however, on the other hand, he was found ‘guilty’ and incarcerated, how would he cope with this and how would he cope with his eventual release into the community; would he be able to adjust to community life. MacLeod reported that the parents stated that they found the situation to be somewhat similar to the experience of a death in the family, due to the absence of their son in their daily routines.

Condry (2007) reported on psychological stages that are experienced by individuals whose family member had been convicted of a serious crime (murder, manslaughter or sexual offences) in Northern United Kingdom. Condry detailed how participants described feelings of loss, similar to the bereavement endured following in the aftermath of a death, thus indicating the traumatic effects of such events. Families reported a loss of their dreams for the offending family member, loss of a close relationship with their family member, loss of friendships (due to the nature of the offence, many participants reported friends were unable to maintain a relationship with them) increasing their social isolation further, loss of their jobs, and difficulties associated with familial and financial security. Families also reported a loss of individual security, as many participants reported that they felt a danger of retribution from the wider community and a loss of participants’ individual identity, as many participants reported that their identity became the parent of a serious offender rather than as a person in their own right. Celinksi and Gow (2005) outline the serious damage to the self that trauma inflicts and, according to their conceptualisations, these parents appeared to be suffering loss of their core self and identity.

Condry (2007) identified four significant sequential stages within this population: 1) initial impact – initial shock of the discovery, the analogy of bereavement was used by many relatives in this stage; 2) early coping – beginning to be able to cope with the discovery, where participants began to experience a renewed sense of hope or optimism; 3) accommodation – progressing to a point where the family member had further adjusted to the
changes in their lives (this is not the same as acceptance). This stage also incorporates for some relatives the ability to help others who are in similar circumstances; and 4) moving on – where relatives were able to consider the whole matter to be in the past, although participants reported that their lives were never to be the same as they were prior to their family member being charged with a serious offence.

Condry (2007) further characterised participants’ accounts of their life prior to the discovery of their family member’s offending behaviour as either ‘problem identifying’ or ‘normalising’. Problem identifying externalises the behaviour as due to the offender’s mental health or prior difficulties such as addictions. Conversely, normalizing emphasises the normalcy of their life prior to this situation. Condry stated that normalising accounts were more prominent with relatives of sex offenders than any other serious offender. She argued this may be due to the social condemnation of sex offenders and therefore, relatives try to resist the tag of ‘sex offender’ by trying to normalise the offender’s life prior to discovery.

May (2000) interviewed eight parents of convicted murderers and reported two forms of stigmatisation family members of serious offenders endure: 1) the notion that the family of origin is toxic (‘family toxicity’); and 2) the social stigma of the committed crime. Family toxicity incorporates others’ perceptions that the family is the causal and or maintaining factor of the offending behaviours. As mentioned previously, the notion of possible family toxicity is echoed in the literature and reinforces such negative stigmatisations, because the family of origin has been hypothesised to create and or maintain offending behaviours, in particular sexual offending (Hanson & Slater, 1988; Langevin et al., 2006). Furthermore, May reported that families who had no previous experience with crime were more aware of their new social role / stigma (parent of a murderer) in comparison to families who had previously experienced criminal behaviour within the family. This notion was also reported by Howarth and Rock (2000) who stated that parents of serious offenders, who had no previous experience with the criminal justice system, were more likely to assume a new role as ‘parent of a murderer’ in comparison to those parents or family members who had previous associations with the criminal system. This finding can be interpreted that family members with no previous offenders in the family are more likely to accept common notions of ‘normal’ and ‘deviant’ behaviours and therefore are more inclined to perceive others as judging and blaming them for the deviant behaviour a child (or family member) has committed (May, 2000).

CURRENT RESEARCH

Overall, there is a paucity of literature to assist practitioners interested in the needs of parents of sex offenders. This lack of scientific literature indicates that parents of sex offenders are a genuinely neglected group of citizens, despite being noted unsympathetically within the etiological literature, an interesting testimony of their being shunned by society. We view this group of citizens as experiencing secondary victimisation and being in need of an adequate mental health response to help them cope with their personal losses, make alterations in their lives and make sense of the stigmatisation and rejection they experience from society at large - a generally unexplored area of social victimisation.
We wished to contribute to this area of literature by analysing the experiences of a small group of parents of sex offenders \( n = 4 \) to see how their self-reports contrasted with those already reported in the literature (see Table 1 Participants demographics). The first aim of the research was to identify the emotional responses of these parents and their needs, and secondly to identify what factors contributed to these parents’ emotional states.

The small number of participants associated with recruitment within this population and a similar population (parents of serious offenders) has been wildly reported (Duane et al., 2002; May, 2000; Smith & Trepper, 1992). Within Duane and colleagues’, May’s, and Smith and Trepper’s research, the total number of participants ranged from 1 to 8. Thus, it can be argued that the small number of participants within this research project is comparative to previous research in this area of interest. Furthermore, Condry (2007) reported that within her participant sample all but one participant was female. She argued that this is due to the nature of gender differences when dealing with such issues particularly the tendency for females to assume or be assigned responsibility for events within the family and the emotional well-being of family members.

### Table 1. Demographics of Mother, Description of Crime and Age of Male Offender

<table>
<thead>
<tr>
<th>Mother’s age</th>
<th>Crime committed</th>
<th>Age of offender at time of crime</th>
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<tbody>
<tr>
<td>39</td>
<td>extra-familial sexual abuse of female neighbour</td>
<td>9</td>
</tr>
<tr>
<td>50</td>
<td>extra-familial sexual abuse multiple counts of younger male</td>
<td>21</td>
</tr>
<tr>
<td>43</td>
<td>intra-familial sexual abuse of younger sister</td>
<td>15</td>
</tr>
<tr>
<td>70</td>
<td>Rape of female police officer</td>
<td>20</td>
</tr>
</tbody>
</table>

A total of 20 questions were developed based on the literature, with three main focus areas: (1) parent’s experiences of their child’s sexually abusive behaviour(s); (2) the impact of the child’s behaviour on the parents and their families; and (3) the types of strategies that the parents utilised to increase their ability to cope. Each interview that was conducted was audio taped, transcribed and subjected to a thematic analysis based on grounded theory, using the Atlas.ti.50 computer program.

This research conducted by Bennett, Frey and Geldard (2008) identified four broad thematic categories: ‘parental emotional experience’; ‘impact of the offending behaviour on parents’; ‘parental needs’ and ‘parental coping strategies’. Themes within three of the four categories have been previously identified within the literature; the novel category that was identified in this study was the ‘parental needs’ category. From the four broad categories identified, a total of 26 themes were identified. Sixteen of these themes had been previously identified within the literature, and 10 novel themes were identified within this study.

Secondary analysis identified what we believed to be two categories: the parent’s personal values and broader social values. This notion of broader social values impacting on parent’s meaning making of their current family situation will be discussed at the end of the chapter.

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Parental Emotional Experience

The ‘parental emotional experience’ category identifies what these parents report as their emotional response to their child’s sexual offending behaviours. As noted, parents reported conflicting emotional responses, for example anger and disgust at the crime, but also confusion about their parental responsibility, concern for their child, and shame. These emotional responses can be understood within the trauma framework particularly in relation to confusion of self and the personal beliefs they previously held.

The ‘parental emotional experience’ category comprises 10 identified themes reported by participants. Table 2 outlines the themes that can be described as responses that led to the occurrence or development of the category parental emotional experience. Examples of the illustrative quotes are included along with personal and social values identified within these quotes. Five of the themes identified in this category have been previously reported by Duane et al. (2002) namely confusion, anger, guilt, shame, and shock. Within the current sample, confusion was identified as a compound of confusion relating to parental reaction, parental responsibility and parental experience. Anger was identified to be two-fold – anger at their child, but also anger at governmental agencies. The parental guilt reported within this study was primarily aimed at parent’s beliefs that they had failed as a parent due to their child being charged with a sexual offence. Within this category, shame was identified as a reaction to the social stigma surrounding sex offending, with the majority of parents reporting that their sense of shame was intensified through discourses from the media and fellow citizens. Finally, shock was reported by participants as their initial response. Some participants reported a continual sense of shock, despite the length of time elapsed between the initial charge and the present time. From the remaining five themes identified, helplessness had also been previously identified within the literature (MacLeod, 1982; Smith & Trepper, 1992). In our research, participants reported feelings of helplessness and hopelessness towards the consequences of the offences and also for their child’s future life. The remaining four themes identified appear to be novel to this category. Disgust was reported within this sample as the parental response to their child’s offending behaviour based on their personal beliefs and, in some cases, their own previous experiences of sexual offending behaviours; the disgust did not appear to be related to their child, but to the offence. Concern for the child’s welfare was reported by all participants; it appeared that the reporting of their concern for their child in two cases was based on the parents’ need to emphasise their worthiness as a parent. The parental fear of consequences theme was identified partly as fear of consequences for themselves, but also fears for their child, particularly on release from incarceration. Finally, the sense of responsibility reported within this category was also two-fold; firstly parents’ retrospective thoughts that they should have known and should have changed the situation, and secondly, the actual responsibility of having to report their child’s offending behaviour (in one case).

Impact of Offending Behaviour on Parents

The second category identified within this study was the impact on the parents due to their son’s offending behaviour(s) and comprised five themes (see Table 3). As noted, parents reported challenges to their sense of self and their role as a parent, changes to their lifestyle.
such as loss of job, social isolation, rejection, and worry about the future. These challenges can also be understood within the trauma framework particularly in relation to loss of self-image and loss of lifestyle. Table 3 outlines the themes that can be described as responses in the category of the impact of offending behaviour on parents. Examples of the illustrative quotes are included along with the personal and social values within these quotes.

Within this category, five specific themes were identified. Of these themes, four have been previously identified within the literature (challenges to parental skills and self-image; worry about the future; isolation and parental pre-occupation with the situation). These themes have been identified by Condry (2007), Duane et al. (2002), and MacLeod (1982). Challenges to parental skills and self-image were identified within this category as the parents reported that they felt that they had failed as parents and therefore their parenting skills were challenged, and thus their self-image as a competent parent was subsequently challenged. Worry about the future was also identified within this category as two-fold; firstly worry about what will happen to their child on their release, and secondly, worry about their child’s possible recidivism. Isolation was identified within this sample as a combination of loss of relationships (personal and familial), rejection by others (perceived or reality based) and being judged by others (perceived or reality based). This theme was reported by all participants and was one of the most frequent themes reported by these parents.

Finally, parental pre-occupation with the offending behaviour was identified by the majority of the parents. Parents reported differing levels of pre-occupation. The parent whose child had molested his sister reported a continual pre-occupation with the situation, whilst those parents whose son had offended against an extra-familial victim reported they were more able to stop the intrusive thoughts and pre-occupation. This may be due to the impact the offending behaviour had on the family (parent was torn between the offender and victim). The remaining identified theme (lifestyle changes due to offence) again appears to be novel to this category and focuses on the intensity of the parent’s willingness to alter their life to maintain stability within the family system and aid in monitoring their child so to reduce the risk of recidivism.

**Parental Needs**

The third category identified within the current study involved parental needs and comprised two themes. This category identifies what these parents report they need in order to help them understand their trauma and to aid their recovery from this trauma. Table 4 outlines the themes that can be described as responses in the category of parental needs. Examples of the illustrative quotes are included along with the personal and social values within these quotes. This category identified two themes: ‘need for reassurance’ and a ‘wish to be heard’. The theme of ‘need for reassurance’ was also two-fold: need for reassurance from their child that he would not commit another offence similar in nature and reassurance from the researcher that the parent was in fact a ‘good’ parent. This second need for reassurance was the prominent form of reassurance sought by majority of participants. This may have been influenced by the nature of the interviews and the ‘professionalism’ of the researcher.
<table>
<thead>
<tr>
<th>Principle category</th>
<th>Specific themes</th>
<th>Illustrative quotes</th>
<th>Personal values</th>
<th>Social values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental emotional experience</td>
<td>Confusion: what to do parental responsi-bility parents’ own experience</td>
<td>Probably, if you talk about it like that, I haven’t really… you know sorted it out in my mind in one way, because I haven’t talked about it… you know… I just do things. I thought about my past &amp; other things &amp; then thought like about A &amp; how it would be like if I didn’t try to protect him. I just… you know it’s happened, but it’s like somebody else’s nightmare &amp; I don’t understand it myself, so it’s a bit hard to explain.</td>
<td>Attitude that if one does not address the situation, then it will ‘go away’.</td>
<td>Attitude that parents must protect their child. Attitude that these things do not occur in ‘my family’.</td>
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<tr>
<td>Disgust</td>
<td>You know he must have known to some extent, or he wouldn’t have kept it a secret in his life; like one of the conversations was citing information from other blokes (in jail) like they used to do it in Rome &amp; I said yeah they used to feed Christians to the lions, but that didn’t make it right. Part of it made me feel sick because I had a past experience myself &amp; I thought oh no, don’t tell me that that’s going to start.</td>
<td>Belief that sexual abuse being destructive to victim.</td>
<td>Belief that there are right and wrong behaviours &amp; two wrongs do not make a right.</td>
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<tr>
<td>Anger</td>
<td>I thought how could he do this to us &amp; I was so disappointed in him &amp; angry; I guess angry that he had done it, but angry too for messing up our lives. For the first time last week I didn’t like him, I wasn’t liking what was coming out of his mouth, I wasn’t liking his attitude… About a month ago, one of the prisoners snuck up behind my son &amp; jumped on my son &amp; bashed him up, &amp; he had 12 days in hospital prison where he couldn’t walk even &amp; he has lost the sight of one eye. …..So where was the security guard?</td>
<td>Expectations of how children should behave. Expectation that child will be protected whilst incarcerated.</td>
<td>Expectation that child will do no wrong in his life. Attitude that all humans are deserving of protection despite their behaviour.</td>
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<tr>
<td>Principle category</td>
<td>Specific themes</td>
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<td>Personal values</td>
<td>Social values</td>
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<td>He applied for a job in the garden out there when he first went to the residential units &amp; he was told he couldn’t do it because he had made an escape attempt from a low security prison farm… never been to one mind you, but he had apparently done that. …That sort of thing doesn’t happen from accident, so now it’s shadowed in his record but it’s not active.</td>
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<td></td>
<td></td>
<td>Attitude that the correction system is unfair and wanting to punish her son.</td>
<td>Expectation that all people deserve to be treated with respect.</td>
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<td></td>
<td>Guilt</td>
<td>Yeah, I feel like I failed in my parental responsibility to my friends so yeah you do feel a little bit of guilt… Because I’m entrusted with my friend’s children and all of a sudden something like this happens and you feel like what have I done wrong? I feel guilty that it happened (son victim of sexual abuse); guilty that I didn’t pick up on it, guilty that I didn’t somehow prevent what’s happened.</td>
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<td></td>
<td></td>
<td>Attitude that parents should always know what is happening.</td>
<td>Belief that parents should always protect children.</td>
<td>Belief that parents should always know everything their children do.</td>
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<td></td>
<td>Helplessness/</td>
<td>Because I can’t prevent it, I can watch but if it’s going to happen, it’s going to happen.</td>
<td>Expectation that mother has no control of child’s behaviour.</td>
<td>Attitude that life will forever be guided by son’s previous behaviours.</td>
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<tr>
<td></td>
<td>hopelessness</td>
<td>We don’t have any recourse to justice… there’s nothing you can do… it’s just a bit disheartening, it’s just a pointer for the future for me, I know that that’s how it will be.</td>
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<td></td>
<td>Shame</td>
<td>If I had my way, it would still be just our secret, but the media saw to that….No-one wants that sort of thing public. No-one would want that known.</td>
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<td></td>
<td></td>
<td>Belief sexual offending is shameful &amp; should not be discussed.</td>
<td>Expectation that society condemns sex offenders.</td>
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<td></td>
<td></td>
<td>You’ve got all these people who then make all these comments &amp; they talk about paedophiles - do they think it’s something you want to talk about?</td>
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Table 2. (Continued)

<table>
<thead>
<tr>
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<th>Specific themes</th>
<th>Illustrative quotes</th>
<th>Personal values</th>
<th>Social values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concern for child’s welfare</td>
<td>He had just broken up with a girlfriend and I thought just let him have some time with male friends you know, before he rushes into another relationship - I was trying to stop him from getting hurt.</td>
<td>Attitude that male platonic relationships can be healing.</td>
<td>Belief that forgiveness from God is necessary.</td>
<td></td>
</tr>
<tr>
<td>Fear of consequences</td>
<td>I guess I just wanted to unburden to somebody, but after I had seen her once and she said I needed to come back again &amp; the second time I just felt she was trying to trick me to give her information, I didn’t feel she was trying to help me, &amp; of course I have never been back.</td>
<td>Belief that society condemns sex offenders.</td>
<td>Expectations that there will be retribution.</td>
<td></td>
</tr>
<tr>
<td>Sense of global responsibility</td>
<td>I don’t see there is anything I could have done that would have made it any different, but you always think I should’ve seen the signs or should have stopped him. Since day 1 with C when things happened, I felt I was partly in a small way responsible, because I think what haven’t I done that could have assisted (even) when I know that I had done everything, everything in my power I possibly could… P and I (his dad) had to take him literally to the police station to have him charged.</td>
<td>Attitude that parents are ‘all knowing’ &amp; therefore responsible for outcomes.</td>
<td>Attitude that parents are ‘all knowing’ &amp; therefore responsible for outcomes.</td>
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</tr>
</thead>
<tbody>
<tr>
<td>Impact on parents</td>
<td>Challenges to parental skills and parental self-image</td>
<td>I guess we only parented the kids the way we know how, like we know best, like how we were brought up I guess.</td>
<td>Belief that 'parenting will come naturally to you'.</td>
<td>Expectation that their child will grow up to be a law abiding citizen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oh yeah, I thought I had done a good job. Yes, there are lots of regrets &amp; I think I shouldn’t have worked &amp; I should have stayed home &amp; just been a mother…</td>
<td>Value that the primary role for females is to mother.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>…but what difference would it have made? … Motherhood is something, that you’re damned if you do &amp; damned if you don’t.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Usually I would have said something, I’m just fighting with myself (be)cause any other time I would have said something… …but it’s my own child and I haven’t.</td>
<td>Attitude that sexual offending is wrong but it is different now my child has done this.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Attitude that parents have to be loyal to their offspring.</td>
</tr>
</tbody>
</table>

Table 3. Specific Themes, Illustrative Quotes and Personal and Social Values of the Impact on Parents

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1Dennis Ferguson was sentenced as a serial child sexual offender in Queensland, Australia; he had recently been returned to jail initially, because no community placement was deemed safe for him due to public outrage.
<table>
<thead>
<tr>
<th>Principle category</th>
<th>Specific themes</th>
<th>Illustrative quotes</th>
<th>Personal values</th>
<th>Social values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lifestyle changes due to offence</strong></td>
<td>I intend to not work too much when he comes home so that I can be his guard. I kept working but I had gone back to part time, I assumed I would have to give up work so I was trying to put everything in place to get another job &amp; move aside.</td>
<td>Belief that child cannot be trusted now. Expectation that society would reject her because of child’s actions.</td>
<td>Attitude there is a need to repair my poor parenting.</td>
<td></td>
</tr>
<tr>
<td><strong>Worry about future</strong></td>
<td>Oh just when he comes home, like you know, who knows what will happen - all this Dennis Ferguson saga going on, it’s just a bit frightening, cause he has been approved to come home here which is good, but we don’t know how safe we’ll be. I worry that he may get himself in trouble. Not intentional trouble, because he is easily led.</td>
<td>Expectation that the community wants retribution</td>
<td>Attitude that son is unable to make own decisions</td>
<td></td>
</tr>
<tr>
<td><strong>Isolation: Loss of r’ships Rejected by others Judged by others</strong></td>
<td>I’ve wiped a lot of people…you discover what real friendship is about &amp; who your real friends are. Anyone who can’t accept that we need to put him first isn’t a real friend - he still comes first along with his sister. I’ve got no friends…no-one wants to talk to you. Well, I had friends but they never come near me anymore. It’s a very lonely time and it is still a very lonely time, like I said when you’ve got a son in jail, some people don’t want to know you anymore’ I’ve lost quite a few contacts I used to have… That’s their choice; they’ve got to cope.</td>
<td>Attitude that friendships are fickle Beliefs that no-one likes associates of sex offenders (stigmatization).</td>
<td>Attitude that the friends remaining are ‘true’ friends. Attitude that everyone copes in different ways.</td>
<td></td>
</tr>
</tbody>
</table>
### Table 4. Specific Themes, Illustrative Quotes and Personal and Social Values of Parental Needs

<table>
<thead>
<tr>
<th>Principle category</th>
<th>Specific themes</th>
<th>Illustrative quotes</th>
<th>Personal values</th>
<th>Social Values</th>
</tr>
</thead>
</table>
| Parental needs     | Need for reassurance | *I said to him, you know I can’t go through this again; I’d have to wipe you and he said I’d have to wipe myself.*  
*I’ve had a bad upbringing & I’ve been in & out of foster care; I was abused; a lot of people think like it’s the same with me, but it’s not. I fought for my kids because I didn’t want to be like my mum ; I won’t be the way my mum was; yes I do have problems but not to the sense where my mum was a hitter & I’m not a hitter, like I’ve stopped that chain.*  
*I’ve always been dead against that what we have been talking about this morning… of sexual predators or whatever you want to call them.* | *Expectation that parent is unable to support child in another similar situation.*  
*Belief that parents created child’s abusive behaviours.* | *Expectation that child learns from mistakes.*  
*Attitude that she has broken an unhelpful family pattern.*  
*Belief that sex offending is bad.* |
| Wish to be heard    |                  | *I don’t feel as though I have support or that people are hearing me.*  
*It would be good to have someone to listen to what I have to say about his issues, because they scare me, they really do scare me.*  
*I’ve got no friends… no-one wants to talk to you.*  
*It’s been a very lonely time and it is still a very lonely time…* | *Attitude that society does not care about her due to situation.*  
*Expectation that there should be something for me.*  
*Beliefs that no-one likes associates of sex offenders (stigmatization).*  
*Expectation of isolation because of son’s offending behaviour(s).* | |
Table 5. Specific Themes, Illustrative Quotes and Personal and Social Values of Parental Coping Strategies

<table>
<thead>
<tr>
<th>Principle categories</th>
<th>Specific codes</th>
<th>Illustrative quotes</th>
<th>Personal values</th>
<th>Social values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental coping strategies</td>
<td>Minimising</td>
<td>I can only say that he didn’t believe that what he was doing was wrong.</td>
<td>Attitude that child was ‘good’ but unaware of right &amp; wrong.</td>
<td>Belief that sex offending is wrong. Belief innocent until proven guilty.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Because I didn’t actually, I know his hand was right at the top part of the thigh; I know they scattered, but I didn’t actually see him touch &amp; didn’t want to cause any drama in the street, because I may have been that 1% wrong.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wish to change situation</td>
<td></td>
<td>You know I just wish he had spoken to me about it; I could have done something to help him.</td>
<td>Expectation that parent could change child’s behaviours.</td>
<td>Attitude that communication would have eliminated this behaviour.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You can’t go back; you can only go forwards at least now we can prevent anything from happening in the future.</td>
<td></td>
<td>Attitude that the future can be hopeful.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I know logically there was nothing I could have done any different; it doesn’t stop you wishing though.</td>
<td>Belief that child’s behaviour was ‘wrong’.</td>
<td>Attitude that parent is not responsible for child’s behaviour.</td>
</tr>
<tr>
<td>Parental acceptance / awareness of child’s behaviour</td>
<td></td>
<td>N is N he did what he did, he has always been a wild child you know.</td>
<td>Attitude that child is responsible for own actions.</td>
<td>Attitude that personality is constant.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There are underlying facts &amp; there is proof of C doing what he did, but I don’t understand why, where it’s come from, where it’s germinated from, when you yourself don’t behave like this in your own home or been brought up that way.</td>
<td>Belief that justice occurs.</td>
<td>Attitude there is pre-existing conditions that create sex offenders.</td>
</tr>
<tr>
<td>Principle categories</td>
<td>Specific codes</td>
<td>Illustrative quotes</td>
<td>Personal values</td>
<td>Social values</td>
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<tr>
<td>Social comparison</td>
<td>I do feel sorry for the Dennis Fergusons of this world who don’t have anyone to support them, because I don’t think that they would stand a hope in hell of ever rehabilitating. …he has to live in this mental health place with people who have drug problems and schizophrenia.</td>
<td>Attitude that rehabilitation must involve family member.</td>
<td>Attitude in status difference between drug users &amp; mental health patients and sex offenders.</td>
<td></td>
</tr>
<tr>
<td>Experiencing child as ‘good’</td>
<td>As a teenager he was a dream teenager, he never gave us any trouble. Oh, he was too good to be true… You know I have a prolapse; he had to help me get up &amp; help me onto my commode chair every hour. He did all those things, had to shower me &amp; cook my food &amp; everything. He rang B the other day and said B, I have to apologise &amp; B said what for mate, he said everything you said &amp; done is true, I just wanted to thank you.</td>
<td>Attitude that good actions indicate good person. Expectation there is ability to change.</td>
<td>Attitude that good children grow up to be good adults.</td>
<td></td>
</tr>
<tr>
<td>Learning to manage the situation</td>
<td>So I guess each person has to deal with things in their own way… …For me it’s been through music &amp; finding other things in life that I enjoy &amp; getting away from everything. So I’ve kept myself busy and occupied; it was my way of dealing with things like decorating my house. I don’t think about those things because it’s too hard to think about those things; I just go and do something else.</td>
<td>Attitude that personal strength is an agent for management of situation. Expectation that doing something different will assist coping. Attitude that if one does not address the situation it will ‘go away’.</td>
<td>Attitude we are all different.</td>
<td></td>
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</tbody>
</table>
Table 5. (Continued)

<table>
<thead>
<tr>
<th>Principle categories</th>
<th>Specific codes</th>
<th>Illustrative quotes</th>
<th>Personal values</th>
<th>Social values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial of offending behaviour</td>
<td>After two and half years, do I think it has happened? No, I still don’t think it happened…</td>
<td></td>
<td></td>
<td>Belief that sex offending is “bad”.</td>
</tr>
<tr>
<td>Victim blaming</td>
<td>Like she is not like 100% supervising them; they’ve got a big playroom out the back; I just don’t know what’s happening. …like she is always out on the street with no clothes on…</td>
<td>Belief that supervision = responsibility. Attitude that acting in certain ways invites certain responses.</td>
<td></td>
<td>Attitude that all parents should be responsible.</td>
</tr>
<tr>
<td>Unexpected positive benefits</td>
<td>Well it’s better because I’d just about had enough before all this happened, I don’t know, maybe we wouldn’t still be together if all this hadn’t happened. He’s been a tower of strength for me, so it’s brought us a lot closer together. No, if anything it’s made me stronger. I love my children as much as I can love them, more than a person can imagine…</td>
<td></td>
<td></td>
<td>Attitude that family struggles unites family members. Attitude that motherly love never ceases.</td>
</tr>
</tbody>
</table>
Furthermore, the majority of participants had not sought, or were not provided with, professional guidance during their experience which also may have influenced their desire for reassurance. The second theme identified was a ‘wish to be heard’, this theme was reported as a desire to have others listen to their concerns and needs and to provide support for them in a safe environment free from the social condemnation surrounding sex offenders. This category has not been examined within the literature to the best of the researchers’ knowledge. The lack of research into this category is regarded as an obvious weakness in our current state of knowledge, particularly if interventions and support are to be implemented for this group of citizens.

**Parental Coping Strategies**

The final category identified was the coping strategies utilised by the parents and these comprised nine themes. The reported coping strategies appear to have aided the parent’s capacity to reflect on their situation. As noted previously, responses to traumatic events can result in utilising defences such as minimising and denial as a means to help the parent understand and reflect on the changes in their world and attempt to recover from the traumatic event. Table 5 outlines the themes that can be related to the category parental coping strategies. Examples of the illustrative quotes are included in the table, along with the personal and social values embedded within these quotes.

Within this category, nine themes emerged in which three themes had not been previously identified within the literature (wish to change situation, learning to manage the situation, and unexpected positive benefits). The theme ‘wish to change situation’ was identified as a coping strategy through participants’ use of reminiscing about what could have been an alternative reality – such as their child talking with them, in the belief that the parent(s) could have altered the child’s offending tendencies. The theme of ‘learning to manage the situation’ involved the strategies that parents identified that helped them deal with their situation, this ranged from music and reading to gardening and re-decorating the house. The final new theme identified by these parents was the unexpected positive benefits parents experienced from their child’s offending behaviour. This theme was identified by only half of the sample, and was reported as strengthening the marital relationship and the relationship with the offending child. The remaining themes have been identified either by Condry (2007) or Duane et al. (2002), namely minimising their child’s sexual offending behaviour, social comparison, parents’ reports of experiencing their child as good, denial and victim blaming.

**DISCUSSION**

The parental emotional experiences identified within this present study, such as confusion, anger, guilt, shame, shock and helplessness / hopelessness confirms previous research conducted by Duane et al. (2002), Smith and Trepper (1992) and MacLeod (1982). The impact experienced by parents such as challenges to parental skills and self-image, worry about the future, isolation and parental pre-occupation with the situation identified in the
The present study also confirms previous research conducted by Condry (2007), Duane et al. (2002), and MacLeod (1982). Additionally, the coping strategies identified by the parents in the current study (minimising; parental acceptance; social comparison; experiencing child as ‘good’; denial and victim blaming) also supports previous coping strategies identified by Condry. However, new parental emotional experiences were identified in the current study, as were new experiences of the impact of offending behaviour on parents, coping strategies utilised by parents and parental needs during this time in their lives.

On closer analysis of the data, the way parents made meaning of their experiences were influenced by the beliefs and values of the wider society, their expectations of themselves as parents and their attitudes with regard to sexual offending behaviour. It could be assumed from these findings that parents’ meaning making is strongly influenced by social discourse. Societal beliefs about sexual offending behaviour(s) appear to be central to influencing how these parents make meaning out of their experience. Figure 1 shows the interaction identified within this sample of parents whose child had been suspected, charged or convicted of a sexual offence. The analysis identified parents’ experiences of their situation as continuously interacting with societal discourses such as the stigmatised identity of the parent of an offender, parental responsibility and the overarching responsibility of females for the emotional stability of their families. The interaction identified in the current research is an alternative to the sequential process identified by previous research, for example Condry (2007), Duane et al. (1992), Smith and Trepper (1992) and MacLeod (1982).

![Figure 1. Interaction between Parental Experience and Societal Discourse (Bennett, Frey, & Geldard, 2008).](image-url)

The social discourse of parental responsibility impacted on all of the participants and was identified as their own sense of responsibility to their child but also their sense of responsibility to society. Johnson, Cournoyer, Fisher, McQuillan, Moriarty et al. (2000) reported that based on a professional’s theoretical model, they were more likely to attribute responsibility to the parents for the child’s mental health concerns, particularly if the professional assumed a systemic or Freudian position. We argue that the stigmatisation reported by parents of children or family members with mental health concerns is similar to the stigmatisation reported by parents of sex offenders, based on the limited knowledge provided to society about these groups of people, the social distain and fear of sex offenders.
and the mentally ill (for a review, see Lefley, 1989; Shaw, 1991 and Stjernsward and Ostman, 2008). This was identified by one particular participant who attempted to discuss her emotional experiences with a psychologist, only to feel that the psychologist held ulterior motives and prior assumptions, in which the participant believed she was obliged to provide information to the psychologist about her son’s offending behaviours (charge stage only – had not gone to trial at that stage).

I guess I just wanted to unburden to somebody, um but after I had seen her once and she said I needed to come back again, and the second time I just felt she was trying to trick me to give her information I didn’t feel she was trying to help me, and of course I have never been back.

Other examples of the stigmatised identity of the parent were identified through the example ‘I’ve got no friends… no-one wants to talk to you’. Other stigmatised identities implied throughout the participants’ accounts incorporate the underlying notion that ‘parents create children who sexually offend’. This notion is echoed in the sex offending literature in which the role of the parent(s) and their parenting practices has been hypothesised to precipitate sexual offending behaviours, for example see Hanson and Slater (1988), Langevin et al. (2006), and Ward et al. (1995). Furthermore, this notion can be argued to be closely linked with the ‘mother blaming’ discourse previously identified within the mental health literature, such as blaming mothers for schizophrenia, autism and other mental health concerns (Johnson et al., 2000). Thus it can be intuitively hypothesised that these parents may be assuming this stigmatised identity because it is echoed in the professional domain as well as the social domain. Such social domain appears to exacerbate the traumatic experience of these mothers and limits these parents’ capacity to access appropriate services to begin their healing process.

**Implications for Practice**

Multiple implications for practice have been identified throughout this study, but the primary concern that was noted during this research is that there is no support network for parents of sex offenders. It is little wonder these parents feel so isolated and are reluctant to engage in research that focuses on their lives. Johnson et al. (2000) identified that professionals attributed blame to parents for their child’s mental health issues more readily if there were limited parental support groups available. Thus, due to the dearth of parental support groups for parents of sex offenders, it could be argued that professionals may be more likely to attribute blame to these parents in comparison to parents of children with a mental health issue. Thus, we believe the primary implication for practice is the construction of support networks for these parents. The development of support groups would firstly provide an environment that is safe and a peer support network that provides these secondary ‘victims’ an opportunity to discuss their lives and not feel so isolated within society. Secondly, the creation of such support networks would send clear messages to society that these parents suffer too, engendering some empathy towards the parents of sexual offenders. Finally, if Johnson et al.’s research is noteworthy, then the construction of support networks may alter professionals’ perceptions of these parents, thus providing more appropriate support.
and reducing isolation and traumatisation of people who are affected by the criminal behaviour of others.

A secondary implication for practice involves the creation of groups that employ appropriate therapies, aimed at understanding and challenging the dominant discourses of parents that include unhelpful attitudes and expectations with regard to their beliefs about themselves and their parenting. Groups employing these particular therapeutic paradigms could assist parents to identify society’s unhelpful attitudes about parents of sex offenders and increase the parents’ ability to challenge these unhelpful values and beliefs. The existence of such groups utilising this approach is likely to increase parents’ willingness to seek help by challenging their personal negative attitudes surrounding sex offending and provide space for parents to discuss their needs and expectations in a safe environment. Thus, it is hypothesised that support groups would be a superior platform for any therapeutic interventions, due to the nature of support group’s ability to normalise, challenge, provide safety for parents to share and increase parents’ self-worth.

Koeske and Koeske (1990) reported that parents generally, who had limited access to social support, were more likely to suffer from parental stress, lower role satisfaction, lower maternal self-esteem, and higher psychological symptoms including somatic symptoms compared to those parents who engaged in continual social support. We would expect this would be particularly true in the case of parents of sex offenders.

**CONCLUSION**

The current study highlights the many complex emotional reactions and the impact on this group, individually and as parents. It further highlights how these people cope and identifies some of their needs previously disregarded by professionals and society at large. Much of the data suggests that the parental responses appear to be influenced primarily by the social discourse surrounding sexual offending and sexual offenders. Thus, it appears these parents are indeed secondary victims of trauma, who not only lose their child (through incarceration), but lose their own freedoms, friendships, sense of identity, employment and even contact with other family members due to their child’s behaviours.

For change to occur, social discourses around sexual offending and sexual offenders and particularly those family members who are associated with these perpetrators need to be challenged. Furthermore, social support networks for these parents appear to be an essential intervention that has previously been shown to be therapeutic for victims generally (see Howarth and Rock, 2000) and should be considered as appropriate interventions for these parents, but which are currently lacking in our community. We also believe that the lack of professional support leads to further isolation and traumatisation of this group of citizens and it is time for professionals to take up this challenge and attempt to refute social discourse surrounding these secondary victims. There is no doubt that this group of people experience deep trauma and re-victimisation for offences they did not commit. We argue that professionals need to open their minds and attempt to support this group of people in our society who, for many years, have been neglected, detested, held accountable and responsible for actions that are not of their own making.
REFERENCES


ABSTRACT

Recovery from illness or the effects of psychotrauma presents as the “narrative” in which suffering victims attempt to make some sense out of their experiences. Whereas there are specific dynamics related to various conditions, we propose (based on the results obtained from the combined groups of victims of torture and industrial and motor vehicle accidents) that there are certain ubiquitous and pivotal stages of recovery in which individuals have an opportunity to exercise their personal agency (or sense of “freedoms”). This conceptual framework refers to Fromm’s idea of “freedom from” and “freedom to” with various stages in between. As predictors of recovery (measured by the Rehabilitation Survey of Problems and Coping), a linear regression model identified a number of factors derived from pre-treatment assessment with the Resilience to Trauma Scale (Research Edition) and Resourcefulness for Recovery Inventory (Revised Edition) which, in essence, add to our conceptualization of recovery as the interplay between resilience and resourcefulness.

Keywords: predicting outcomes, psychotrauma, narrative, resilience to trauma scale, RRI-RE

INTRODUCTION

Attempts to conceptualize common mechanisms and paths to recovery from various psychopathological disorders and related disabilities are clinically very significant, but present as a challenging task for clinicians. Common clinicians’ experiences tell us that, even

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if we limit our interest to psychotraumatic conditions (which are frequently associated with physical injuries and head injuries), we are still dealing with a broad variety of psychopathological manifestations of various degrees of severity along with vast individual differences, both in how similar traumas manifest themselves clinically, and how initial symptomatology evolves and responds to various treatment modalities. Knowing these challenges, we were, nevertheless, tempted to find out if our theoretical model, for which the primary components refer to resilience and resourcefulness, would help us simplify and understand these divergent narratives and trajectories of recovery by delineating some factors and pivotal therapeutic decisions that would lead to desirable therapeutic outcomes.

For the purpose of documenting the applicability of this model to practical clinical situations, we decided to review actual clinical samples of clients who were involved in therapy hoping that any positive findings obtained in this group would be possible to be generalized more broadly to other groups. There is a second research question which was explored: Can we predict the final outcome of treatment on the basis of initial assessment? To analyse such a question, at the time of diagnostic assessment we administered, along with the usual measures of psychopathology (which have by themselves certain predictive values), the newly developed measures of resilience and resourcefulness (Resilience to Trauma Scale – Research Edition and Resourcefulness for Recovery Inventory – Revised Edition). It was expected that it would be possible to document that certain aspects of resilience and resourcefulness contribute independently to the outcome following psychological therapy and physical therapy assessed several months later on.

Regarding the traumatic experiences of the participants in our research, our sample consisted of clients who were referred for accident-related assessments due to industrial accidents or motor vehicle accidents, or who were referred for psychological assessment as a part of a refugee acceptance process because, in their country of origin, they had suffered torture in terms of physical and emotional abuse. With respect to the severity of their condition, these clients were first seen by professionals (such as physicians, lawyers, and rehabilitation companies, and others) and if considered significantly traumatized, were referred for assessment.

**Resilience to Trauma Scale (RE) as a Reflection of the Self Facing Adversity**

When predicting the therapeutic change and recovery outcome from the experience of serious trauma that is usually associated with bodily injuries, it makes sense to first assess the contribution from resilience and resourcefulness separately and then to assess their combined effect. In this study, clients’ resilience was measured by the Resilience to Trauma Scale – Research Edition which is described in a companion book on trauma¹ (Celinski & Allen, in press), whereas resourcefulness was measured by the Resourcefulness for Recovery Inventory – Revised Edition which was presented in a previous volume² (Celinski & Allen, 2011a) in a chapter titled “Resourcefulness as the Art of Succeeding”. In our view, the most important aspect of resilience is its relationship to adversity; specifically this refers to people’s

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experiences at the time when trauma or adversity actually occurred and how they conceptualized it, and then coped with the post-traumatic sequelae. The contrast between the pre-traumatic sense of the self and the physical, cognitive, and emotional symptomatology following the event creates a dialectic tension which either represents an opportunity for re-evaluating the situation and mobilizing strength for adaptive coping, or contributes to feeling depressed, passive and disengaged. In the longer term, the impact from trauma may result in individuals feeling “crushed” by the magnitude of the sustained losses that include physical injuries, or in regarding themselves as capable once again of engaging with life on a resilient level of functioning with the ability to progress and improve their quality of life.

Considering that resilience is the pre-requisite for actively seeking, developing, and employing resources (which represents resourcefulness), it is expected that some interactions would be observed when utilizing data from both the RTS-RE and the RRI-RE which were designed to measure these constructs separately.

**THE RESOURCEFULNESS FOR RECOVERY INVENTORY-REVISED AS A MEASURE OF THE SELF IN TRANSFORMATION**

In our conceptualization of resourcefulness (as reflected in the Resourcefulness for Recovery Inventory – Revised Edition (2007), recovery refers to gradually unravelling (spontaneously and/or after having been activated by specifically targeted therapeutic interventions) a sequence of delineated mental states, each encompassing different ideas, beliefs, and behaviours to which certain emotional significance is attached. These mental states reflect attempts of personal agency (thus representing various freedoms) at making sense out of one’s own illness and coping with the new physical and psychosocial reality.

At their best, they offer an alternative to projecting the misery of the past onto the present and the future. In therapy, a positive perspective and hopeful engagement need to be primed through reference to positive experiences people have had in coping with past adversities, and should be further developed in small steps. However, at the very beginning, an open minded experience of both the negative and positive poles of one’s own situation and condition is required to create a motivating dialectic tension between the “archaic” (see our chapter titled “Recovery as Narrative of Resilience and Resourcefulness”, Celinski & Allen, 2011b) and dysfunctional predispositions on the one hand, and the more adaptive progressive alternatives on the other; in the course of recovery, a person is expected to be gradually more inspired by the latter. Across the course of recovery, a person is expected to be gradually more capable of regarding their own limitations as a challenge which should inspire him or her to utilize a broad range of personal resources that would facilitate and promote recovery.

The RRI-RE is applicable to a myriad of adverse situations and conditions in which individuals must cope or adjust. Whereas this instrument was primarily developed on the basis of experience with the treatment of those persons suffering from psychotraumatic disorders and undergoing recovery, it was considered that the RRI-RE should also prove useful in assessing and treating patients experiencing psychological stresses from the death of a loved one, a difficult divorce, severe medical illness or other unfavourable life situations.

The RRI-RE is a 239 item multipurpose self-report questionnaire based on symmetrical and bipolar conceptualizations of stress reactions including both their negative (regressive
and recovery inhibiting) and positive (recovery-promoting) aspects. The inventory assesses an individual’s spontaneous ability to react to adversity using clusters of specific behavioural, cognitive, emotional and psychophysiological responses that are less or more optimal for dealing with a particularly difficult life situation. The median RRI-RE full scale alpha reliability is higher than or equal to 0.90. Whereas the instrument itself and its broad clinical applications are described in detail elsewhere in a prior volume (Celinski and Allen, 2011b), at this point, it is relevant to summarize our conceptualization of recovery as referring to dialectic relations between subjective representation and understanding of illness on the one hand, and an individual’s actual situation and condition on the other. Incorporating perspectives from positive psychology, our understanding of the process of recovery is consistent with Fredrickson’s (2009) broaden-and-build theory of positive emotions which allows for healthy transformation as an individual utilizes and acquires a broader range of resources. Endorsements of health-promoting factors manifest a person’s ability to “choose” health over illness and this is reflected in the person’s cognitions, emotions and behaviours. The items selected for the RRI-RE were extracted from the reviews of rehabilitation and clinical literature, and from polling both patients and rehabilitation personnel with respect to factors that inhibit or promote recovery (Antoniazzi, Celinski and Alcock, 2002).

The narrative of recovery, in its initial stages, aims at achieving some acceptance of the situation that is forced on an individual and has a goal of emotional stability. This begins with gradual cognitive and emotional “distancing” from the original impact of trauma, from the entitlement to the life that is now no longer possible, and from the anger and frustration caused by the people, circumstances or fate that results in the excessive focus on, and preoccupation with, the past.

![Figure 1. The Narrative Meaning of Recovery as Reflected in the RRI-RE.](image)

Considering that a concept of “freedom” has a strong common sense meaning, various types of freedom manifesting in diverse mental states, offer a convenient way of creating the narrative of recovery through a transformation that is framed as “liberation”. Such a narrative moves an individual through stages in which certain ideas and emotions are especially

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Resilience and Resourcefulness in Predicting Recovery Outcome

strongly manifesting (see Figure 1). Whereas these mental states, pertaining to specific recovery stages, are somewhat arbitrarily created, individuals are usually capable of recognizing their relevance to coping with adversity, if they are exemplified by the clients’ personal history, history in general, and by cultural and personal values. Such associations help integrate cognitions with emotions and with corresponding behaviours that represent an agentic manner (based on choice rather than on being compelled) of coping with the post-traumatic situations and one’s own condition. By progressing through various stages, clients should become aware of the importance of “freedom in” manifesting as mindfulness and stress management, of the “freedom through” which may engage external support in learning new skills, of “freedom for” which is manifesting as mental preparation to face new challenges that would eventually enable them to act with a sense of “freedom to” that provides a mental framework for development of specific goals, along with plans for achieving better psychological adjustment and well being.

In the next section, we will describe the correspondence between our theoretical model of recovery and the findings from the statistical analysis of our clients’ samples.

What Really Matters in Recovery?

The purpose of this study was to find which aspects of resilience (as measured by the RTS-RE) and resourcefulness (as measured by the RRI-RE) that were administered at the time of initial assessment, together with measures of psychopathology, are especially conducive to the outcome from psychological therapy and physical rehabilitation assessed several months later. The specific interest was on finding if resilience and resourcefulness would be better predictors of positive outcome than anxiety, depression and pain. It was hypothesized that regardless of the initial severity of the psychological conditions (which typically included adjustment disorders, generalized anxiety, PTSD, major depression, and pain disorders along with concussive brain injury), the therapeutic outcome would be primarily predicted by identified resilient features and an ability to utilize personal resourcefulness. In the course of treatment, no specific and strict treatment regimen was followed, but rather various psychological approaches and techniques were utilized in a flexible manner depending on the psychologist’s judgment about a client’s needs.

Method

Outcome Measure

As an outcome measure, we chose the Rehabilitation Survey of Problems and Coping (R-SOPAC; Salmon & Celinski, 2002) in which a person is asked to rate both subjective experience of typical post-traumatic symptomatology and his/her coping ability on a zero (not a problem) to six (an extreme problem) point scale. The R-SOPAC provides a convenient and transparent measure of outcome assessing clients’ physical, cognitive and emotional impairments that are related to their disability along with their coping abilities. A summary
score combining these three domains yields an overall index of patient impairment and coping difficulties.

Participants

In total, 59 patients were assessed with the R-SOPAC before and after engaging in rehabilitative efforts at the Toronto offices of three psychologists. The sample was 44.1% male and 45.9% female; for the whole sample, the average age was 45.2 years ($SD = 11.6$) and 13.5 years of education ($SD = 3.4$).

On average for 4-6 months, the clients received psychological treatment “as usual” for psychotraumatic conditions; this treatment included cognitive behavioural approaches, along with relaxation and desensitization; however, the variations in treatment between clients and the offices cannot be reliably specified. Furthermore, the clients participated in various forms of physical therapy for bodily injuries that were provided by multiple sites and using methodology as considered appropriate for the diagnosed conditions. Using R-SOPAC, pre- and post- comparisons, the change for the sample overall averaged a 23% reduction (range 19-25%) in self-reported symptoms, with effect size differences ranging from moderate to large (Cohen’s $g$ 0.50 to 0.80) for each of the R-SOPAC components and for the overall total.

In a series of analyses, changes in R-SOPAC scores were predicted by both scale and factor scores of the RTS-RE and RRI-RE in multiple regression analyses that employed backwards methods in order to minimize suppression effects (premature removal of variables due to overlapping variance).

Predicting Outcome with RTS-RE Factor Scores

Whereas 59 cases were available to assess RRI-RE variables predicting outcome, only 22 cases contained RTS-RE data. This latter subset was 50% male and 50% female; the average age for the whole sample was 44.2 years ($SD = 13.3$) and average years of education was 13.5 years ($SD = 4.5$). Multiple regressions with backwards elimination were used to predict R-SOPAC total score using basic demographic data and RTS-RE factor scores. A significant overall model was produced that explained 41.5% of the total adjusted variance ($R^2 = 0.71$) with the final solution including loadings from age ($t = 3.47, p = .003$) and RTS-RE Factor three ($t = 2.08, p = .05$) and Factor nine ($t = 3.99, p = .001$). Content for RTS-RE Factor three (that we call “facing the challenge”) reflects positive and hopeful engagement, and using an active coping strategy for recovery (taking personal responsibility). Factor 9 of the RTS-RE relates to the ability to visualize the details surrounding the trauma. Factor 9 (that we call “traumatic amnesia”) accounted for only 4% of total RTS-RE variance, but its association with head injury and post-traumatic amnesia (PTA) or dissociative amnesia is noteworthy and indicates that better outcome is associated with the ability to remember and reprocess the traumatic event. (While this finding largely supports the usual practice of desensitization and exposure to traumatic events, in cases with PTA or psychogenic amnesia, whenever the accident is very psychotraumatic, in order to avoid retraumatization, therapists should...
exercise clinical judgment while assisting patients in imaging “forgotten” details surrounding their accident.

Although RTS-RE Factor 5 was not retained as a significant predictor in the final model, interim results revealed a negative relationship to outcome \( p < .07 \) that was approaching significance; Factor 5 represents subjective appraisal of losses and acquired disability as having a profound emotional, global consequences on peoples’ lives (i.e., “Do you feel that the event caused a great loss in your life?” or that “You have lost faith in yourself and/or others. You have lost meaning and purpose of life”, etc.).

In spite of the relatively small number of cases, these results make intuitive sense and are quite important with respect to recognition that the future outcome is dependent on a client’s courage to consciously experience the emotional and cognitive content of the traumatic event, to make a deliberate effort to re-engage with the post-traumatic condition and psychosocial situation, and to be able to minimize the cognitive and emotional impacts associated with objectively sustained losses.

**Predicting Outcome with the RRI-RE Factor Scores**

Predicting overall R-SOPAC outcome using only the RRI-RE factor scores resulted in a significant model \( F = 4.05, df = 39, p = .01 \) in which the first RRI-RE factor score was the only clearly significant predictor \( t = 2.38, p = .023 \). The multiple correlation for the final model was moderate in size \( R^2 = 0.55 \) and only accounted for 19% of the variance when adjusted for outliers. Overall improvement associated with the first RRI-RE factor reflected the absence of cognitive components of anxiety. In other words, positive outcome was dependent on a sense of self-efficacy and/or acceptance, which is a treatment oriented conclusion drawn from the fact that it was negatively related to items concerning interference, worry, stress, feeling trapped or stuck and focusing on the past, and on what has been lost.

Factor score 5 and a variable reflecting symptom exaggeration which is related to experiencing strong negative emotional reactions (i.e., catastrophizing) approached significance \( p < .07 \) and remained in the final model as well (while using \( p > 0.10 \) for removal). The strongest items associated with the fifth factor stressed certain positive benefits that derived from the patients’ traumatic experience including gaining strength, wisdom and becoming a better person.

Although the well defined Factors 2 through 4 did not contribute to the final solution, it should be noted that Factors 2 and 5 have similar optimistic content, but differ in their cognitive versus more emotional perspective (the RRI-RE’s second factor has questions such as “I see my life improving” and “I try to keep a positive attitude”). The failure of this factor to contribute to the predictive model may be that its effect was subdued due to the retention in the final solution of a variable measuring symptom exaggeration which is also related to experiencing strong negative emotional reactions (i.e., catastrophizing). It should be noted that therapeutic improvement may have resulted in part from a moderation of the patients’ initial symptom exaggeration. To assess the latter, two separate measures were utilized: *Computerized Assessment of Response Bias (CARB; Allen et al., 1997)* and the *Test of Memory Malingering (TOMM; Tombaugh, 1996)*. Symptom exaggeration was found to be largely unrelated to RRI-RE individual factors and scales, and these two separate measures were also negatively related to the R-SOPAC total score (the higher the score, the higher are...
symptoms and poorer coping). Negative correlations were observed with CARB ($r = -.33$, $p < .001$, $n = 155$) and TOMM ($r = -.45$, $p < .001$, $n = 271$). However, a composite measure of symptom invalidity, derived from standard performance-based neuropsychological measures, showed positive correlation ($r = + 0.38$, $p < .001$, $n = 173$). It is not surprising that the transparent nature of the R-SOPAC may prompt exaggerated self ratings. Symptom exaggeration is to be expected in populations recovering from trauma; however, it should not be regarded as a barrier to effective treatment that can lessen the effects of catastrophizing. Unfortunately, over-reporting, associated with catastrophizing, is often used as the reason for denial of treatment on the assumption that scoring poorly on symptom validity represents a pervasive lack of effort and motivation for recovery, or even a deliberate “fabrication” of symptoms.

Predicting Outcome using RRI-RE Subscales

In addition to linking the recovery outcome with the RRI-RE factors, a similar set of analyses to assess recovery outcome was undertaken this time using RRI-RE subscales along with demographics and other variables assessing depression (Beck Depression Inventory-II), anxiety (Beck Anxiety Inventory), trauma-symptoms (Davidson Trauma Scale) and selected scales from the Multidimensional Pain Inventory. Using backwards removal of variables that were found not to be significant, after their exclusion, a final model was highly significant ($F = 7.43$, $df = 58$, $10$; $p < .0001$) producing an impressive predictive fit ($R^2 = .78$) that accounted for 52.6% of total adjusted variance in outcome. Of the top nine predictors ($p < .03$ for all), eight RRI-RE subscales were retained with only age remaining in the final model ($p = .005$; younger patients improved more) and ranking fifth in terms of statistical significance. The MPI Pain Interference Scale was the only other variable retained in the final model ($p = .097$) but appeared to contribute only a small amount to the total explained variance. The top four RRI-RE subscales, associated with improvement in R-SOPAC total score were all negative in terms of face validity, and in decreasing order of importance included Hope, Doctors, Control and Awareness. The four positive RRI-RE subscales referred to Dealing with Loss and having Fundamental Values, Hope and Control.

The fact that both negative and positive variables predict the outcome suggests that a state of high distress (characterized by hopelessness, loss of control, feeling abandoned and not being helped by professionals, and not knowing how to understand one’s condition) which, in the initial period of post traumatic recovery manifest as “catastrophizing”, is the source of inspiration for proactive action to undo loss, understand better one’s condition, regain hope and control, while also deriving strength from one’s own fundamental values.

Combining Prediction using RTS-RE and RRI-RE Factor Scores

We have drawn theoretical distinctions between resilience and resourcefulness, and based on the results that the factor structure of these two instruments were largely unrelated (as correlating the top five factor scores for each instrument revealed only three significant relationships out of 25 separate comparisons), we have confidence that we are measuring two independent and clinically relevant constructs. Accordingly, the unique contributions of each
measures to outcome were assessed by their simultaneous entry into a model to predict treatment outcome. As before, a very limited sample of patients who engaged in rehabilitation and psychotherapy (N = 22) qualified for this purpose (i.e., only those who were assessed with the R-SOPAC at the beginning and end, and who, at the beginning of treatment, were also administered both RTS-RE and RRI-RE). A highly significant overall model was produced (R² = .75) that explained 49.6% of the adjusted overall variance with the final model, predicted by age, RRI-RE Intentionality and RTS-RE Factor 9 (referring to the presence or absence of PTA or dissociative amnesia). Interim results in this backwards elimination procedure indicate that outcome is also significantly related to RRI-RE-assessed positive attitudes towards healthcare professionals (“Doctors”, p < .05) and to Hope (p = .003) - as opposed to the scales related to depression, resignation and disengagement. The other RTS-RE components predicting outcome at this step included Factor 4 (p = .001) reflecting a lesser degree of catastrophic appraisal of an individual’s condition at the time of trauma (e.g., I had just escaped death; I was sure I would be disabled for life) and Factor 10 (p = .01) that refers to subjectively assessed availability of social support; there was a negative relationship of outcome with Factor 8 (p = .02) whose content concerns blaming others for the accident (the more blaming, the worse the outcome) as this likely releases an individual from taking responsibility for his/her own recovery.

These findings suggest that better outcome was associated with less catastrophic appraisal of the traumatic event and an ability to fully experience the traumatic event, along with establishing for oneself a clear direction for recovery in terms of intentionality, hope and utilization of health care resources (i.e., assistance from health professionals) and having some social support. Holding others responsible for the accident may be associated with a belief that others should be more responsible for helping with recovery which may decrease a sense of personal responsibility for being actively and practically engaged in the advancing one’s recovery. To clarify this issue, future research is needed.

Another unanswered question pertains to the relationships between the outcome and trauma severity. In our study, the actual trauma severity was not objectively assessed and it requires a separate measure. It is likely that the better outcome was associated with objectively less severe traumas. While there is likely a correspondence between objective and subjective appraisals of trauma severity (which was addressed through the scale), the difference between these two estimates may represent one of the factors predicting recovery which may be a goal for further research.

To summarize, the findings presented in this chapter suggest that both scales provided independent and complementary information that are useful in predicting positive outcomes for treatment of those who were both significantly psycho-traumatized and who also suffered body and head injuries.

In the next section, we will describe how we tested our hypothesis that the positive change reflected in therapeutic outcome is associated with broadening and utilization of personal resourcefulness, as reflected in RRI-RE therapeutic measures.
ASPECTS OF RESOURCEFULNESS THAT CHANGE WITH TREATMENT

We undertook a series of analyses to assess the utility of the RRI-RE for identifying positive changes in recovery. As the first step, we compared pre-post RRI-RE data to determine whether recovery is reflected in gains in resourcefulness, as assessed by the RRI-RE scales. A total of 33 cases were available for this purpose. The sample was 48.4% male and 51.6% females with an average of 13.1 years of education ($SD = 4.0$) and an average age of 44.7 years ($SD = 12.1$) for the whole sample. A multivariate analysis of variance (MANOVA) procedure comparing pre-post RRI-RE full scales (combined positive and negative subscales) failed to reach overall statistical significance ($p = .30$), although scales referring to Stress, Acceptance and Integration significantly changed suggesting improvements in these domains ($p < .02$ for all). A second MANOVA procedure was undertaken using separate RRI-RE subscales as dependent variables and also failed to reach significance ($p = .11$). To continue investigation of what is instrumental in recovery, we employed binary logistic regression (BLR) to determine which RRI-RE positive and negative scales changed as a result of treatment (pre-post treatment was entered as the binary condition). As with previous regression procedures, the BLR was undertaken using a stepwise backwards elimination process. Although this procedure is typically undertaken to optimize cutoff values for classifying patients (e.g., in symptom validity research), our interest was in identifying which RRI-RE scales changed over the course of treatment. The BLR was highly significant overall ($Chi^2 = 20.78$, $p < .001$) and converged in 18 steps. Using the default cutoff, a 74% overall correct classification (pre- versus post- treatment) was obtained with approximately equal false positive and false negative rates near 25% (+/- 2%). The final predictors retained in this model were RRI-RE positive scales for Stress ($p = .001$), Intentionality ($p = .004$) and Family ($p = .076$). It needs to be noted that the Wald statistics, associated with the contributions of individual predictors in the model, are notoriously insensitive, and predictors in the Backwards Likelihood Ratio procedure are retained in each step if their recalculated probability levels remain below 10% ($p < .10$).

A similar BLR, using the full RRI-RE scales (combining positive and negative scales), was also significant overall ($Chi^2 = 20.52$, $p < .001$). Final retained predictors in this model were RRI-RE subscales related to Control ($p = .01$), Stress ($p = .02$), Integration ($p = .02$) and Acceptance ($p = .08$); whereas the latter probability is above the level of $p < .05$, it is below our cut off level of $p < .10$). A BLR model using only the positive RRI-RE subscales was equally significant ($Chi^2 = 20.52$, $p < .001$) and correctly classified 83% of all patients. The significant positive subscale predictors retained in the final solution for this model included Intentionality, Fundamental Values and Control ($p = .01$ for all), as well as Responsibility ($p = .02$), Time (whether focused on the past or on present and future) ($p = .05$) and Beliefs ($p = .09$). A model involving only RRI-RE Negative subscales was somewhat less significant overall ($Chi^2 = 18.57$, $p < .001$) with associated 74% classification accuracy, and only retained as predictors the subscales for Stress ($p < .001$) and Fundamental Values ($p = .003$).

In essence, the BLR procedures revealed that selected RRI-RE scales and subscales consistently improved with treatment; this is generally in line with findings indicating improvements in R-SOPAC following treatment which we reported earlier in this chapter. Considering, however, that the MANOVA analyses failed to find a significant overall main effect for treatment, one can question the appropriateness of using BLR analyses to identify

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which aspects of resourcefulness improved with treatment. Whereas we were lacking satisfactory statistical power appropriate for the multivariate analyses using so many variables, nevertheless, we had already found that R-SOPAC measures of outcome produced moderate to large effect sizes changes. Thus, the BLR results could be viewed as complementing and reinforcing earlier findings, and also providing insight into improving or streamlining the RRI-RE. It is important to note that Positive and Negative subscales taken separately are better at predicting the outcome than the use of combined scales, probably because combination of positivity and negativity dilutes the power of the individual components which were intended to measure the same underlying construct. Further, it is methodologically and clinically important to note that the most changes in response to treatment occurred in the positive RRI-RE subscales, as opposed to the negative ones.

To summarize, in this chapter, we explored which factors, derived from RTS-RE and RRI-RE taken individually and in combination, predict positive outcome (as measured by R-SOPAC) from rehabilitation that, in addition to physical therapy, included psychotherapy for psychotraumatic conditions. With respect to RTS-RE’s ability to predict outcome, we conclude that factors which are the most conducive to therapeutic outcomes include the ability over time to gradually visualize and emotionally experience the traumatic event in its entirety (which reflects resilience). Ideally therapeutic sensitivity and skill should lead to the patient moving to positive and hopeful engagement, and taking personal responsibility for recovery through utilization of health care and support which enable more effective coping.

As one of the benefits of psychological treatment is reduction in catastrophizing, therapeutic efforts should first be directed at ameliorating symptoms of high distress and exaggeration considering that good outcome was most negatively compromised by symptoms of interference, worry, stress, feeling trapped or stuck, and focusing on the past and what had been lost. By contrast, the positive treatment outcome is predicted by the RRI-RE factor reflecting the relative absence of largely cognitive symptoms of anxiety. Positive outcome was also associated with an RRI-RE factor that relates to perceived benefits derived from the individual’s traumatic experience including gaining strength and wisdom, and becoming a better person. Thus, to promote recovery, the clients need to redirect their focus to acceptance, stress management and self-efficacy, and to seek all the necessary external (medical and social) support.

Scales and subscales from the RRI-RE were also investigated separately in an effort to determine which scales changed with treatment, using the instrument itself as an outcome measure. The greatest gains in RRI-RE were reflected in the subscales that refer to a better ability to manage Stress and to a sense of Control, inner Integration and Acceptance of one’s condition and psychosocial situation. Some of these findings are consistent with those directly predicting improvement on the R-SOPAC and some represent a common understanding of their clinical importance.

A combined model utilizing data from both RTS-RE and RRI-RE explained 49.6% of the variance with the final model being predicted by age, RRI-RE Intentionality and RTS-RE Factor 9 (reflecting the presence or absence of ability to visualize the trauma event). The interim results in the backward elimination procedure indicate that outcome is also significantly related to RRI-RE-assessed positive attitudes towards health care professionals and to hope, as opposed to scales related to depression, resignation and disengagement. Other RTS-RE factors refer to emotional control and cognitive appraisal by individuals of their condition, social support and taking active approach to recovery rather than blaming others.
for the trauma (which relieves individuals from a sense of responsibility for the traumatic event and perhaps also for their own recovery).

Novelty and importance of the reported findings may be further ascertained in the context of typical predictors of outcome based on the measures of psychotherapy. Previous work by the authors (Celinski & Allen, 2007), utilizing stepwise hierarchical regression, provided support for the thesis that certain RRI-RE scales explained considerable additional variance, over and above that captured by traditional psychopathology measures such as BDI-II, BAI and MPI pain scales, and cognitively-based measures of symptom exaggeration in predicting various indicators of self-reported impairment. Essentially, these prior findings showed that RRI-RE variables could “moderate” or explain from 15% to 40% of variance in other dependent measures of psychopathology. We interpreted these findings as suggesting that certain RRI-RE subscales were semi-independent of measures of symptom exaggeration, pain and global manifestations of psychopathology, and could offer the clinician considerable additional condition-specific insight. Our current findings support and extend these earlier conclusions, and are arguably more methodologically sound and clinically significant considering that the backwards regression initially loads all available variables and then systematically eliminates those that fail to substantially contribute to the model (p > 0.10 criteria). Our current findings are also noteworthy for what was eliminated during the backwards elimination process which included BDI-II, BAI, MPI Interference and Pain Severity Indices, and DTS total score due to their lack of association with clinical improvement. In short, selected RRI-RE subscales do a better job of predicting outcome than any of these commonly employed psychopathology measures; this provides an optimistic perspective that psychopathology needs to be acknowledged and accepted at the beginning, but ultimately it is people’s own resilience and resourcefulness that matter in terms of recovery.

**CONCLUSION**

It is our conclusion that RTS-RE and RRI-RE contribute independently to predicting the final outcome from physical rehabilitation and psychotherapy several months later. Knowledge of the factors which have positive impact on predicting outcome allows the therapist to introduce and enhance these factors in the course of treatment at the appropriate time when the need arises and when a client is ready to accept change as contributing to recovery.

In this respect, our findings are consistent with Smith and colleagues’ (2008) research that utilized the Brief Resilience Scale which defines resilience as the ability “to bounce back”. Smith et al. also refer to resilience as being opposite to anxiety, depression and negative affect, along with physical symptoms which result from stressful events, difficult times and setbacks (in this latter sense, their understanding of resilience is similar to the primary concept of our Resilience to Trauma Scale - Revised Edition that refers to the prevention of emotional psychopathology). We also agree with the Smith et al. statement that resilience guides people to promote their recovery by seeking appropriate resources which include optimism, social support and active coping (among others). Whereas the value of the Brief Resilience Scale is its brevity (6 questions such as “I tend to bounce back quickly after
hard times” and “It is hard for me to snap back when something bad happens”), the value of RTS-RE as a clinical tool is that it reflects peoples’ traumatic experiences in the context of their own sense of the self, pre-traumatic specific coping styles, and their perspectives on the long term sequelae and on the value of their effort at creating new meaning in life while being aware of losses.

These issues may be specifically targeted in the course of therapy as relevant to the positive outcome. The RTS-RE provides evidence that the therapeutic outcome depends on active processing of the memories and of images of the trauma, and assessment of the losses as the prerequisite to active and hopeful engagement in recovery. At the very beginning, the therapeutic focus needs to be on decreasing a tendency to catastrophizing. Considering that both negative and positive RRI-RE factors contribute to a positive outcome, it suggests that dialectic tension between feelings of abandonment, loss of control of one’s life, and of being uninformed of one’s condition must be outweighed by reference to fundamental values, effectively dealing with losses, hope and regaining control, as identified by the pertinent RRI-RE scales. The importance of these scales becomes relevant at various stages of recovery and could facilitate clients’ progress, if clinicians are aware of their relation to the final outcome.

A critical review of this study would probably point out a lack of sufficient clarity about specific diagnostic classifications of the patients’ groups, a lack of comparisons between groups regarding the effectiveness of particular treatment methods, variable duration of therapy and absence of the measures of clients’ traumatic experiences (other than their subjective ratings of the severity of their physical and psychological traumas). Nevertheless, considering that in spite of these confounding factors, we have managed to document the importance of resilience and resourcefulness for recovery from a combination of physical and emotional conditions, this strongly suggests their clinical significance which may be more precisely documented in the future studies.

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Chapter 9

How Are Social Support, Sociotropy, and Autonomy Related to Traumatic Stress Disorders?

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Abstract

The present study examined how the quantity and quality of social support(s) and how sociotropic and autonomous personality styles are related to PTSD in 51 people who were diagnosed with acute stress disorder following trauma events. When reassessed after a period of more than four weeks, 31 of these patients were diagnosed with PTSD. These two groups (‘ASD’ and ‘PTSD’) were compared on social support, and personality-style as well as their trauma levels. Significant differences were found between the two groups for perceived social support, with those members in the PTSD group having fewer persons to support them (quantity of social support), less satisfaction with that support (quality of social support) and significantly higher scores on sociotropy (concern over what others think, pleasing others) and autonomy (perfectionist–autonomous-self-strivings, desire to control, and defensive separation). This chapter emphasises the influence that social support, and excessive autonomy and sociotropy, may have in PTSD. Individualised assessment and treatment is needed to address these aspects and to aid recovery.

Keywords: acute stress disorder; post-traumatic stress disorder; sociotropy; social support; autonomy

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INTRODUCTION

Since the 1980s, and following the return of soldiers from the Vietnam War, considerable research interest has focused on the psychological reactions that persons may experience following a traumatic event. This includes not only war-related trauma, but also trauma arising from many different arenas. There is a huge body of research relating to posttraumatic stress disorder (PTSD) and more recently to acute stress disorder (ASD) around the world, including numerous Australian studies (e.g., Alcorn, O’Donovan, Patrick, Creedy, & Devilly, 2010; Biddle, Creamer, Forbes, Elliott, & Devilly, 2002; Creamer & Forbes, 2004; Creamer, O’Donnell, & Pattison, 2004; Creamer, Wade, Fletcher, & Forbes, 2011; Dearn, & Matthews, 1998; Devilly, 1996, 2001; Devilly & Spence, 1999; Forbes, Hawthorne, Elliott, McHugh, Biddle, Creamer, & Novaco, 2004; Hodgins, Creamer, & Bell, 2001; Matthews, 1998, 1999, 2000, 2005; O’Donnell, Creamer, Bryant, Schnyder, & Shalev, 2003; O’Donnell, Creamer, & Pattison, 2004; Steindl, Young, Creamer, & Crompton, 2003).

Traumatic experiences, those extreme occurrences outside the realm of normal everyday life, can exert significant impact on psychological functioning (Horowitz, 1991). According to Harbert (2002), acute traumatic stress occurs when interpretations of a traumatic event, insufficient coping mechanisms, and limitations in resources (individual or group) result in stress too severe to be relieved easily. Symptoms of acute stress disorder may manifest shortly after the traumatic event. An important need in the management of people who have been exposed to a traumatic event is to identify those people who are at risk of PTSD. Researchers (e.g., Bryant, Harvey, Sackville, Dang, & Basten, 1998) have found that early treatment of trauma survivors suffering from ASD can effectively prevent PTSD in many cases.

Research has identified ASD syndromes that can predict PTSD. Much has previously been made (correctly) of the need to deal with the component symptoms of ASD that lead on to PTSD. For example, in their study of victims of violent assault, Brewin, Andrews, Rose, and Kirk (1999) found an overall diagnosis of ASD correctly classified 83% of the group who went on to receive a diagnosis of PTSD. They also found that similar predictive power could be achieved by classifying the ASD and PTSD groups according to the absence or presence of at least three re-experiencing or arousal symptoms. Similarly, Creamer, O’Donnell, and Pattison (2004) investigated the relationship between ASD and the subsequent development of PTSD in a population of trauma survivors and found that although all ASD symptom clusters contributed to the prediction of PTSD severity, only arousal and re-experiencing the traumatic event predicted a categorical PTSD diagnosis. The current chapter notes the value of attention to these specific ASD categories and gives attention instead to an area less well studied, that of the importance of social support, and personality styles.

The ASD-PTSD guidelines provided by Australian researchers in the field suggest when and when not to treat (cf., Forbes et al., 2007), but as indicated in this chapter other variables should also be addressed, including the personality-style variables of sociotropy and autonomy (cf., Kols, Robinson, & Tracy, 2004). Sociotropy is a personality characteristic involving excessive concern over what others think, dependency in relationships, and emphasis on pleasing others. Autonomy (‘the autonomous individual’) is a characteristic defined by emphasis on self-set standards of behaviour involving a perfectionistic, self-critical approach, a need to control events and others, and separation defensiveness - a need to
How are Social Support, Sociotropy, and Autonomy Related …

She defend oneself emotionally from others (Robins, Ladd, Welkowitz, Blaney, Diaz, & Kutcher, 1994). See for example earlier papers on sociotropy and autonomy, with their strong relationships with depression (Beck, 1983; Beck, Taylor, & Robbins, 2003). These personality attributes, along with social support relationships, are reported in the current research outlined in this chapter.

DEFINITIONS

Acute Stress Disorder

To meet the DSM-IV diagnosis of ASD a person must have been exposed to a traumatic event in which they experienced, witnessed, or were confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and the person’s responses involved intense fear, helplessness, and/or horror. They must have at least three of five dissociative symptoms (a subjective sense of numbing, detachment, absence of emotional responsiveness; reduction in awareness of surroundings; de-realization; depersonalisation; and dissociative amnesia), at least one re-experiencing symptom (re-experiencing the traumatic event through recurrent images, thoughts, dreams, illusions, flashbacks, a sense of reliving the experience; distress on exposure to cues of the traumatic event; marked avoidance symptoms), avoiding stimuli that arouse recollections of the trauma (thoughts, feelings, conversations, activities, places, and people), and anxiety or arousal symptoms (sleep difficulties, irritability, poor concentration, hyper vigilance, exaggerated startle response, motor restlessness). Further, the disturbance must cause significant distress or impairment in social, occupational, or other important areas of functioning, and the disturbance has to last for a minimum of two days and a maximum of four weeks, and occur within four weeks following the traumatic event (American Psychiatric Association, 1994, 2000).

Post Traumatic Stress Disorder

To qualify for a diagnosis of PTSD, the person must have met the following two criteria: (1) experienced, witnessed or otherwise been confronted with an event which involved actual or threatened death, serious injury, or threat to physical integrity and (2) the person’s response must include intense fear, helplessness, or horror.

Symptom manifestations fall into three broad categories: (1) re-experiencing the event (recurrent and intrusive recollections of the event; recurrent distressing dreams of the event; acting or feeling as if the traumatic event was recurring; intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event); (2) persistent avoidance of stimuli associated with the event and numbing of general responsiveness (efforts to avoid thoughts, feelings or conversations associated with the trauma; efforts to avoid activities, places, or people that arouse recollections of the trauma; inability to recall an important aspect of the trauma; markedly diminished interest or
participation in significant activities; feelings of detachment from others; restricted range of affect; and a sense of foreshortened future); and (3) persistent symptoms of increased arousal (difficulty in falling or staying asleep; irritability or outbursts of anger; difficulty in concentrating; hypervigilance; exaggerated startle response). The duration of the disturbance is more than one month and the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning (American Psychiatric Association, 1994, 2000).

For definitions of other constructs studied (social support; sociotropy, autonomy) see the relevant sections including in ‘Diagnostic Measures’ below. The next section deals with background theories in their approaches to defining how and why PTSD occurs, and the subsequent sections introduce the relevant social support and sociotropy-autonomy literature.

**Background Theories on the Development of PTSD**

Numerous theories have attempted to explain the development of PTSD and they each have limitations. Learning theories (e.g., Holmes & St. Lawrence, 1983; Keane, Zimering, & Cadell, 1985) explain the development of PTSD through classical and operant conditioning. Information processing theories (e.g. Howowitz, 1986) incorporate psychodynamic ideas and cognitive theories of emotion and information processing, as well as the importance of social support following a traumatic event in the development of PTSD. Other information processing theories (e.g., Resick & Schnicke, 1992) focused on the schematic reconciliation of the affect of trauma, and included emotional variables such as shame, anger and sadness. The psychobiologic theory (e.g., Southwick, Bremner, Krystal, & Charney, 1994) limited the development of PTSD to alterations in the person’s neurobiological response to stress following a traumatic event. However, none of the above theories succeeds in explaining individual differences in subsequent diagnoses of PTSD when individuals have ostensibly been exposed to the same traumatic event. One strength of the psychosocial theory of Green, Wilson, and Lindy (1985) was the inclusion of environmental factors, especially of social support, but further research in this area would help confirm its contribution. Despite the huge body of research, there are still questions that require answers regarding the psychological consequences of suffering a traumatic event.

**STUDIES OF SOCIAL SUPPORT, SOCIOTROPY AND AUTONOMY**

**Social Support**

There have been consistent findings that social support is related to health outcomes, with evidence of the relationship being strongest for mental health. Research (e.g., Affleck, Tennen, Urrows, & Higgins, 1994; Cohen & Wills, 1985; DeLongis, Folkman, & Lazarus, 1988; Ogden & Mtandabari, 1995; Solomon, 1993; Turner Cobb & Steptoe, 1998; Tyler & Cushway, 1995) has found that the quantity of social support is related to health outcomes following a traumatic event, with the more social support in general leading to better mental health outcomes. However, conflicting results have been found in other studies where it was
not the quantity, but the quality of social support that best attenuates the negative impact of exposure to trauma (e.g., Eustace, MacDonald, & Long, 1999).

This current study therefore evolved partly from the theoretical psychosocial model of PTSD (e.g., Green, Wilson, & Lindy, 1985; Joseph, Williams, & Yule, 1993, 1997) which takes into account the recovery environment in which a person experiences and attempts to recover from a traumatic event; it expands earlier research on social support and PTSD by examining the significance of the type and quantity of, and perceived satisfaction with, the support provided following a traumatic event.

**Personality Characteristics (Sociotropy and Autonomy), Depression, and PTSD**

The relationship between personality traits and psychological well-being and its reverse has received considerable attention in the literature. The early work of Beck (1983), for example, suggested that sociotropy and autonomy represented predictive factors for depression, and this has been supported, with particular emphasis on sociotropy (e.g., Clark, Beck & Brown, 1992; Nietzel & Harris, 1990, Sato & McCann, 1997). However, the research exploring the relationship between the personality characteristics of sociotropy and autonomy with PTSD is sparse. At the time of conducting our research, only one published article (Kolts, Robinson, & Tracy, 2004) had built upon earlier research that investigated associated cognitive structures and beliefs in the development and maintenance of PTSD (e.g., Foa & Rothbaum, 1998; Foa, Tolin, Ehlers, Clark, & Orsillo, 1999; Janoff-Bulman, 1992; Owens & Chard, 2001; Resick & Schnicke, 1992). This study (Kolts et al., 2004) had explored if these personality constructs might predispose individuals to experience exaggerated posttraumatic cognitions thus making them more vulnerable to the development of PTSD. Their results showed that both sociotropy and autonomy were significantly related to symptoms of PTSD and depression, and they significantly improved prediction of PTSD symptom levels after controlling for the effects of depression. In addition, their results showed PTSD symptoms were significantly related to personality styles that overemphasized either the role of personal relationships or the role of autonomous behaviours (e.g., perfectionistic self-critical approaches and need to control). Their study needed further support to confirm or otherwise the findings suggesting the importance of these personality variables.

The personality factors (sociotropy and autonomy) were thus selected to be examined in this study because they had been identified as vulnerability factors in the development of depression, and had been shown to be significant in the development of PTSD in the Kolts et al. study, but had not been examined in other studies.

**Objectives and Hypotheses**

The objectives of the present study were to examine the relationship between traumatic life events, quantity and quality of social supports, the personality factors sociotropy and autonomy and their relationships with PTSD. One technical aim was to predict group membership (ASD, PTSD) from scores on the personality style and social support variables. It was expected that:

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1) Patients with a higher quantity of support would be less likely to go on to be diagnosed with PTSD than patients with fewer people providing them with support.

2) Patients with perceived satisfaction with the quality of support provided would be less likely to go on to be diagnosed with PTSD than those patients who were less satisfied with the quality of support.

3) Those patients who had elevated scores on sociotropy and autonomy would be more likely to go on to receive a diagnosis of PTSD.

**METHOD**

**Participants**

Participants were from one initial group of patients recruited following a traumatic event, from the private practices of two psychologists who work in Victoria. The patients later formed two groups. Group 1 (Time 1) was made up of those participants who met the criteria for a diagnosis of ASD using responses to the Acute Stress Disorder Interview and the Acute Stress Disorder Scale related directly to the DSM-IV criteria as described in the next paragraphs. Participants in Group 2 were those from Group 1 who were followed up after 4 weeks (Time 2) and were shown to have gone on to have a clinical diagnosis of PTSD after they had been assessed by the clinical-administered PTSD scale (CAPS). The patients were treated by the two psychologists during the month between the ASD and PTSD diagnosis, but no record was provided of the amount or type of treatment.

**Diagnostic Measures**

The *Acute stress disorder interview (ASDI)* by Bryant, Harvey, Dang, and Sackville (1998) was chosen as the diagnostic tool for the two psychologists to administer to patients to confirm the diagnosis of ASD (Time 1). The ASDI is a structured clinical interview that contains 19 dichotomously scored items that relate to the DSM-IV criteria. To meet the criteria for ASD, one must experience a stressor and respond with fear or helplessness, have at least 3 of 5 dissociative symptoms, at least one re-experiencing symptom, as well as experiencing marked avoidance, and marked arousal (Bryant, Harvey, Dang, & Sackville, 1998; Bryant & Harvey, 2000).

The *Acute stress disorder scale (ASDS)* by Bryant (1999) is a self-report version of the Acute Stress Disorder Interview (ASDI). The ASDS is a 19-item inventory that is based on the DSM-IV diagnostic criteria for acute stress disorders. The 19 items that comprise the ASDS include five dissociative symptoms, four re-experiencing symptoms, four avoidance symptoms, and six arousal symptoms. Respondents rate the extent to which each symptom is present on a 5-point scale (ranging from 1 = not at all to 5 = very much). The ASDS was used in the current study to test the hypothesis that the ASD symptoms of re-experiencing, arousal, avoidance, and dissociation would significantly contribute to the prediction of PTSD.

The *Clinician-administered PTSD scale (CAPS)* developed by Blake, Weathers, Nagy, Kaloupek, Charney, and Keane (1998) was chosen as the diagnostic tool for the two
How are Social Support, Sociotropy, and Autonomy Related …

psychologists to administer to patients to confirm the diagnosis of PTSD (Time 2). The CAPS is a structured clinical interview designed to assess individuals over the age of 15 for the 17 symptoms of PTSD outlined in the DSM-IV.

The CAPS consists of standardized prompt questions and supplementary follow up (probe) questions that target DSM-IV criteria for PTSD without ‘leading’ the respondent. The items assess core PTSD symptoms and related issues: re-experiencing symptoms, avoidance and numbing symptoms, hyperarousal symptoms, trauma-related guilt, dissociation, subjective distress, functional impairment, onset, duration, symptom severity, symptom improvement, and response validity. The CAPS was chosen because it is regarded by the American National Centre for Post Traumatic Stress Disorder as the gold standard tool for PTSD assessment and diagnosis for both military and civilian trauma survivors.

The Social supports questionnaire – short form (SSQ-6). The SSQ-6 developed by Sarason, Shearin, and Pierce (1987) was used to measure the amount of, and perceived satisfaction with, social support. The SSQ-6 yields scores for the perceived number of social supports (network size) and satisfaction with social support that is available within that network. The questionnaire consists of two parts with six questions in each part. The first part asks respondents to list the number of individuals who provide the type of support indicated in each question (SSQ-N), and the second part is for rating satisfaction with support from the network (SSQ-S) against the same types of support (the number of contacts are identified for each of the (listed) types of support); that is, whether the contacts are dependable, help the patient relax, are accepting of the patient, help the patient feel better, and are consoling. The participants are also asked to rate their satisfaction with the social support available on each of the same ‘types of support’, such as being dependable, on a scale ranging from (6) ‘very satisfied’ to (1) ‘very unsatisfied’.

The SSQ-6 was used to test the hypotheses that patients with a higher quantity of social support and with perceived greater satisfaction with the quality of that social support would be less likely to go on to have a diagnosis of PTSD than patients with fewer people to provide them with support, and who were less satisfied with the quality of social support provided.

The Personal style inventory-revised (PSI-11) by Robins, Ladd, Welkowitz, Blaney, Diaz, and Kutcher (1994) is a 48-item self-report measure used to assess sociotropy, autonomy and their constituent subscales. The PSI-11 consists of two 24-item scales to measure sociotropy and autonomy, which are seen to be enduring personality characteristics presumed to increase vulnerability to psychopathology. The Sociotropy Scale assesses investment in positive interchange with others and consists of three subscales: concern over what others think (7 items), dependency (7 items), and pleasing others (10 items). The 24-item Autonomy scale measures separateness and independence from others and also consists of three subscales: perfectionism/self-criticism (4 items), need for control (8 items), and defensive separation (12 items). Participants were asked to consider the statements about personal characteristics and to indicate whether they agree or disagree, and to what extent. Each item on both scales is converted to a 6-point Likert-type scale, ranging from 1 = strongly disagree to 6 = strongly agree. The PSI-11 identified the participants’ scores on the subscales for sociotropy (concern over what others think, dependency, and pleasing others) and autonomy (perfectionism/self-criticism, need for control, and defensive separation) to test the hypothesis that those patients who have elevated scores on sociotropy and autonomy are more likely to go on to have a diagnosis of PTSD.
Descriptive Information

All participants were asked to report their age, sex, marital status, level of education, and current position or occupation. They were asked if they felt they had physically or emotionally recovered from the traumatic event and were invited to provide any comments. During the initial assessment of all participants, a brief description of the traumatic event was recorded onto the questionnaire by the psychologists to gain an idea of the degree of match in the level of initial trauma in the two groups. This information was gathered in order to answer the question whether those people with ASD who did not go on to have PSTD were exposed to less severe traumas.

Participants and Procedure

Participants were those patients who had experienced a traumatic event and had been referred to the private practices of two Victorian psychologists over a period of 10 months. The psychologists, using the Acute Stress Disorder Interview, assessed patients who presented within four weeks of having suffered a trauma. If they were found to have the diagnosis of ASD, they were invited to participate in the research and, if they agreed, formed Group 1 and completed the Acute Stress Disorder Scale. Participants in Group 1 were reassessed four weeks later. If it was found they had gone on to have the clinical diagnosis of PTSD, according to the diagnostic criteria for posttraumatic stress disorder as set out in the Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition (American Psychiatric Association, 1994), they became members of Group 2. They were asked not to write their name or any identifying marks on the questionnaire to ensure anonymity. Participants received a stamped, addressed envelope in which to return their questionnaire to the researcher.

RESULTS

Demographic Information

A total of 51 participants participated in the study (ASD: n = 20, PTSD: n = 31). There were no significant differences between the groups for gender, marital status, age, education, and occupation. The two groups differed in terms of the rating of the event by the psychologists. Five of the 31 participants who became members of the PTSD group were involved in an incident where they thought they were going to be killed. No one in the ASD group faced this experience. The severity of the incident may therefore have influenced the findings of the study. However, analyses with, and without, the five members involved in the PTSD group yielded similar significant results and all members were kept in the group for analysis purposes.
How are Social Support, Sociotropy, and Autonomy Related …

Hypotheses: Social Support

As hypothesized (Hypothesis 1), the data showed those patients who reported a higher number of people as supporting them on each of the social support variables following their traumatic event/s were less likely to go on to have PTSD than patients with fewer people to provide support, thus confirming the positive relationship between the provision of social support and mental health outcomes. The results also indicated that support network size (Hypothesis 2) is a moderator of PTSD. The means and standard deviations for the scores of the two groups on the social support measures are presented in Table 1. The Table shows (1) the number of people that members of the two groups (PTSD; non-PTSD) felt they could name who were dependable, helped them relax, were accepting, helped them feel better, and consoled them; and (2) the degree of satisfaction experienced by the patients (on a six-point scale) in relation to the quality of the type of support offered (dependability, etc).

Table 1. Means and Standard Deviations for Social Support: 1. for the number of people available who were for example seen as dependable; and 2. for the quality of the social support element (e.g., being dependable)

<table>
<thead>
<tr>
<th></th>
<th>PTSD</th>
<th>NON-PTSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependable</td>
<td>4.67</td>
<td>7.21</td>
</tr>
<tr>
<td>Help to relax</td>
<td>2.81</td>
<td>5.21</td>
</tr>
<tr>
<td>Accepting</td>
<td>3.13</td>
<td>7.38</td>
</tr>
<tr>
<td>Help to feel better</td>
<td>3.19</td>
<td>7.00</td>
</tr>
<tr>
<td>Consoling</td>
<td>2.23</td>
<td>4.46</td>
</tr>
</tbody>
</table>

Subscale score 2

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependable</td>
<td>1.96</td>
<td>1.38</td>
</tr>
<tr>
<td>Help to relax</td>
<td>2.39</td>
<td>1.42</td>
</tr>
<tr>
<td>Accepting</td>
<td>1.97</td>
<td>1.13</td>
</tr>
<tr>
<td>Help to feel better</td>
<td>2.19</td>
<td>1.33</td>
</tr>
<tr>
<td>Consoling</td>
<td>1.87</td>
<td>1.17</td>
</tr>
</tbody>
</table>

A one-way between-groups MANOVA was conducted to compare the two groups (PTSD vs Non-PTSD) on the subscales of the numbers of social support measure (the number of people they can count on to be dependable when they need help, help them feel more relaxed, accept them totally, care about them, help them feel better, and console them). MANOVA was significant, Pillai’s trace = .521, $F(6,48) = 8.72$, $p < .001$, $\eta^2 = .52$. At the univariate level, the PTSD group scored lower than the non-PTSD group on the number of people they could count on for social support on all of the subscales (all $p$’s <.001).
A second one-way between-groups MANOVA was conducted to compare the two groups (PTSD vs Non-PTSD) on the six subscales of the social support satisfaction measure. MANOVA was significant, Pillai’s trace = .255, $F(6,48) = 2.74$, $p < .05$, $\eta^2 = .26$. At the univariate level, the PTSD group scored lower in satisfaction (reverse scored) than the non-PTSD group on all of the subscales (all $p$’s < .01).

Hypotheses: Sociotropy and Autonomy

Hypothesis 3, that individuals high in either of the personality traits, sociotropy or autonomy, would experience higher levels of PTSD following a traumatic event, was supported. Both groups showed high levels of sociotropy and autonomy on their scores on the PSI-11, but the PTSD group scored higher than the non-PTSD group. The means and standard deviations for the two groups on the PSI-11 scores are presented in Table 2.

Table 2. Group Means and Standard Deviations for Sociotropy and Autonomy

<table>
<thead>
<tr>
<th></th>
<th>PTSD</th>
<th>SD</th>
<th>NON-PTSD</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociotropy</td>
<td>104.97</td>
<td>16.51</td>
<td>81.97</td>
<td>12.90</td>
</tr>
<tr>
<td>Autonomy</td>
<td>98.74</td>
<td>18.42</td>
<td>76.80</td>
<td>17.44</td>
</tr>
<tr>
<td>Sociotropy Subscale scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concern for others</td>
<td>30.68</td>
<td>6.62</td>
<td>20.60</td>
<td>3.80</td>
</tr>
<tr>
<td>Pleasing others</td>
<td>46.10</td>
<td>7.49</td>
<td>35.95</td>
<td>7.37</td>
</tr>
<tr>
<td>Dependency</td>
<td>28.19</td>
<td>5.90</td>
<td>25.35</td>
<td>5.10</td>
</tr>
<tr>
<td>Autonomy Subscale scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perfection</td>
<td>18.80</td>
<td>3.78</td>
<td>13.50</td>
<td>3.61</td>
</tr>
<tr>
<td>Need for control</td>
<td>32.38</td>
<td>6.89</td>
<td>25.05</td>
<td>6.10</td>
</tr>
<tr>
<td>Defensive separation</td>
<td>47.55</td>
<td>10.33</td>
<td>38.25</td>
<td>10.74</td>
</tr>
</tbody>
</table>

A one-way between-groups multiple analysis of variance (MANOVA) was conducted to compare the two groups (PTSD vs Non-PTSD) on their total scores for sociotropy and autonomy. Overall, MANOVA showed a significant group difference, Pillai’s trace = .445, $F(2,48) = 19.25$, $p < .001$, $\eta^2 = .45$. At the univariate level, the PTSD group was found to score higher than the non-PTSD group on both autonomy ($F(1,49) = 18.43$, $p < .001$, $\eta^2 = .27$) and sociotropy ($F(1,49) = 27.95$, $p < .001$, $\eta^2 = .36$).

A second one-way between-groups MANOVA was conducted to compare the two groups (PTSD vs Non-PTSD) on the six subscales of Sociotropy and Autonomy. Once again MANOVA was significant, Pillai’s trace = .518, $F(6,44) = 7.88$, $p < .001$, $\eta^2 = .52$. At the
univariate level, the PTSD group scored higher than the non-PTSD group on all of the sub-scales of Autonomy (all p's <.001) and on the Sociotropy scales of Concern for Others ($F(1,49) = 38.12, p < .001, \eta^2 = .44$) and Pleasing Others ($F(1,49) = 22.60, p < .001, \eta^2 = .32$). However, although the difference was in the same direction, the group difference on the Dependency subscale of Sociotropy was non-significant ($F(1,49) = 3.13, p = .08, \eta^2 = .06$).

In summary, based on the present study, those patients with higher levels of sociotropy and autonomy, and with lower numbers of people on whom they can rely for social support are most likely to go on to have a diagnosis of PTSD.

**DISCUSSION**

By the nature of their work, health professionals, including psychologists, are in a position to help their patients and clients from developing chronic symptoms. The concepts of ASD and PTSD are complex: biological and physiological changes occur, and the disorders are detrimental to the normal functioning of the individual. The psychological attributes of ASD and PTSD are important because it is the alteration in an individual’s thoughts, feelings, and behaviours that leads to the need to identify and treat the disorders. While there have been many medical and health science studies of ASD symptoms and their relation to PTSD (including the emphases on the arousal symptoms and the re-experiencing traumatic experiences), there have been few examining the effects of social support networks of the individual and how the individual relates to those networks (e.g., in an exaggerated attention to what others think; or in a perfectionistic autonomous manner).

The first of our hypotheses in this study was supported: that the quantity of social support, the number of supporting people an individual, who had suffered a traumatising event, could list would be related to the likelihood of that individual going on to be diagnosed with PTSD. This finding is consistent with that of many earlier studies (such as those of Affleck et al., 1994; Turner et al., 1998). Some studies had suggested that it was quality of the supportive network, rather than the quantity of support, that made a difference (cf., Eustace et al., 1999). The second of our hypotheses checked whether quality of the network social support was a significant differentiator between those who went on to a diagnosis of PTSD and those who did not. Again, in our study we found support for this hypothesis. That is, it is not only the quantity of support that matters, but also its quality, as both are significant discriminators.

These findings have implications directly for treatment. What can be concluded is the importance of social support (both quantity and quality) to assist recovery following a traumatic event. Having a supportive network clearly in place will assist in recovery. An implication of the findings is that helping patients build their networks will help increase their chances of not being diagnosed in due course with PTSD; that is, it will help in building mental health and wellbeing. The hypothesis for future study that needs to be examined is, in part, how can the treating professional become part of the supportive network and also influence the wider development of the supportive social network of their patient or client. Provision of useful information in an emotionally supportive environment by professionals is valuable, as is helping facilitate the growth of the supportive network of the traumatised individual. Psychologists and helping professionals therefore could guide their patients to
seek out resources that provide them with valued sources of reinforcement in their own lives, such as increased opportunities to develop social relationships. If there is not a source of quality social supports available, it is imperative that the patient be given considerable support by their medical practitioners, psychologists, counsellors, social workers, clergy, and other appropriate health professionals. But helping individuals build, or rebuild, their own networks of contacts could be most beneficial in the longer run.

Hypothesis 3, that personality attributes, particularly excessive sociotropy and autonomy, would predict stress disorder with higher scorers being linked more with PTSD than with ASD, was supported. As indicated earlier, the American study by Kolts, Robinson, and Tracy (2004) had furthered earlier research and suggested that sociotropy and autonomy might predispose individuals towards vulnerability to PTSD following a traumatic event. The current study found very similar results in a setting that involved a study of patients from referral to the treating psychologist for assessment, and treatment over a time period of individuals who had been traumatised.

Our study confirmed the hypotheses that sociotropic and autonomic persons are vulnerable to PTSD. As with the findings on social support, so there are implications for practitioners in the obtained results. Attention should be given to help those with excessive sociotropy (too much reliance on what others think and an overly strong need to please others) by providing strategies that cope more effectively in dealing with the trauma - and similarly with those who display excessive autonomy (or self-reliance, perfectionistic self-standards, and need for personal controls), again striving to provide strategies that are effective in coping with the effects of the trauma. Certainly as suggested by Beck (1983), persons who vary in their sociotropic and autonomous needs may respond better to different therapeutic styles and emphases. Assessment of these characteristics may thus help the therapist to work with the patient in developing specific coping strategies. Persons with high or excessive autonomous needs, for example, might benefit more from techniques to manage their trauma by the therapist challenging their thoughts of self-blame and feelings of failure and worthlessness, and helping them build a sense of resilience in the short term. This can be compared to the treatment of patients who are assessed as having high sociotropic needs and who are likely to become dependent upon their therapist. In treating those patients with high sociotropic needs and with low social supports, it is important for the therapist to encourage a build up of social support and to deal with any feelings of anxiety about relationships. During the therapeutic relationship, the therapist needs to foster the patient’s independence. For autonomous patients, therapy would be concerned with establishing other means of ensuring self-esteem, whereas patients with high sociotropic needs would be more likely to respond to reassurance and being the company of their sources of nurtureance following a traumatic event.

**CONCLUSION**

These results have strong practical implications in terms of consideration of treatment of traumatized patients, indicating the importance of early assessment and also of social support (both quantity and quality). This study has shown the importance of social supports for those who have suffered a traumatic incident. Personality variables, especially sociotropy or
How are Social Support, Sociotropy, and Autonomy Related …

excessive need for approval and reliance on others, also make a difference in ability to handle trauma crises. Giving attention to these aspects when dealing with those who have suffered a traumatic incident may well help the recovery phase and build resilience.

REFERENCES


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PART 3: STRUGGLE, RECOVERY AND RENEWAL
Poem

WARD 2E*

Hospital noises
Hubbub of the busy staff
Background buzz like distant planes taking off
Drones interminably!

Outside it rains on Ipswich Road
Two sinuous snakes of traffic move incessantly
In sensuous proximity
Yet distant and separate from us.

That’s the outside world with its ‘infinite variety’
We are inside; within a buzzing
Metropolis of hospital life.
Inside a busy Brisbane building,
With all its traumas and tribulations.
Signs of sickness in every ward
And nauseating smells.

Tubes and technology weaving a contorted tapestry
In the sterility of the surroundings.
Cylinders of gas and air,
And patients with no hair,
In the cancer ward.

Elizabeth Tindle, © 8 August, 2003

*This poem was written by Elizabeth on one of her visits to the hospital to see her beautiful daughter in the cancer ward. Her daughter, Danielle, had Hodgkins Lymphoma and she has been in remission for 9 years. In 1983, Dr Robert Tindle, Elizabeth’s husband, discovered the marker for the stem cell for all blood cells - lymphocytes, phagocytes, T cells, b cells and others. In every bone marrow transplant, because of Leukaemia or other cancers, the stem cells are harvested and returned to the patient to start growing fresh blood. The patient uses either their own blood cells (autologous) or those of a matched donor. Twenty years later, their daughter received a bone marrow transplant, and at that time was told that her father had made the basic discovery. The baby son, saved on Galapagos Islands, has the same blood as the daughter and could potentially be a "saviour sibling."
Chapter 10

DEPRESSION AMONG HOLOCAUST SURVIVORS: A META-ANALYTIC REVIEW

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¹Queensland University of Technology, Australia
²Consulting Psychologist, Regional Australia

ABSTRACT

Depression, anxiety and paranoia are commonly listed as part of the constellation of psychological symptoms seen in Holocaust survivors; these three symptoms are common reactions to many forms of trauma. In this chapter, our focus will be on the results of a meta-analytic review of the assessment of depression among Holocaust survivors. The review incorporates assessment of potential demographic moderators. It is concluded that Holocaust survivors as a group are more depressed on average than the general population (as inferred from control groups), but that many factors lead to differences in the severity of the depression. The impact of some demographic moderators on depression are clearer than others. For example, results pertaining to gender clearly suggest female survivors are more affected by depression than male survivors; however findings relating to the age and nature of Holocaust experiences are more mixed. It is noted that there are obvious differences in depression levels among survivors and that the factors that lead to this are yet to be clearly delineated.

Keywords: Holocaust survivors, depression, meta-analysis, gender and depression, age and depression

INTRODUCTION

A sizeable amount of research has been conducted into the psychological after-effects of the Nazi Holocaust on its survivors. Now more than 65 years after the end of World War II, it is timely to bring some meaningful synthesis to this literature. Depression, anxiety and paranoia are commonly listed as part of the constellation of psychological symptoms seen in Holocaust survivors. In their seminal work in the trauma field, McCann and Pearlman (1990)
stated that these three symptoms are common reactions to many forms of trauma (p. 40). Another area of functioning mentioned by a great number of theorists/researchers is survivors’ ability to develop trust and intimacy in personal relationships. It has been contended that because of their experiences survivors are impaired in their ability to form secure attachments (Berger, 1988; Brom, Durst, & Aghassy, 2002; Cohen, Dekel, & Solomon, 2002; Dasberg, 2001; Davidson, 1980; Eitinger, 1973; Freyberg, 1980; Grubrich-Simitis, 1981; Kellerman, 1999, 2001; Klein, Beersheba, Zellermayer, & Shanan, 1963; Kren, 1989; Nadler & Ben-Shushan, 1989; Nathan, Eitinger, & Winnik, 1963; Porter, 1981; Rosenbloom, 1988; Ryn, 1990).

Difficulties in developing trust in relationships is a common reaction to any traumatic event among all age groups (Macksoud, Dyregrov, & Raundalen, 1993). McCann and Pearlman (1990) also noted that damaged trust schemas, among people who have been victimised, is a common occurrence (p. 44). Depression, anxiety, paranoia and the above described interpersonal problems were grouped together originally by a number of clinicians and researchers who referred to this constellation of symptoms as the survivor or concentration camp syndrome (Klein et al., 1963; Niederland, 1981, 1988).

When reviewing the literature, many authors have suggested that there is no overall difference between survivors and the general population in the above mentioned symptoms because a large number of non-clinical studies find no significant differences between survivors and control groups. However, a vast majority of these studies do find that survivor groups score higher on measures of mental health, even if it is not significantly higher. In other words, in general, survivors do score higher on measures of mental health than controls; however the difference between clinical survivor samples and controls is larger and reaches significance more frequently than differences between non-clinical survivors and controls (Berger, 1988; Rustin, 1988).

Thus survivors suffer from the symptoms categorised in the ‘survivor syndrome’ to varying degrees of severity (Felsen, 1998). If this is the case, what factors lead to some survivors being more debilitated than others? Conjecture about potential moderating demographic variables abounds; gender, age, country of origin, reason for persecution, nature of Holocaust experiences, loss/survival of family members and post-war settlement location are just some that have been suggested. Curiously, few of these have been adequately assessed empirically; some have been addressed in case studies, but few have been considered often (if at all) in large scale survey studies.

Many of these potential demographic moderators have not been related to specific symptoms, but rather more generally to the severity of post-war adjustment. However, depression has been singled out as being uniquely affected by the age of the survivor during their Holocaust trauma. Specifically, it is argued that the older the survivor was at the time of their persecution, the more likely they are/were to suffer from (or have higher levels of) depression in the post-war period. Bensheim (1960, cited in Hafner, 1968) describes how chronic depression appears to be the main symptom seen in survivors over 30 years of age (Bensheim, 1960, cited in Hafner, 1968). Consistent with Bensheim’s (1960, cited in Hafner, 1968) notion, Hafner (1968) notes that depression appeared to be more common among older survivors than younger survivors, both from an appraisal of his own sample and a review of earlier literature. In their groundbreaking study of child survivors of the Holocaust, Keilson and Sarphtie (1992) found that children aged up to four years during the Holocaust, suffered from what they termed “neurotic character development”, while children aged 11 to 14 when
liberated, commonly experienced anxiety, with older teens more commonly experiencing depression. In terms of the children of survivors, the authors (Beck, Gow, & Liossis, 2005) have previously reported that delay in child rearing was associated with lower levels of depression and anxiety in those children, indicating that time passing may very well play a part in transmission of better psychological health of the descendants of the holocaust survivors. That article explores the possible reasons for this outcome.

Quantitative meta-analytic review of this research has been notably lacking. Only one meta-analysis of research into the children of Holocaust survivors had been published prior to the current research project being undertaken and this was by van Ijzendoorn, Bakermans-Kranenburg and Sagi-Schwartz (2003). However, after the Ph.D work of the first author was completed, in which she conducted a number of meta-analytic reviews of the literature pertaining to Holocaust survivors, in 2010 Barel, Van Ijzendoorn, Sagi-Schwarts and Bakerman-Kranenburg published a meta-analysis on the physical and psychological health of Holocaust survivors and compared them to people who did not experience the holocaust. This particular chapter presents a subset of meta-analytic findings relating to depression among Holocaust survivors.

As already stated, depression has been mentioned as an after-effect of the Holocaust by many researchers and theorists and is listed as one of the symptoms of the syndrome observed in survivors by a number of different clinicians (e.g., Axelrod, Schnipper, & Rau, 1980; Bergmann & Jucovy, 1990; Chodoff, 1997; Dasberg, 2001; Davidson, 1980; Eitinger, 1973; Grubrich-Simitis, 1981; Hafner, 1968; Kellerman, 2001; Krystal, 1995; Last, 1989; Nathan et al., 1963; Niederland, 1988). Porter (1981) argues that the severity of depression is strongly related to the degree of survivor guilt experienced by the survivor. This survivor guilt relates to the loss of loved ones during the Holocaust (Porter, 1981). Depression has also been viewed as a consequence of unresolved mourning for relatives who perished during the Holocaust (Solkoff, 1981; Steinberg, 1989).

In the current study, meta-analyses of articles and dissertations measuring depression among Holocaust survivors are conducted. Control groups in these studies predominantly comprise pre-war immigrants from countries to the survivor samples. Other control group types include post-war immigrants who did not experience persecution and people native to the country in which the study was conducted. The following hypotheses are addressed in this study:

1) Despite differences in the strength of effect noted in individual studies, the overall meta-analytic effect size comparing Holocaust survivors to control groups on depression will be statistically significant. It will be found that, overall, Holocaust survivors have higher levels of depression than control counterparts.

2) Analysis will reveal that demographic variables moderate the strength of the effect between survivors and controls. Meta-analyses comparing survivor demographic subgroups will yield significant results.

**Method**

A literature search was performed in order to identify studies undertaken between 1945 and 2003 and conducted with Holocaust survivors. The search terms “Holocaust Survivors”

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and “Concentration Camp” were entered into the PsycINFO citation database and the results of the two searches cross-referenced. PsycINFO incorporates the Dissertation Abstracts International database so that both published and unpublished sources were searched. Both the ProQuest Psychology Journals database and the Psychology Journals online database were also surveyed, and the results cross-referenced with those resulting from the PsycINFO search. In addition to computer database searches, search results were cross-referenced with the comprehensive Holocaust research bibliography, established by the late Leo Eitinger in 1979 (Rieck, n.d.). The most recent print edition produced by Robert Krell and Marc Sherman (1997) was perused. Miriam Rieck maintains an electronic version of the bibliography which can be found on the internet (http://research-faculty.haifa.ac.il/arch/index.asp) and this resource was used to check post-1997 references added to the bibliography.

An effect size was calculated for each comparison of group means while odds ratios were calculated to compare incidence rates. In each case, 95% confidence intervals were calculated for these. Conceptual replications (in which study participants completed more than one measure of depression) were averaged, so that each sample was not included more than once in the analysis.

**RESULTS**

The results set out the findings in this study by the first author on the nature of the holocaust experiences, loss of family members, gender and age differences, and post-war settlement location factors.

**HOLOCAUST SURVIVORS VERSUS CONTROL GROUPS**

A total of 14 studies, assessing depression levels among Holocaust survivors versus controls, were obtained. Eleven of the fourteen studies were published in journals and the remaining studies were presented in unpublished dissertations. A total of 25 results (incorporating 8 averaged conceptual replications) were included within the 14 studies.

These 25 comparisons of Holocaust survivor and control group depression levels were incorporated in the overall meta-analysis for depression. Holocaust survivor groups were found to have higher levels of depression than their control groups in 24 of the 25 comparisons; 8 of the 24 results reached statistical significance. These results contrasted with those of Shmotkin, Blumstein and Modan’s (2003) study (the 25th study), where the control group had higher depression levels than the survivor group.

The overall meta-analytic effect size for depression levels of Holocaust survivors versus control groups is 0.24 with a 95% confidence interval stretching between 0.17 and 0.31. As the confidence interval does not contain zero, this effect is statistically significant.

The study results included in these calculations are presented in Table 1, and then graphed in Figure 1. The order of the names of the authors in the table match the order in the graph (1-25).
### Table 1. Between-Group Comparisons of Depression in Survivors versus Controls

<table>
<thead>
<tr>
<th>Author/s and Year</th>
<th>Country</th>
<th>Measure/s</th>
<th>HS Sample Source</th>
<th>Control Sample Source</th>
<th>Effect Size g</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shmotkin, Blumstein and Modan (2003)</td>
<td>Israel</td>
<td>Centre for Epidemiologic Studies Depressed Mood Scale</td>
<td>Community</td>
<td>Pre-WWII Immigrants</td>
<td>-0.22</td>
</tr>
<tr>
<td>2. Conn, Clarke and Reekum (2000) (averaged)</td>
<td>Canada</td>
<td>Geriatric Depression Scale and Hamilton Depression Rating Scale</td>
<td>Clinical</td>
<td>Non-survivor patients NOS</td>
<td>0.07</td>
</tr>
<tr>
<td>3. Landau and Litwin (2000)</td>
<td>Israel</td>
<td>Zung Self-Rating Depression Scale</td>
<td>Community (Males)</td>
<td>Pre-WWII Immigrants (Males)</td>
<td>0.08</td>
</tr>
<tr>
<td>4. Shmotkin and Lomranz (1998)</td>
<td>Israel</td>
<td>Affect Balance Scale</td>
<td>Community (Group 2 sample)</td>
<td>Pre-WWII Immigrants</td>
<td>0.09</td>
</tr>
<tr>
<td>5. Shmotkin and Lomranz (1998)</td>
<td>Israel</td>
<td>Affect Balance Scale</td>
<td>Community (Group 2 sample)</td>
<td>Pre-WWII Immigrants</td>
<td>0.09</td>
</tr>
<tr>
<td>6. Leon, Butcher, Kleinman, Goldberg and Almagor (1981)</td>
<td>America</td>
<td>Minnesota Multiphasic Personality Inventory</td>
<td>Community (Females CC)</td>
<td>Pre-WWII Immigrants (Females)</td>
<td>0.13</td>
</tr>
<tr>
<td>7. Lowin (1983)</td>
<td>America</td>
<td>Symptom Checklist - 90</td>
<td>Groups</td>
<td>Non-survivor Jews NOS</td>
<td>0.17</td>
</tr>
<tr>
<td>8. Shmotkin and Lomranz (1998)</td>
<td>Israel</td>
<td>Affect Balance Scale</td>
<td>Community (Group 1 Sample)</td>
<td>Pre-WWII Immigrants</td>
<td>0.21</td>
</tr>
<tr>
<td>9. Shmotkin and Lomranz (1998)</td>
<td>Israel</td>
<td>Affect Balance Scale</td>
<td>Community (Group 1 Sample)</td>
<td>Pre-WWII Immigrants</td>
<td>0.21</td>
</tr>
<tr>
<td>10. Shmotkin, Blumstein and Modan (2003)</td>
<td>Israel</td>
<td>Centre for Epidemiologic Studies Depressed Mood Scale</td>
<td>Community</td>
<td>Pre-WWII Immigrants</td>
<td>0.21</td>
</tr>
<tr>
<td>12. Landau and Litwin (2000)</td>
<td>Israel</td>
<td>Zung Self-Rating Depression Scale</td>
<td>Community (Females)</td>
<td>Pre-WWII Immigrants (Females)</td>
<td>0.37</td>
</tr>
<tr>
<td>13. Leon, Butcher, Kleinman, Goldberg and Almagor (1981)</td>
<td>America</td>
<td>MMPI</td>
<td>Community (Females non-CC)</td>
<td>Pre-WWII Immigrants (Females)</td>
<td>0.38</td>
</tr>
<tr>
<td>14. Leon, Butcher, Kleinman, Goldberg and Almagor (1981)</td>
<td>America</td>
<td>MMPI</td>
<td>Community (Males CC)</td>
<td>Pre-WWII Immigrants (Males)</td>
<td>0.38</td>
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Table 1. (Continued)

<table>
<thead>
<tr>
<th>Author/s and Year</th>
<th>Country</th>
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<th>Control Sample Source</th>
<th>Effect Size g</th>
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<tbody>
<tr>
<td>15</td>
<td>Joffe, Brodaty, Luscombe and Ehrlich (2003) (averaged)</td>
<td>Australia</td>
<td>General Health Questionnaire – Severe Depression and Brief Psychiatric Rating Scale – Withdrawn Depression</td>
<td>Community N = 100</td>
<td>Pre-WWII Immigrants N = 50</td>
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<tr>
<td>16</td>
<td>Yehuda, Kahana, Southwick and Giller Jr (1994)</td>
<td>America</td>
<td>SCL-90</td>
<td>Community (without PTSD) N = 12</td>
<td>Not specified N = 14</td>
</tr>
<tr>
<td>17</td>
<td>Brody (1999) (averaged)</td>
<td>America</td>
<td>Geriatric Depression Scale and Structured Clinical Interview for DSM-IV – Depression</td>
<td>Not specified (non-CC) N = 15</td>
<td>Pre-WWII Immigrants N = 10</td>
</tr>
<tr>
<td>18</td>
<td>Amir and Lev-Wiesel (2003)</td>
<td>Israel</td>
<td>SCL-90</td>
<td>Survivor Groups N = 43</td>
<td>Pre-WWII Immigrants and Israeli Born N = 44</td>
</tr>
<tr>
<td>19</td>
<td>Brody (1999) (averaged)</td>
<td>America</td>
<td>Geriatric Depression Scale and Structured Clinical Interview for DSM-IV – Depression</td>
<td>Not specified (CC) N = 15</td>
<td>Pre-WWII Immigrants N = 10</td>
</tr>
<tr>
<td>20</td>
<td>Finer-Greenberg (1987) (averaged)</td>
<td>America</td>
<td>Cognitive Checklist and SCL-90-R</td>
<td>Groups N = 29</td>
<td>Pre-WWII Immigrants N = 25</td>
</tr>
<tr>
<td>21</td>
<td>Joffe, Brodaty, Luscombe and Ehrlich (2003) (averaged)</td>
<td>Australia</td>
<td>General Health Questionnaire – Severe Depression and Brief Psychiatric Rating Scale – Withdrawn Depression</td>
<td>Community N = 100</td>
<td>Australian or English Born N = 50</td>
</tr>
<tr>
<td>22</td>
<td>Leon, Butcher, Kleinman, Goldberg and Almagor (1981)</td>
<td>America</td>
<td>MMPI</td>
<td>Community (Males non-CC) N = 6</td>
<td>Pre-WWII Immigrants (Males) N = 9</td>
</tr>
<tr>
<td>23</td>
<td>Yaari, Eisenberg, Adler and Birkhan (1999) (averaged)</td>
<td>Israel</td>
<td>SCL-90 and Beck Depression Inventory</td>
<td>Clinical N = 33</td>
<td>Pre-WWII Immigrants N = 33</td>
</tr>
<tr>
<td>24</td>
<td>Nadler and Ben-Shushan (1989)</td>
<td>Israel</td>
<td>Clinical Analysis Questionnaire – B – D2 Suicidal Depression, D4 Anxious Depression and Low Energy Depression</td>
<td>Community N = 34</td>
<td>Pre-WWII Immigrants N = 34</td>
</tr>
</tbody>
</table>

Note 1. HS = Holocaust Survivors; NOS = Not otherwise specified; CC = Concentration Camp
Negative effect sizes mean the control group scored higher than the survivor group while positive effect sizes mean the survivor group scored higher than the control group.

Note 2. Conn, Clarke and Reekum (2000) measured depression levels of their HS sample both before and after extended stays in a clinical facility. Only the baseline measure of depression (that is before treatment) was included in the meta-analysis.
Shmotkin and Lomranz (1998) had two separate groups of Holocaust survivors. Group one was derived by fortune through a lifespan study which happened to include survivors in its sample and group two consisted of survivors purposefully recruited for this and other studies on the Holocaust survivor population.

**Nature of Holocaust Experiences**

Nine studies investigated the nature of the survivor’s Holocaust experience in terms of its possible impact on depression level. The use of a meta-analysis combining the results of these studies was not possible due to the differences in the categories used. The results of these studies will now be summarised.

Heinz Hafner reported on an examination of restitution claim files which incorporated details of the survivors’ war time experiences. The survivors had been assessed (on average) about 15 years after the cessation of hostilities (Hafner, 1968). Holocaust experiences were divided into discrimination (experienced effects of economic and social laws imposed, but emigrated before enduring more extreme experiences), illegal residents (survivors in hiding or using assumed identity), and ghetto and concentration camps. The percentage of survivors in each category, who were diagnosed with chronic depressive reactions, are as follows: discrimination (22%, \( n = 95 \)), illegal residence (31%, \( n = 70 \)), ghetto (19%, \( n = 54 \)) and concentration camp (30%, \( n = 158 \)). Survivors who managed to stay alive by living in hiding, or by living as a gentile, have an equal level of depression diagnoses as those interned in camps.

A study conducted by Joffe and colleagues in Sydney in 2001 made an attempt to group survivors into severity of experience deriving a mild, moderate and severe group (see Joffe,
Brodaty, Luscombe, & Ehrlich, 2003). The mild experience group in the authors’ words included survivors who were “generally removed from high risk situations such as living anonymously in the countryside or with non-Jewish families or living on Aryan papers.” The moderate group were “usually in ghettos or labour camps but not in death camps, had some freedom and were able to forage for food.” The severe group consisted of survivors who were “in concentration or death camps or in inhumane conditions hidden for months and often years, at constant risk of being discovered or killed.” These groupings were subjectively determined by the authors. Perhaps unsurprisingly, ratings of depression increased with the considered severity of their experiences.

Joffe et al. (2003) utilised two measures of depression: the Severe Depression scale of the General Health Questionnaire and the Withdrawn Depression scale of the Brief Psychiatric Rating Scale. The findings on these scales for the three groups were as follows: Severe Depression scale of the General Health Questionnaire – Mild group ($M = 0.7, SD = 1.8, n = 15$), Moderate group ($M = 0.8, SD = 1.5, n = 39$), Severe group ($M = 1.7, SD = 2, n = 46$); Withdrawn Depression scale of the Brief Psychiatric Rating Scale – Mild group ($M = 2, SD = 3.8, n = 15$), Moderate group ($M = 2.9, SD = 3.3, n = 39$), and Severe group ($M = 4.8, SD = 3.8, n = 46$). The moderate group was significantly lower than the severe group on the GHQ scale, and both the mild and moderate groups were significantly lower than the severe group on the BPRS scale.

Lev-Wiesel and Amir’s (2000) sample was made up of Holocaust survivors who were children during the Holocaust. Participants had a mean age of approximately 65 years when the data was collected in 1997/1998 making them about six years old when the war started in 1939 and around 12 years old at the cessation of hostilities in 1945. They divided their sample into four groups: (i) survivors who were in a concentration camp, (ii) who were in hiding, (iii) who were adopted by a Christian family, and (iv) who were cared for in a Christian orphanage or monastery. This study therefore delineated more clearly the various types of experiences categorised by Hafner (1968) as illegal residents. Using the SCL-90, they found that Holocaust survivors who were adopted by a Christian family had the highest level of depression ($M = 1.07, SD = 0.83, n = 52$), followed by those who spent time in a Christian orphanage or monastery ($M = 0.78, SD = 0.64, n = 37$). Surprisingly, survivors who were in hiding ($M = 0.59, SD = 0.37, n = 46$) or in a concentration camp ($M = 0.59, SD = 0.64, n = 35$) had the lowest depression levels of all four groups. Survivors, adopted by Christian families had significantly higher depression levels than these two groups. It is not clear whether this was due to being separated from people of their own faith, and thus from important rituals and dietary habits, or if it was due to being placed in an institution.

Rozen’s (1983) study separated survivors who had spent time in a concentration camp from those who had been in hiding. Participants in this study had a mean age of approximately 60 years making them young adults of around 16 in 1939 and around 22 years old in 1945. In terms of differences in depression levels (as measured by the Beck Depression Inventory) between former concentration camp inmates and those in hiding during the war, it was the latter group that had the higher (though not significantly higher) level of depression ($M = 11.45, SD = 7.40, n = 53$ versus $M = 10.02, SD = 5.68, n = 47$).

Amir and Lev-Wiesel (2001) looked at the difference in depression level within a group of survivors who had been in hiding during the war. They investigated differences between those who could remember their pre-war identity and those who could not. They found that survivors in hiding, who could not remember their pre-war identity, had a higher level of
Depression among Holocaust Survivors

depression \( (M = 1.08, SD = 0.99, n = 23) \) than those who could remember \( (M = 0.72, SD = 0.54, n = 23) \). This result narrowly missed achieving the conventionally accepted statistical significance levels \( t(44) = -1.91, p = 0.062 \). It is possible that this identity issue could well be at the heart of elevated depression scores in groups of survivors who had been in hiding as compared to camp survivors.

Leon et al. (1981) also looked at how different Holocaust experiences affected survivors’ depression levels. They separated their group into male and female survivors and also examined the differences between those who had been interned in a concentration camp and those who had had other Holocaust experiences. For both genders, it was the survivors with non-concentration camp experience who had higher depression than those who were interned in a camp (non-CC females \( M = 62.67, SD = 9.62, n = 9 \); non-CC males \( M = 66.33, SD = 7.31, n = 6 \); CC females \( M = 60.25, SD = 10.85, n = 16 \); CC males \( M = 64.27, SD = 11.69, n = 11 \)).

Robinson et al. (1990) added further to the body of research regarding differences between camp and non-camp Holocaust survivors. In a group of 86 survivors, contacted via the Yad Vashem archive, they found that the incidence of depression among the 49 death camp survivors was notably higher than among the 37 non-camp survivors (55% versus 24%). Odds ratio analysis reveals that this difference is highly significant with depression being 3.82 times more likely among camp survivors with a confidence interval from 1.49 to 9.76.

In a later study, Robinson, Rapaport-Bar-Sever, and Rapaport (1994) again contacted a group of survivors through Yad Vashem. This group were child survivors having been aged less than 13 years when Nazi persecution began for them. This time, they delineated survivors who had been in camps, in labour camps, and in hiding. The sample size is quite small for the labour camp group \( (n = 14) \) and so for the purposes of this exercise they were combined with the camp group \( (n = 29) \). The percentage with depression is higher in the camp group than the hiding group (48% of 43 versus 31% of 44); however this difference does not reach statistical significance with odds ratio analysis.

Nathan, Eitinger and Winnik (1964) sorted through Jerusalem’s Talbieh Psychiatric Hospital’s patient records for the period 1949 to 1959 and found the files of 157 concentration camp survivors and 120 survivors who had spent most of the war in exile in the Soviet Union. The authors cite the incidence of manic depressive disorder, dysphoria and depressive signs among these two groups. The incidence of these three diagnoses was higher in the camp group than the exile group; however the difference was more marked and statistically significant for those with dysphoria and depressive signs. Of the camp group, 13% had been diagnosed with major depressive disorder compared to 10% of the exile group. Dysphoria was diagnosed in 45% of camp survivors compared to 21% of survivors who had been exiled. This equates to an odds ratio of 3.06 with a confidence interval between 1.78 and 5.25. Depressive signs were seen in 49% of the camp group versus 37% of the exile group with an odds ratio of 1.66 and associated confidence interval from 1.02 to 2.70. The reader should bear in mind, however, that the camp group appear to have a slightly older age profile than the exile group, meaning age could be a possible confound in this study. This age factor will be addressed later in the Discussion.

In one of the few studies to examine survivors persecuted for political reasons, Favaro, Rodella, Colombo and Santonastaso (1999) compared current and lifetime incidence of major depressive disorder, as well as current depressed mood, in a group of Italian political
prisoners who had been interned in a camp \((n = 51)\) and a group of former partisans \((n = 47)\). For all diagnoses, the political prisoners from the camps had markedly higher incidence rates than the ex-partisans. The current incidence of major depressive disorder was 33\% for the camp group and 4\% for the ex-partisan group with a corresponding odds ratio of 11.25 (95\% CI = 2.43 to 52.03). Lifetime major depressive disorder diagnoses had been obtained by 45\% of the camp group and 6\% of the ex-partisans, with an even higher odds ratio of 12.05 (95\% CI = 3.31 to 43.90). Finally the largest difference of all was found in the incidence of depressed mood with 55\% of the camp group considered to have this symptom compared to 6\% of the ex-partisans which leads to an odds ratio of 17.86 (95\% CI = 4.90 to 65.06).

Favaro et al. (1999) also provided more information about the duration of these survivors’ depression experiences. They noted that, among the camp survivors who had experienced at least one episode of major depression, 65\% stated they had suffered from depressive symptoms continuously since their liberation from the camp. Six camp survivors and one ex-partisan noted that they had suffered from major depressive disorder at some stage in the past, despite the fact that they did not suffer from any symptoms of depression at the time of the study. Finally, two camp survivors and two ex-partisans stated that while they had endured a depressed mood since liberation, they had only recently met the criteria for diagnosis of a major depressive episode.

The approaches used by the studies, described in this section, to examine the impact of the nature of Holocaust experiences on depression levels differ widely. The differences in categories used make it difficult to directly compare all studies, but it is possible to make some tentative statements. There is some inconsistency in findings relating to camp survivors versus those who spent time in hiding. However, it can be said that depression levels among those in hiding have been found to be somewhat higher than what some would predict. The traditional viewpoint is that camp survivors are the most detrimentally affected. The results here would tend to suggest that a moderate number of survivors who were in hiding are at least as, and in some cases more, depressed than camp survivors. The suggestion that ex-partisans are less depressed than other survivors seems to be borne out here, however further comparisons of these groups are required for a more definite conclusion.

**Loss of Family Members**

Hafner (1968) cross-referenced survivors who were diagnosed with depression with those who had lost members of their immediate family during the war. The incidence of recurrent depression was slightly higher among those who had lost family members than among those who had not. However, contrary to what would be expected, chronic depression was markedly higher among those who had not lost family members. This data was provided only in a chart without exact numbers quoted, however it is possible to state that approximately 18\% of survivors without loss were diagnosed with recurrent depression compared to approximately 24\% who did and approximately 26\% of survivors with loss were diagnosed with chronic depression compared to approximately 38\% of those who did not lose family members. Hafner (1968) theorised that the higher level of chronic depression among survivors who did not lose family members may be due to interaction with family members (who were also traumatised) which effect may be stronger than the impact of losing family members.

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Gender Differences

There were four studies which incorporated five comparisons assessing gender differences in depression among Holocaust survivors. Of these, three found that males had higher depression than females – with two reaching significance (Jurkowitz, 1996; Landau & Litwin, 2000; Rozen, 1983), and the remaining two found that females had the higher depression level (Leon et al., 1981). When these studies are combined in a meta-analysis, the overall effect size comes to -0.39 (with males less depressed than females) with a 95% confidence interval between -0.15 and -0.63, making it statistically significant.

However, comparison of effect sizes summarising the two genders compared to control groups shows that not only are female survivors more depressed than male survivors, but the difference between female survivors and controls is also more marked than for males (0.32 vs. 0.18). Neither of these effect sizes is statistically significant, probably as a function of small sample size.

The incidence of frequent depression among female survivors was more than double that of male survivors in a study conducted by Carmil and Carel (1986) in Israel. Almost half the female survivors noted they were frequently depressed (49.7% of 793) compared to a fifth of the males (23.0% of 1,366). This difference derives a highly significant odds ratio of 3.31 with a 95% confidence interval from 2.74 to 3.99.

Consistent with Carmil and Carel’s (1986) findings just described, Matussek’s (1975) examination of compensation files found a higher incidence of depressive mood in females than males. Matussek (1975) examined 144 compensation files at the Regional Indemnification Office in Munich dated up to 1960. Thirty-eight percent of the 37 females were found to have depressive mood compared to 28% of the 107 males. This difference is not statistically significant using odds ratio analysis.

A meta-analytic odds ratio was calculated for the above studies considering the incidence of depression among male and female Holocaust survivors. The analysis revealed that overall females are 3.31 times more likely to have depression than males. With a 95% confidence interval between 2.74 and 3.99, this result is statistically significant.

A fairly consistent pattern of results is clearly evident for gender. It is apparent that female Holocaust survivors have higher mean levels of depression than males and that they also have a higher incidence of depression diagnosis than males.

Differences due to Age when Persecuted

Results of Hafner’s (1968) study suggested that depression becomes increasingly common among older survivors than younger survivors. The diagnosis of chronic depression was given to 9% of the 37 survivors aged 13 at the start of their persecution, 24% of the 104 aged 14 to 21, 26% of the 98 aged 22 to 30, 40% of the 92 aged 31 to 50 and 50% of the 4% aged 51 and over. The relationship between age and depression becomes more apparent when the incidence of the symptom of depression (as opposed to clinical diagnosis) is examined over narrower age ranges. The readers should note that the following percentages are approximations from a graph which does not cite specific data. The incidence levels presented in the chart are as follows: 15% among survivors aged 0-8 at the beginning of their persecution, 26% among those aged 9-13, 31% among those aged 14-16, 35% among
those aged 17-21, 40% among those aged 22-30, 39% among those aged 31-50 and 50% among those aged over 50. A fairly clear increase in depression with age is evident from this study. Thus in future studies, we need to ascertain to what extent the increase is due to the child being older at the time of the persecution, or whether it is the aging process itself that leads to the increase, or whether it is a mixture of both factors.

Matussek (1975) provided a much broader breakdown of age groups in his summation of 144 compensation files. He found very similar incidence levels of depressive mood in his group of 63 survivors, who were aged under 30 at the start of the incarceration in a camp, compared to the 81 survivors who were over 30 at the time (32% versus 30%). This difference is not large enough to reach statistical significance with odds ratio analysis.

Bower (1994) used similarly broad age categories in another assessment of compensation files. He compared the incidence rates of depression among survivors who were 16 or younger during the Holocaust, versus survivors who were aged 20 years or over. There was a higher incidence of depression among the older group than the younger group (76%, $n = 100$ versus 66%, $n = 100$) again suggesting a possible positive relationship with age. The odds ratio for this study was not statistically significant.

Sigal and Weinfeld (2001) had Canadian children of Holocaust survivors rate their parents on a number of psychopathological measures including depression. These children were separated into four groups based on their parents’ age at the cessation of World War II. These groups consisted of children of survivors aged 2-9 years, 10-13 years, 14-18 years or 19-24 years at the end of the war. Holocaust survivors who were older during the war were rated by their children as more depressed than survivors who were younger during the war. Survivors aged 2-9 years during the war were rated as the least depressed ($M = 2.35, SD = 1.87, n = 47$), followed by those aged 10-13 years ($M = 2.63, SD = 2.29, n = 54$) with the 14-18 and 19-24 year olds being almost equivalent ($M = 3.64, SD = 2.53, n = 114$ and $M = 3.63, SD = 2.66, n = 137$ respectively). The two older age groups were rated significantly higher than the two younger age groups by their children. Children of survivors in the two older age groups also rated their parents as significantly more depressed than did their control counterpart children. There were no significant differences in the children’s ratings of younger parents. These findings provide more support for the idea that survivors are more affected, the older they were during their traumatic experiences in World War II.

The impact of age during the Holocaust on depression levels is also assessable via a meta-regression. Of the 25 comparisons included in the meta-analysis of depression levels in survivors versus controls, mean age was provided for 21 comparisons from nine studies (Amir & Lev-Wiesel, 2003; Brody, 1999; Conn, Clarke, & Reekum, 2000; Finer-Greenberg, 1987; Joffe et al., 2003; Landau & Litwin, 2000; Shmotkin et al., 2003; Shmotkin & Lomranz, 1998; Yaari, Eisenberg, Adler, & Birkhan, 1999). The mean age of each study group in 1945 was calculated by subtracting the mean age from the study year to determine the mean birth year and then subtracting this from 1945. An average effect size was determined for each study where multiple measure of depression were used, so that each sample group was only counted once in the analysis. The results of the meta-regression revealed a weighted correlation of -0.606 between survivors’ ages in 1945 and effect size. This correlation is significant at $p < 0.001$. It must be borne in mind, however, that 5 of the 14 studies did not provide mean age and so could not be included in this analysis (Kahana, Harel, & Kahana, 1989; Leon et al., 1981; Lowin, 1983; Nadler & Ben-Shushan, 1989; Yehuda,
Depression among Holocaust Survivors

Kahana, Southwick, & Giller Jr., 1994). This result would tend to suggest a decrease in depression with age.

Another meta-regression was conducted to examine the effects of time lapse since 1945. This was designed to assess whether there is any support for the notion that depression starts to increase as survivors age. All studies could be included in this analysis. Again, an average effect size was derived for studies utilising multiple measures of depression. There is a weak, but significant, relationship between time lapse since 1945 and depression levels. A correlation co-efficient of 0.141, significant at \( p < 0.001 \) was derived.

The two studies conducted by Robinson with various colleagues also provide data pertinent to this issue by providing incidence of depression as at the time of study and also retrospectively immediately after the war (Robinson et al., 1990; Robinson et al., 1994). In the earlier study, 55% of the 86 survivors suffered from depression immediately after liberation compared to 42% in 1989 when the data was collected. In the later study conducted with child survivors (aged less than 13 when persecution began), the incidence was higher when the data was collected than after the war (31% versus 42% of 103 survivors). Interestingly, Robinson et al. (1990) found that 38% had suffered with depression for the entire time since liberation, 17% encountered it only after the war but not currently, although 4% said they only suffer from depression currently and did not suffer from it after the war.

While a number of incidence study results were consistent with the notion that survivors who were older at the time of the Holocaust are more depressed than younger counterparts, meta-regression analysis resulted in a contradictory finding. Data pertaining to the increase of depression rates/levels with age was more consistent with meta-regression and incidence studies apparently in agreement. Further analysis of the impact of a survivor’s age during the Holocaust is necessary for clarification.

Post-War Settlement Location

Sub-group meta-analysis provides an impression of the differential effect between survivors who settled in Israel versus those who settled in America, Canada, or Australia which might be viewed as counterintuitive. A much weaker effect is identified when assessing Israeli participants (0.19) compared to American/Canadian/Australian participants versus control groups (0.31). The findings of Nadler and Ben-Shushan (1989) suggest that the depression levels of survivors in Israel depend greatly on the nature of the community in which they live. For example, they found that survivors living within a kibbutz (a very close knit community group) had significantly lower levels of anxious and low energy depression than survivors living in the city. No specific statistics can be quoted as they were not presented by the authors. Barel et al. (2010) reported that of the studies they analysed that living in Israel, rather than elsewhere, can serve as a protective factor; the survivors there had greater psychological well-being. It is possible that there was a higher purpose and greater meaning in living in a place where the status of being a Jew was validated.

Hafner (1968) checked for the impact of emigration on depression incidence in his examination of compensation claim files. He divided the survivors into those who remained in Europe, those who emigrated once and those who emigrated more than once. However, he did not provide details of where the immigrants moved to. Upon examination of a chart presented in his article, Hafner (1968) found that survivors who immigrated more than once

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had the lowest level of chronic depression (approximately 27%, \( n = 74 \), compared to roughly 32%, \( n = 45 \) for non-emigrants and 40%, \( n = 198 \) for those who emigrated once) and the highest level of recurrent depression (approximately 27%, compared to roughly 15% of non-emigrants and 17% of those emigrating only once). This seemingly contradictory finding is a little confusing; however it will be shown through an examination of depression levels how well survivors integrated into their new homelands.

Predictably both forms of depression are more common among those survivors considered to have “bad social integration” compared to those considered to have “good social integration”. Among the good social integration group (\( n = 102 \)), approximately 18% were found to suffer from recurrent depression and roughly 32% from chronic depression. Of those considered to have bad social integration (\( n = 84 \)), roughly 23% were diagnosed with recurrent depression and roughly 49% were diagnosed with chronic depression.

The findings in relation to post-war settlement location are contrary to what some may predict with survivors in Israel demonstrating a smaller difference from controls than counterparts in continents further afield. However, it would seem that the additional variable of integration into the adopted country’s community could be a mitigating factor here (Van IJzendoorn et al. (2003), as well as the special status of Israel for survivors (Barel et al., 2010).

**DISCUSSION**

The first hypothesis suggested that Holocaust survivors would have higher levels of depression than control groups, even in instances where the differences between the groups were not significant. It was hypothesised that where survivor groups and control groups differ, it would be more likely that survivor groups would score higher than controls, rather than vice versa. This would translate to significant overall meta-analytic effects with significantly higher levels of depression in all three groups. This hypothesis was largely supported.

Of the 25 comparisons between Holocaust survivors and controls, 24 reported survivors as having higher depression than controls. However, only 8 of the 24 reached statistical significance. The remaining 16 results would be dismissed as presenting no difference between survivors and control groups, despite the fact that they are still all in the same direction. This finding supports the hypothesis that survivors are on the whole more depressed than controls/the general population, but there is great variation in the degree of this difference.

A possible explanation for the large number of non-significant results is the small sample sizes in a large number of studies. It may be that it is not that survivors groups are not more depressed, but that inadequate sample sizes, and therefore less statistical power, has masked the effect; that is, a larger difference between groups is required for a significant result with smaller sample sizes. Many studies found survivor groups scored higher than controls, but the difference between the groups was not large enough for statistical significance, given their small study samples.

The second hypothesis was that significant differences in depression levels/incidences would be found when comparing demographic subgroups of survivors. While results in
relation to some demographic variables remain ambiguous, it is possible to make some assertions. The results for gender are mostly clear cut, with substantial evidence suggesting that female survivors have higher levels of depression and are more likely to be diagnosed with depression. As the incidence of depression is sometimes higher in females than males in several countries, perhaps this may have been expected; additionally, the possibility that for male survivors, who were mentally occupied at work for the greater part of the day in their new country, their time to ruminate was far less than the women who may have spent all day at home with much less structured mental occupation and occupational status.

Findings relating to age during the Holocaust are less clear with incidence studies suggesting higher rates of depression among older survivors, while meta-regression suggests higher mean levels of depression among those who were younger during the Holocaust. However, results suggesting depression increases with age are more consistent. There is also a trend in many countries for people over the age of 60 and 65, who have suffered from trauma, to have worse health than the general population (Krause, Shaw, & Cairney, 2004); and thus comparing these holocaust groups to normative data for same age groups would be helpful.

Results relating to post-war settlement location are somewhat counter-intuitive with many suggesting that Israel would be a far more detrimental location than “far away” continents such as the Americas and Australia, but the current results suggest the opposite. Researchers who studied the impact of integration within the adopted homeland suggest this issue needs to be examined further at a deeper level, rather than conducting only basic comparisons between countries.

Aspects of the survivor’s Holocaust experience can also impact on the severity of depression symptoms. Although many have suggested that survivors who spent time in camps were the most affected and would have the highest depression levels among the survivor group, evidence has emerged which suggests that other experiences may be equally and sometimes more traumatising (such as being in hiding). One explanation for why a survivor in hiding may have higher symptom levels than those in camps relates to the uncertainty of their situation and ever-present danger of being discovered, which was not as important an issue for those in a camp whose experiences were qualitatively different. For example, apart from having more certainty about their position, camp survivors also had the camaraderie of their fellow camp inmates, while those in hiding were often on their own and would have experienced extreme loneliness and isolation.

Such findings clearly point to the need for empirical investigation into the impact of these factors, rather than working purely on assumptions about what will be the most traumatising constellation of conditions.

**CONCLUSION**

It is clear that while there is a great disparity on the severity of depression symptoms of survivors, in general they suffer from depression more frequently and more severely than the general population. It is also clear that there is a large degree of individual differences among Holocaust survivors which can be explained via simple demographic variables such as their age and gender and details/particulars of their experiences and their post-trauma environment.
Certain aspects of the survivor narrative may be more damaging than others. While this chapter has contributed in some way in demystifying the impact of these potential moderating variables, it is clear that more research is needed to more clearly delineate their respective impacts.

The population of Holocaust survivors is rapidly diminishing and soon there will be no survivors left. It is important that we fully understand not only the impact of this horrific event, but also the factors that lead to differential post-traumatic adjustment. The identification of demographic subgroups within the Holocaust survivor population may inform research and clinical practice focussed on identifying particularly vulnerable or at risk groups and/or risk factors of other traumas. While the Jewish Holocaust is unique on a number of levels, comparisons can be made to recent events in Cambodia, Rwanda and the former Yugoslavian republics. What we learn from the Jewish Holocaust survivors should be applicable to survivors of these other holocausts and may aid in the alleviation of more long term mental health problems resulting from the traumas.

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ABSTRACT

Regardless of the situation or sequelae, the most common human response to traumatic events is sleep disturbance and in, and of itself, this is considered normal. However, in the case of severe or sustained traumatic exposure such as that often experienced by defence personnel, sleep disturbances can become quite distressing and disabling. While this is not always associated with posttraumatic stress disorder or even acute stress disorder, sleep disturbances and nightmares are prevalent in many combat veterans. Many factors associated with deployment can precipitate sleep loss even before, or without, exposure to combat. In this chapter, the types and characteristics of the most common sleep disturbances in combat veterans will be outlined and described. The nature of the relationship between sleep loss, nightmares and PTSD will also be outlined and discussed. Factors involved in the cause and perpetuation of sleep disturbances in military personnel and combat veterans will also be examined. In addition, the most efficacious pharmacological and psychological interventions for the treatment of sleep loss and nightmares in this population will be highlighted.

Keywords: sleep; sleep disturbances; nightmares; combat veterans

INTRODUCTION

It is well known that sleep disturbance, including nightmares, is a common, usual and normal response to traumatic occurrences (Pillar, Malhotra & Lavie, 2000), including experiences of natural disasters (Kato, Asukai, Miyake, Minaakawa & Nishiyama, 1996), aggressive violence (Ohayon & Shapiro, 2000), traffic accidents (Klein, Koren, Arnon &
Sandra Sacre

Lavie, 2002), rape (Muller, 1996), the Holocaust (Kuch & Cox, 1992), and prisoner of war camps (Goldstein, van Kammen, Shelly, Miller & van Kammen, 1987). Sleep loss, such as that which results from trauma, can lead to significant fatigue, distress, depression, increased risk of injuries and accidents, and reduced ability to function effectively during the daytime (Ford & Kamerow, 1989).

While most people who experience sleep disturbances as a result of trauma find that their sleep loss is temporary (Lavie, 2001), some develop longer-term difficulties with insomnia and/or nightmares, most often associated with the diagnosis of posttraumatic stress disorder (PTSD) (Harvey, Jones & Schmidt, 2003). Research has shown that PTSD is not entirely uncommon in the general population (with prevalence rates of 5% - 10%) (Kessler, Sonnega, Bromet, Hughes & Nelson, 1996), but that it is even greater in post-conflict settings (with prevalence rates of 16% - 37%) (De Jong et al., 2001). The prevalence rates of PTSD amongst war veterans have been shown to be between 9% and 36%, with those who have endured exposure to high levels of threat, atrocities or abusive violence demonstrating the highest prevalence (King, King, Gudanowski & Vreven, 1995; Schlenger et al., 1992).

Combat veterans have been found to have a much higher incidence of sleep disturbances, nightmares and other symptoms of post-traumatic stress disorder than veterans without combat experience (Horowitz, Wilner & Kaltreider, 1980; Van der Kolk, Burr, Blitz & Hartmann, 1981). In addition, combat veterans are much more likely than members of the general community to suffer from a range of other sleep disorders such as insomnia, obstructive sleep apnoea, narcolepsy and restless legs syndrome (Halper, 2008; Mustafa, Erokwu, Ebose & Strohl, 2005; Ocasio-Tascón, Alicea-Colón, Torres-Palacios & Rodríguez-Cintrón, 2006).

The Relationship between Sleep and PTSD

That there is a clear relationship between sleep disturbances and posttraumatic stress disorder (PTSD) is well established in the literature (Harvey, et al., 2003; Kilpatrick, et al., 1994; Mellman, 1997; Mellman & Hipolito, 2006; Neylan, et al., 1998; North, et al., 1999; Ohyayon & Shapiro, 2000; Pillar et al., 2000; Schuster, et al., 2001; Zayfert & DeViva, 2004). Research has also shown that a range of sleep disturbances including insomnia and recurrent nightmares frequently occur in combat veterans with PTSD (Goldstein, et al., 1987; Neylan et al., 1998; Phelps, Forbes & Creamer, 2007). Nightmares are thought to be a manifestation of one of the hallmark features of PTSD, that of intrusive recollection of the traumatic event (Keane, Wolfe & Taylor, 1987). Insomnia, decreased deep sleep and increased spontaneous awakenings are manifestations of yet another hallmark feature of PTSD, that of hyper-arousal, so it is not uncommon for both nightmares and insomnia to be present in the same individual with PTSD (Kramer & Kinney, 2003).

While studies of sleep reports of PTSD sufferers have consistently shown significant sleep disruption and distress, studies based on objective measures have been mixed (Harvey, Jones & Schmidt, 2003). This has created some difficulties in drawing any firm conclusions about the role of sleep disturbances in PTSD (Woodward, 1995). Polysomnographic studies by Hurwitz, Mahowald, Kuskowski and Engdahl (1998) and Engdahl et al. (2000) failed to find any objective, clinically significant difference between the sleep of war veterans with and without PTSD, although their subjective reports did differ. The findings of these studies

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suggest that PTSD may be associated with a type of sleep state misperception or “subjective insomnia”, a phenomenon which also often occurs in patients with primary insomnia.

**Incidence of Sleep Disturbance in Combat Veterans**

A recent study found that as many as 74% of military personnel report poor sleep quality during deployment (Peterson, Goodie, Satterfield & Brim, 2008) and there is some evidence that a large number of veterans continue to experience sleep difficulties during the transition back to civilian life and beyond (Lewis, Creamer & Failla, 2009). A U.S. study (Mustafa, et al., 2005) which examined an outpatient veteran population for sleep problems and risk for sleep disorders, found that nearly 42% of participants met high-risk criteria for insomnia, with 24% reporting the use of sleeping pills or bedtime alcohol. A more recent study targeting Hispanic veterans (Ocasio-Tascón, et al., 2006) found that 53% met high-risk criteria for insomnia. While the relationship between post-traumatic stress disorder and sleep disturbance is well documented (e.g., Inman, Silver & Doghramji, 1990; Kramer & Kinney, 2003; Mellman, Kulick-Bell, Ashlock & Nolan, 1995; Neylan et al., 1998), the incidence of sleep disturbances in the general population of recently returned veterans is less well known.

An Australian pilot study of 152 Vietnam war veterans (Lewis et al., 2009) found that all of those with PTSD and 90% of those without PTSD reported clinically significant sleep disturbance, highlighting the pervasiveness of sleep loss in the veteran population. The authors of this study suggested that a range of factors associated with deployment and military experiences may lead to disrupted sleep patterns in the majority of veterans, regardless of whether they have PTSD. Indeed there are a number of deployment factors (e.g., movement across time zones, night-time operations, and irregular sleep patterns), combat-related factors (e.g., trauma exposure, sentry duty, sustained vigilance, and physiological and psychological arousal associated with combat) and post-deployment factors (e.g., sleep avoidance, self-medication, and co-morbid physical and mental health problems) which are highly likely to contribute to the development of a chronic sleep disturbance, or even to an exacerbation of an established sleep disorder.

**Causes of Sleep Disturbance in Combat Veterans**

There is some evidence that problematic sleep may develop in veterans before they are exposed to combat, through disrupted sleep-wake patterns, shift work, stress, vigilance, noise, fear, anticipation and other factors relating to the deployed environment (Peterson, et al., 2008). Some authors (e.g., Halper, 2008) have also suggested that sleep loss prior to, or during, stressful events may prevent normal processing of traumatic memories, increasing a person’s vulnerability to PTSD. Traumatic exposure and sustained waking arousal during combat experiences often result in acute stress and in many cases, disturbed sleep (Pallmeyer, Blanchard & Kolb, 1986). In addition, military personnel may develop an impaired ability to sustain states of reduced arousal, due to repeated sleep disruption, which in turn may lead to a conditioned feature of PTSD (Mellman et al., 1995). There is strong evidence that both the central and autonomic nervous systems may be chronically altered in individuals with PTSD, leading to hyper-arousal of the sympathetic nervous system, increased sensitivity of some

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reflex responses and sleep disturbances (Friedman, Charney & Deutch, 1995). Further, Mellman and colleagues have suggested that the intrusion of aroused states and behaviours into sleep may be a central cause of PTSD-related sleep disturbance (Mellman et al., 1995).

There are few studies that have examined the sleep of traumatised individuals directly after the traumatic event (Vandekerckhove & Cluydts, 2010). However, one study that investigated hospitalised military personnel with acute posttraumatic stress found that these individuals tended to have fragmented sleep of short duration which was characterised by elevated motoric reactivity and only short, infrequent periods of REM sleep (Germain, Buysse & Nofzinger, 2007). Another study found that sleep disturbance had significant prognostic power, with 72% of individuals suffering sleep disturbance one month post-trauma going on to develop PTSD (Harvey & Bryant, 1998). Still another study found that sleep complaints were not predictive of PTSD at one week post-trauma, but were significantly predictive at one month post-trauma (Koren, Arnon, Lavie & Klein, 2002). Together the findings of these studies are consistent with the hypothesis that while disturbed sleep, particularly REM sleep, is fairly typical immediately post-trauma, sustained sleep disturbance is more likely to be associated with the development of PTSD. They even suggest the possibility that post-trauma sleep disturbance itself may increase the likelihood of PTSD developing.

**Perpetuation of Sleep Disturbance in Combat Veterans**

The literature on insomnia maintenance has shown that once poor sleep patterns are established, it is not uncommon for sufferers to engage in compensatory behaviours which inadvertently perpetuate the problem. For example, taking longer to get to sleep at night (increased sleep onset latency) has been linked to increased cognitive activity pre-sleep - in particular, rumination about not getting enough sleep, and the effects of this sleep loss on daytime functioning (Harvey, 2000; Lichstein & Rosenthal, 1980; Semler & Harvey, 2004; Wicklow & Espie, 2000). Harvey (2002) contends that these negative cognitions (which commonly extend into other parts of the night and day) are exacerbated by dysfunctional beliefs about sleep (such as “I must have eight hours sleep to function in the day”) and maladaptive safety behaviours undertaken to avoid further sleep loss. These in turn prevent disconfirmation of false beliefs. In combat zones, defence personnel may additionally have reduced ability to control or predict the environmental conditions preventing sleep. According to the Cognitive Model of Insomnia Maintenance (CMIM; Harvey, 2002) such cognitions (both at night and during the day) further activate autonomic arousal, inciting an anxious state. As a result of this state, selective attention is given to cues that indicate sleep is being, or will be, impeded (Ree, Pollitt, & Harvey, 2006). In a combat zone, the consequences of sleep loss may even be perceived as potentially life-threatening by the individual. This leads to an exaggerated and unhelpful view of the individual’s sleep deficit, as well as of the results of the apparent sleep loss (Harvey, 2002). The selective attention and heightened perceptions also have the reciprocal effect of increasing the individual’s negative cognitions about sleep and daily functioning. Negative cognitions also lead to the undertaking of sleep-related safety behaviours (those behaviours undertaken to circumvent the feared situation of not sleeping, such as daytime napping, alcohol consumption, spending excess time in bed when awake), and these in turn prevent the individual from disproving any false or
exaggerated beliefs about sleep (Harvey, 2002; Perlis, Giles, Mendelson, Bootzin, & Wyatt, 1997). The activation of this cycle to and from negative cognitions can result in more actual sleep loss and reduced daytime functioning (Semler & Harvey, 2005) through increased anxiety and physiological arousal.

**DREAMING AND THE COGNITIVE PROCESSING OF TRAUMATIC EXPERIENCES**

Natural studies of normal populations of people who have experienced stressful or traumatic events, such as major surgery (Breger, Hunter & Lane, 1971), personal trauma and assault (Germain, et al., 2004; Kroth, et al., 2004), war trauma (Mellman, 2000) or natural disasters (Siegel, 1996) as well as natural studies of clinical populations with similar concerns, have found some common dreaming patterns, such as the tendency for traumatised individuals to incorporate traumatic life events in their dreams, often recurrently, and for this incorporation to increase waking distress (Zadra, O’Brien, & Dondery, 1997-1998). These nightmares often remind the dreamer of the current stressor or trauma and revive the associated negative affect and distress. What these studies seem to point to is the tendency for people who have been traumatised to experience dream content which reflects not only their traumatic experiences, but also their emotions in relation to those experiences. They seem to also show that, like their waking emotions, their dream emotions and congruent content are often reactive rather than adaptive.

Kramer, Schoen and Kinney’s (1984) research with Vietnam veterans determined an association between high recall of dreams of stressful events and poor subsequent adaptation to the events. They found that the dreams of these veterans tended to be repetitive and disturbing, and sometimes returned when they were faced with new stressors. They suggested that, rather than serving an adaptive function, the dreams of these veterans served as an expression of their emotional preoccupations at any given time. Germain and Nielsen (2003) found that posttraumatic nightmare sufferers exhibited a different pattern of sleep disturbances to idiopathic nightmare sufferers, suggesting that individuals with posttraumatic stress are more aroused as a result of nightmare psychopathology. Domhoff (1996) suggests that the phenomenon of post-traumatic dreams reflects a preoccupation with unresolved problems.

Another common pattern was a change over time from dream representations of actual traumatic events to more symbolic representations of evolving emotions in relation to the events, with a tendency for such nightmares to remind the dreamer of the trauma and revive the associated negative affect and distress (Hartmann, 1998). Dreams were found to be somewhat diagnostic in that they often reflected progress over time, in terms of the extent of the individual’s focus on the trauma.

Hartmann (1996) has proposed that repetitive traumatic nightmares are not even dreams at all, but memory intrusions into normal sleep and dreaming like the “flashbacks” of the waking state. He argued that while ordinarily dreams following trauma reflect a gradual integration of the traumatic event with other personal themes, PTSD nightmares tend to remain “encapsulated” and fixed in content. The second explanation, offered by Lansky (1990), is that these repetitive nightmares represent a compulsion to repeat by the ego, which,
initially overwhelmed, attempts to prepare itself to replay, and eventually to master overwhelming traumatic experience.

Another explanation for repetitive dreams is that they simply mirror waking preoccupation, and dissipate when that preoccupation diminishes, or in the case of post-traumatic nightmares, become entrenched as dysfunctional, cognitive dream patterns reflecting ingrained, compulsive waking thought patterns. Indeed, vulnerable individuals who are inclined to experience waking life as particularly intense and absorbing, may be at higher risk of developing repetitive dream patterns (Belicki & Cuddy, 1991; Najam & Malik, 2003). With a greater tendency to daydream (Tonay, 1993) and experience sleep disturbances, repetitive dreams and nightmares (Schredl, Ciric, Gotz & Wittmann, 2003), the wellbeing of these individuals may become subject to a feedback loop whereby their waking and dreaming cognitions serve to perpetuate one another.

What all of these studies tend to show is that dreams reflect the currently predominating emotional concerns of the dreamer, or group of dreamers. As such, they hint at the possibility of dreams being somehow related to a cognitive mechanism involved in emotional processing.

**THE NEUROPHYSIOLOGY OF REM SLEEP AND TRAUMA**

Relative to other conscious states, the regional activation of specific brain areas during REM sleep suggests that motivational and emotional learning may be being processed during this stage of sleep (Hobson, Stickgold, & Pace-Schott, 1998; Stickgold, Hobson, Fosse & Fosse, 2001). This may account for the psychological salience and intense emotionality of REM sleep dreams (Hobson, 1988; Hobson et al., 1998). The findings of neuroimaging studies, indicating preferential activation of limbic and paralimbic forebrain structures during REM sleep, are consistent with emotional learning (e.g., Maquet et al., 1996; Nofzinger, Mintun, Wiseman, Kupfer, & Moore, 1997), and imply that emotion may be fundamental to the construction of dream plots, rather than a product of them (Hobson et al., 2000). Processing of memories of socially salient emotional experiences is believed by several theorists to be an important function of REM sleep (e.g., Koulack, 1993; Kramer, 1993; Perlis & Nielsen, 1993).

There is now some evidence that REM sleep may serve an important function in complex and procedural learning (Smith & Rose, 1996), insights into problem-solving (Luo & Niki, 2003; Stickgold, et al., 2001; Stickgold & Walker, 2004; Wagner, Gais, Haider, Verleger & Born, 2004), and the processing of emotionally influenced memories (Maquet et al., 1996; Nofzinger, et al., 2004; Nofzinger, et al., 1997; Wagner, Gais & Born, 2001). In his detailed review of the possible links between REM sleep physiology and the actions of eye movement desensitisation and reprocessing therapy (EMDR), Stickgold (2002) has provided a model whereby REM sleep is optimally configured to enable a cortical integration of traumatic memories into semantic networks, potentially reducing the strength of traumatic, hippocampally mediated memories.
Nightmares and Conditioned Arousal in Response to REM Sleep

Individuals with combat-related PTSD are more likely to experience anxiety, agitation, body movement and threatening dreams in relation to their sleep disturbances than individuals with primary insomnia (Inman, et al., 1990). Repeated nightmare experiences often result in increased awakenings accompanied by startle or panic symptoms. Laboratory studies have found that combat veterans with PTSD tend to have these symptomatic awakenings during, or soon after, periods of REM sleep, regardless of whether they awake with dream recall (Mellman et al., 1995). This suggests that the REM sleep state itself may sometimes induce conditioned arousal states in these individuals. Mellman and colleagues (1995) have suggested that this psychophysiological response to REM activity may develop through conditioning by nightmares during a more acute stage in the illness. Increased interruption of REM sleep may interfere with an individual’s ability to process emotional memories and thus, somehow defer traumatic memory processing. While in the short term, this may reduce PTSD symptoms, it may in the longer term, prolong the illness. On the other hand, avoidance of traumatic memory processing may be adaptive and may give individuals with PTSD respite from intrusive and threatening material. Indeed, an interesting study by Kaminer and Lavie (1991) found that well-adjusted Holocaust survivors had consistently lower dream recall than more poorly adjusted survivors when awakened from REM sleep.

Effective Therapies for Sleep Disturbances and Nightmares in Combat Veterans

The available evidence suggests that assertive attention to preventing and minimising sleep loss in veterans, particularly those who have recently returned from active duty, is likely to be effective and result in less dependence on sedative medication and alcohol, and lower risk of injuries, accidents, daytime fatigue, mood disturbances and PTSD, whilst also improving quality of life, ability to cope, daytime functioning, productivity and general health (Lewis et al., 2009). For those who have already developed sleep disturbances, nightmares or PTSD, the existing evidence shows that a combination of medication and psychotherapy is usually the most helpful (Halper, 2008).

Although a Cochrane review of pharmacological interventions for PTSD reported that SSRI treatment could be effective (Stein, Ipser & Seedat, 2006), the effect size in almost all clinical trials of SSRIs in PTSD has been found to be too low to be considered clinically effective (National Collaborating Centre for Mental Health, 2005). Furthermore, SSRIs are known to be relatively ineffective in relation to sleep disturbances and commonly even exacerbate insomnia (Halper, 2008). The most effective pharmacotherapy for the treatment of post-traumatic nightmares has been found to be Prazosin, an alpha-1 adrenergic antagonist that is primarily prescribed for the treatment of hypertension and benign prostatic hyperplasia (Calohan, Peterson, Peskind & Raskind, 2010; Miller, 2008; Raskind, et al., 2003; Raskind, et al., 2007; Taylor, et al., 2008). However, it has been noted that nightmares were found to return when Prazosin was discontinued (Spoormaker, et al., 2006).

Cognitive behavioural therapies (CBT) including prolonged exposure (Foa, Davidson & Frances, 1999), eye movement desensitisation and reprocessing (EMDR) (Bisson, et al.,...
Sandra Sacre

2007) and cognitive processing therapy (CPT) (Monson, et al., 2006), have been found to be efficacious for the treatment of PTSD (Cukor, Spitalnick, Difede, Rizzo & Rothbaum, 2009). Although exposure therapy has been endorsed as the preferred first-line treatment for PTSD, a study of PTSD treatment practices amongst Veterans Affairs clinicians in the USA found that few clinicians even routinely discussed traumatic events in psychotherapy (Rosen, et al., 2004). Recent research in relation to the treatment of sleep symptoms in PTSD sufferers has also shown that exposure-based treatments, such as imagery rehearsal therapy (IRT), can also be effectively applied to the treatment of PTSD nightmares (Harvey, et al., 2003; Krakow, Hollifield, et al., 2001). IRT is a type of cognitive restructuring technique whereby individuals write down their nightmares and are instructed about ways to alter the storyline of the nightmare script (Spoormaker, et al., 2008). This has been found to be the treatment of choice for nightmares and promising long-term effects have been found after just one to three sessions. Studies have also shown that a combination of IRT for nightmares and sleep hygiene, stimulus control, sleep restriction and cognitive restructuring for insomnia is effective in reducing nightmares and improving sleep quality in people with PTSD (Krakow, Johnston, et al., 2001; Krakow, et al., 2002).

CONCLUSION

Combat veterans have a high incidence of sleep disturbances, nightmares and a range of other sleep disorders. Their longer-term difficulties with insomnia and nightmares are most often, but not always, associated with the diagnosis of PTSD. Although there is a clear relationship between reported sleep disturbances, associated distress and PTSD, polysomnographic studies have failed to find objective, clinically significant differences between the sleep of war veterans with and without PTSD. This suggests that PTSD may be associated with sleep state misperception or “subjective insomnia”, a phenomenon often also seen in patients with primary insomnia. Many factors associated with deployment, combat and post-deployment are likely to lead to disrupted sleep patterns or exaggerated focus and concern about sleep loss and these are, in turn, highly likely to contribute to the development of chronic sleep disturbances and disorders. Indeed, sleep loss prior to, or during, stressful events may prevent the normal processing of traumatic memories, increasing vulnerability to PTSD. Once poor sleep patterns, or unhelpful cognitions relating to sleep, are established, it is not uncommon for sufferers to engage in compensatory behaviours which inadvertently perpetuate the problem.

People who have been traumatised tend to experience dream content which reflects their traumatic experiences as well as the emotions that relate to those experiences, often producing PTSD nightmares that are “encapsulated” and fixed in content. These repetitive nightmares may represent a need to replay, and eventually master overwhelming traumatic experience. However, conditioned arousal caused by symptomatic awakenings from nightmares may subsequently be induced by REM sleep. This arousal may serve to perpetuate interrupted REM sleep which then interferes with normal processing of emotionally influenced memories. The most effective pharmacotherapy for the treatment of post-traumatic nightmares has been found to be Prazosin, although nightmares tend to return when Prazosin is discontinued. Exposure-based treatments, such as imagery rehearsal therapy (IRT) are

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effective in the treatment of PTSD nightmares. Further, a combination of IRT for nightmares and cognitive behavioural therapy for insomnia is effective in reducing nightmares and improving sleep quality in combat veterans with PTSD.

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Sleep Disturbances and Nightmares in Combat Veterans


Sandra Sacre


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COPING SELF-EFFICACY AND PSYCHOLOGICAL DISTRESS IN FLOOD VICTIMS

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ABSTRACT

Religious and non-religious approaches to life provide complementary coping approaches that uniquely affect psychological adjustment to life stressors. In this chapter, we explore the role of flood-related coping self-efficacy on the psychological health of flood affected residents three months post-disaster in the state of Queensland in Australia. The flood events occurred in 2008, 3 years before the onset of the 2011 Mega Floods that affected 75% of the State of Queensland. Our results showed that greater flood-related coping self-efficacy was associated with decreased general and traumatic distress for all flood victims (religious and non-religious). However, no difference was found between the distress levels of religious and non-religious Queensland flood victims. In general, the results in this chapter emphasize the importance of non-religious coping factors on psychological adjustment of all flood victims.

Keywords: floods, coping, self-efficacy, psychological distress, religious beliefs

INTRODUCTION

From 2008 to 2011, following decades of severe drought, Queensland experienced a number of large and serious deluges and floods in different parts of the State; the nature and predicted incidence of these deluges have been written about in the book “Meltdown”¹. After experiencing prolonged periods of drought, monsoonal troughs in mid-January to mid-February, 2008, brought widespread flooding to much of central Queensland, with the towns

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of Charleville, Emerald, and Mackay being the worst affected and declared as natural disaster zones (Emergency Management Australia, 2008). These same areas flooded again in 2011. Following the floods in Central/Eastern Queensland in 2008, the first author was able to collect data from Emerald, Mackay, and Charleville residents to investigate the effects of the disaster on their distress levels and the factors that assisted them in managing and recovering from the distress. This chapter focuses on a portion of that data. See also our chapter in the book on coping and survival.

Between conducting the study outlined herein and the publication of this book, a massive flood disaster occurred in 2011 across the state of Queensland in Australia, the setting for the study. The earlier study investigated, in a very systematic way, what differences there were between victims in terms of holding religious beliefs or not, on greater flood-related coping self-efficacy and general and traumatic distress. At the time of this book going to publication, a longer term analysis of the psychological health of flood victims had not yet been completed on the 2011 flood events, although indications are that the effects have been very severe on economic, social, psychological and eco resilience (see the Gow & Celinski *Mass Trauma: Impacts and Recovery Issues* book).

In this chapter, we report on the 2008 analysis which was part of a quantitative research project on the effects of floods on people's psychological health. The specific aim of this particular analysis was to investigate whether identifying oneself as having a religious affiliation or not would make any differences to a person’s levels of flood-related coping self efficacy and general and traumatic psychological distress, in flood affected residents of Queensland.

**Natural Disasters and Traumatic Distress**

Exposure to a natural disaster poses a considerable threat to an individual in their lifetime (Norris, 1992), with epidemiological research reporting that the global prevalence of natural disasters has increased substantially over the past decade (Centre for Research on the Epidemiology of Disasters, 2006). Indeed, natural disasters have been reported as the third most common type of traumatic event experienced by the Australian general population (Creamer, Burgess, & McFarlane, 2001).

In the past decade, many mega disasters have impacted on different countries across the world, resulting in major loss of life, property, livestock, environmental areas, roads, bridges and other infrastructure.

Natural disasters provide a unique opportunity to investigate the psychological responses of an entire community to a single stressor (Smith, 1996). To date, research on coping with Australian natural disasters has been limited in some respects.

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The Psychological Impact of Natural Disasters

In addition to adverse financial and physical health consequences, exposure to natural disasters often results in increased psychological morbidity, both immediately after the event and for prolonged periods post-disaster (Benight & Bandura, 2004). A meta-analysis by Rubonis and Bickman (1991) reported that the prevalence rates of psychopathology, particularly anxiety and general psychological distress, increased by 17% following a disaster. Many researchers suggest that the increased prevalence rates are due to the unexpected, unpreventable, and uncontrollable nature of natural disasters (Assanangkornchai, Tangboonngam, & Edwards, 2004; Gibbs, 1989), with other researchers also emphasizing the importance of the sudden and rapid depletion of internal resources, such as optimism, and external resources such as social support (Benight & Bandura, 2004; Benight, Ironson, Glebe, et al., 1999; Benight, Swift, Sanger, Smith, & Zeppelin, 1999).

Increased levels of psychological stress and symptoms of Post Traumatic Stress Disorder (PTSD) are considered normative reactions up to four months following natural disasters (Benight & Bandura, 2004). Flood victims report short-term effects including psychological numbness, anxiety, grief, both general and flood-related distress, concentration deficits, and severe sleep disturbances (Assanangkornchai et al., 2004; Gerrity, Steinglass, Ursano, Fullerton, & Norwood, 2003). Despite decreasing over time for most natural disaster victims (Sundin & Horowitz, 2003), longitudinal studies have also reported enduring outcomes up to two years post-disaster, of increased traumatic distress for earthquake victims (Lewin, Carr, & Webster, 1998) and increased depression, apathy, and physical health problems for flood victims (Gerrity et al., 2003).

Factors affecting Psychological Impact

Research suggests that several dispositional and situational factors affect psychological adjustment of disaster victims. Norris et al. (2002) conducted a comprehensive review of empirical disaster studies, published between 1981 and 2001, encompassing 160 distinct disaster samples and over 60,000 victims. Risk factors for higher psychological distress post-disaster were identified as dispositional characteristics including female gender, low education levels, and low socioeconomic status; and situational factors including lower coping self-efficacy, lower social support, and higher levels of resource loss and exposure severity. Despite the review including a range of man-made (45%) and natural (55%) disasters, the same risk factors have typically been reported for research solely on floods (Assanangkornchai et al., 2004; Liu et al., 2006) and other natural disaster types (Bodvarsdottir & Elklit, 2004; Goto, Wilson, Kahana, & Slane, 2006; Lewin et al., 1998; Sumer, Karanci, Berument, & Gunes, 2005).

Furthermore, natural disaster research has also identified other important risk factors including relocation (Gerrity et al., 2003), prior experience of adverse life situations up to 12 months pre-disaster (Bodvarsdottir & Elklit, 2004), and lower levels of optimism (Benight, Swift et al., 1999).
General Coping with Natural Disasters

Empirical natural disaster research has consistently reported robust results for the direct relationship between dispositional and situational risk factors and psychological distress; however, coping dimensions play an important role in mediating the impact of these factors (Benight, Swift et al., 1999; Gibbs, 1989). A lot of coping research has been underpinned by social cognitive theory, which views individuals as proactive agents of change in reactions to environmental stressors because of their self-beliefs (Bandura, 2001). Accordingly, coping self-efficacy, defined as the perceived ability to cope with stressful or traumatic environmental demands, is considered to be a key internal resource affecting psychological adjustment to life stressors (Bandura, 1986).

Coping self-efficacious individuals cognitively perceive distressing events as relatively unthreatening and manageable, thus fostering a sense of personal mastery and control, and employment of active, problem-focused coping strategies and behaviours (Benight & Bandura, 2004; Benight, Ironson, Klebe et al., 1999). Conversely, individuals low in coping self-efficacy perceive traumatic events as relatively frightening and insurmountable, which cultivates a sense of helplessness and employment of passive and emotion-focused coping skills (e.g., denial, cognitive and emotional avoidance). Furthermore, higher perceived levels of self-efficacy related to a specific stressor are considered more beneficial for positive psychological outcomes than higher levels of general self-efficacy (Hobfoll et al., 2007).

Although not explored for floods, empirical studies that have employed natural disaster coping self-efficacy measures provide support for the buffering effect of higher levels of coping self-efficacy on general psychological distress and traumatic psychological distress of natural disaster victims. For example, up to 6 months post-disaster, cross-sectional studies have reported that lower levels of coping self-efficacy were associated with greater general and traumatic distress for European earthquake victims (Sumer et al., 2005) and U.S. hurricane victims (Benight, Ironson, & Durham, 1999; Benight, Swift et al., 1999). Longitudinal studies on U.S. data have also highlighted the importance of lower levels of natural disaster coping self-efficacy in predicting enduring psychological distress up to 12 months post-disaster for hurricane victims (Benight, Ironson, Klebe et al., 1999) and for bushfire and flood victims (Benight & Harper, 2002).

Other findings from these studies are also noteworthy. Lower levels of coping self-efficacy remained important predictors of increased general and traumatic distress for natural disaster victims, after controlling for important dispositional and situational factors including resource loss and optimism (Benight, Ironson, & Durham, 1999), demographics and immediate psychological distress levels (Benight & Harper, 2002). Furthermore, lower levels of coping self-efficacy were also shown to mediate the effects of risk factors (e.g., increased resource loss, lower levels of optimism, social support, and self-esteem) on increased psychological distress both within the short-term (Benight, Swift et al., 1999; Sumer et al., 2005) and enduring 8 to 12 months post-disaster (Benight et al., 1999).

Coping Responses and Religiosity

More religious individuals (implied by greater prayer and church attendance activities) have experienced less depression when dealing with stressful life events through employing
greater levels of positive religious coping strategies (Nooney & Woodrum, 2002). Furthermore, when coping with recent stressors including bereavement, medical illness, and relationship difficulties, empirical studies that have used intrinsic-extrinsic operationalizations of global religiosity also report that individuals with stronger intrinsic religious beliefs experience lower levels of maladaptive psychological outcomes (e.g., traumatic psychological distress, depression) through greater use of the positive religious coping strategy of seeking comfort through God’s love (Park & Cohen, 1993; Roesch & Ano, 2003).

Smith et al. (2000) conducted a longitudinal study of Protestant and Catholic church members exposed to floods in Missouri and Illinois, who completed questionnaires at 6 weeks ($n = 209$) and again at 6 months post-flood ($n = 131$). Results showed that greater levels of global religiosity and the positive religious meaning-making strategy of attributing the flood to a loving God with a benevolent purpose (benevolent god reappraisal) were associated with lower levels of general psychological distress (measured by the GHQ-12) at both time periods. In contrast, greater use of the negative religious control strategy of pleading or bargaining with God (pleading for direct intercession) was slightly negatively, but not significantly, associated with greater general psychological distress at both time periods.

Because religion has been frequently reported as an important coping factor in natural disaster victims (see Weaver, Flannelly, Garbarino, Figley, & Flannelly, 2003), and recommendations have been made that researchers of disasters investigate the impact of religious and non-religious dimensions on post-disaster adjustment (Gibbs, 1989), we explored whether there would be any differences in levels of general and traumatic psychological distress between religious and non-religious flood victims. In other words, in a natural disaster situation, would religious affiliation overall alter people’s psychological reactions in terms of distress and coping after the floods?

Whilst religious dimensions were shown to be an important influence on psychological distress of religious flood victims by Smith et al. (2000), the exclusion of a non-religious comparison group limits generalization of the results to a community context. Results from the surprisingly small amount of general coping research that has included non-religious comparison groups indicate that religious individuals experience no better psychological outcomes than their non-religious counterparts when dealing with life stressors such as aging, loneliness, and parenting children with disabilities (see Pargament, 1997 for a review), and health, work, or financial problems (Ellison, Boardman, Williams, & Jackson, 2001). Based on this research, we hypothesized that there would be no difference in levels of general and traumatic psychological distress between religious and non-religious flood victims.

**METHOD**

**Design**

The study used a cross-sectional, between-groups design with religious affiliation as the independent variables, and flood-related coping self-efficacy and general and traumatic psychological distress as the dependent variables. Correlational analyses determined the

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association between flood-related coping self-efficacy, religious affiliation, and general and traumatic distress outcomes. Finally, appropriate between-group statistical analyses assessed whether religious and non-religious flood victims experienced different levels of distress.

Participants

Participants were 260 flood victims, mainly from Mackay (87%). Individuals less than 18 years of age, those persons diagnosed with PTSD, or with a history of psychiatric illness not associated with the impact of the floods, were advised not to participate. Most participants were female (67%), religiously-affiliated (72%), Australian (91%), lived in the flooded towns (99%), did not require temporary or permanent relocation (68%), and had not experienced any other traumas in the previous 12 months (88%). The mean age of participants was 49.41 years ($SD = 15.52$, range = 18 to 93 years) and questionnaires were anonymously completed at an average of 11.12 weeks post-flood ($SD = 3.69$). For participants who indicated that social support was applicable, the majority were either satisfied or very satisfied with levels received from friends (92%), family (90%), community (82%), and church (72%). Participants represented a variety of education levels, living arrangements at the time of the floods, and levels of material damage and insurance coverage.

Procedure

Survey packets informed participants of the study’s purpose, potential risks, eligibility criteria, and consent information. Informed consent for written questionnaires was indicated by return of reply paid surveys, while on-line participants had to advise informed consent before being presented with survey questions. Questionnaires were presented in two parts with all participants requested to complete Section A (demographics, religious affiliation [including no religious affiliation], general natural disaster questions, flood-related coping self-efficacy, general distress, and traumatic distress). Participants who nominated a religious affiliation in Section A were instructed to complete Section B religious measures (global religiosity, religious coping - reported on in Pritchard & Gow, 2011).

Targeted areas were the Western and Central Queensland flood-affected areas of Charleville, Emerald, and Mackay. Approximately six weeks post-flood, on-line participation was sought via e-mail distribution from consenting rural organisations and universities, and through Queensland radio and newspaper media releases. Four weeks later, 39 questionnaires (15% of the total sample) were completed on-line; however, third-party sampling techniques impeded determination of return rates. Christian churches in flood-affected areas were identified by yellow pages and internet directories, and leaders were contacted by mail and follow-up phone calls to request their help in recruiting participants. Approximately six weeks post-floods, consented leaders of 13 flood-affected churches then distributed survey packets to interested congregation members following church services. Four weeks later, 26 questionnaires (10% of the entire sample) were returned by mail for a return rate of 6.5%. Consistent with other natural disaster research using similar third-party sampling methods (McFarlane, 1986; Smith et al., 2000), actual return rates were probably substantially higher as not all survey packets were distributed (e.g., a box of 100 surveys was found intact by the...
Coping Self-Efficacy and Psychological Distress in Flood Victims

researcher at one Mackay church location). Follow-up correspondence revealed many church leaders had over-estimated potential participant numbers. Ten weeks post-flood, a further 1000 questionnaires were placed in letter boxes of houses in Mackay flood-affected streets. Streets were randomly selected from all major geographical areas that the local newspaper had identified as flood-affected. Within the following nine weeks, 195 usable questionnaires (75% of the total sample) had been returned, representing a return rate of 19.5%. Overall the returns numbered 260 residents.

Measures

Flood-related Coping Self-efficacy. The 10-item Natural Disaster Coping Self-Efficacy Scale (NDCSE; Benight & Harper, 2002) assessed coping self-efficacy in dealing with floods. Participants indicated perceived capability on successfully dealing with natural disaster demands (e.g., “Dealing with all the disruptions caused by the natural disaster”). Items were answered using a 7-point Likert-scale ranging from 1 (not at all capable) to 7 (totally capable) and summed to produce a total score. Cronbach’s alpha of .92 and test-retest reliability of .69 across a 1 year-period have been reported for bushfire and flood victims (Benight & Harper, 2002).

General Psychological Distress. The 12-item General Health Questionnaire (GHQ-12; Goldberg, 1992) assessed general psychological distress. Participants indicated frequency of psychosomatic symptoms experienced over the last few weeks (e.g., “Have you lost much sleep over worry?”). Responses were measured using a 4-point Likert format (0 = less than usual to 3 = much more than usual) and summed to produce a total score, with higher scores indicating greater levels of general distress. Cronbach’s alpha ranging from .82 to .90 have been reported across a variety of populations (Goldberg & Williams, 1988).

Traumatic Psychological Distress. The 22-item Impact of Event Scale - Revised (IES-R; Weiss, Marmar, Wilson, & Keane, 1997) measured traumatic psychological distress. Participants reported frequency of symptoms over the past seven days that were specifically related to experiencing the flood. Items were rated on a 5-point Likert-type scale (0 = not at all to 4 = extremely). Mean scores were calculated for the three subscales of intrusion (eight items e.g., “I thought about it when I didn’t mean to”), avoidance (seven items e.g., “I tried not to talk about it”), and hyperarousal (seven items e.g., “I had trouble concentrating”). Cronbach’s alpha for the subscales ranging from .72 to .92 have been reported across a variety of traumatic events (Sundin & Horowitz, 2002).

RESULTS

Participants who nominated “No religious affiliation” and who did not complete religious measures (as instructed) comprised 28% of the sample and were classified as “Non-religious”. Participants who nominated a religion but who did not complete religious measures (15% of sample) were classified as “Non-practising religious” (as indicated by written correspondence on returned survey). The remaining 57% of the sample who

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nominated a religion and who completed religious measures were classified as “Practising Religious”.

**Group Differences**

Overall, participants \((N = 260)\) felt capable of coping with the demands of the flood, experienced general distress levels the ‘same as usual’ over the previous few weeks, and experienced only a ‘little bit’ of all traumatic distress outcomes in the previous week. In checking the relationships between the variables, at \(p < .001\), Pearson bi-variate correlations revealed that lower levels of flood-related coping self-efficacy were significantly and strongly associated with greater general distress \((r = -.56, n = 259)\), avoidance distress \((r = -.50, n = 258)\), hyperarousal distress \((r = -.55, n = 258)\), and intrusion distress \((r = -.52, n = 258)\). Differing sample sizes reflect missing flood-related coping self-efficacy data for one non-religious participant, and missing traumatic distress data for one non-religious participant. The means and standard deviations are set out within Table 1.

<table>
<thead>
<tr>
<th>Table 1. Means and Standard Deviations for Whole Group on Coping &amp; Distress Measures</th>
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<tbody>
<tr>
<td>Entire Sample ((N = 260))</td>
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<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Flood-related coping self-efficacy</td>
</tr>
<tr>
<td>Distress Outcomes</td>
</tr>
<tr>
<td>General Distress</td>
</tr>
<tr>
<td>Traumatic Distress</td>
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<tr>
<td>Avoidance distress</td>
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<tr>
<td>Hyperarousal distress</td>
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<td>Intrusion distress</td>
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</tbody>
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\(^a\) \(n = 259\); data missing for 1 participant.

Data analyses examined whether religion differentially influenced distress levels within a community context. Group differences in flood-related coping self-efficacy were also explored due to it typically being the strongest unique predictor across distress outcomes.

As shown in Table 2, non-practising religious individuals had the highest level of flood-related coping self-efficacy and the lowest levels of general and avoidance distress. Practising religious individuals reported the lowest flood-related coping self-efficacy and, interestingly, also the lowest intrusion and hyperarousal distress. However, mean distress outcomes were similarly low across all groups. A series of Shapiro-Wilks tests revealed that, generally across all groups, flood-related coping self-efficacy distributions were significantly negatively skewed \((p < .01)\) and distress distributions were significantly positively skewed \((p < .001)\).

Although normality violations are more likely for larger sample sizes \((Field, 2005)\), non-parametric tests, rather than ANOVA’s, were used because of the disparate sample sizes among religious groups and the significant non-normal distributions for the relatively small sample size \((n = 37)\) of the non-practising religious group \((Tabachnick & Fidell, 2007)\).
Coping Self-Efficacy and Psychological Distress in Flood Victims

Table 2. Group Differences for Flood-related Coping Self-Efficacy and Distress

<table>
<thead>
<tr>
<th>Group</th>
<th>Flood Coping Efficacy</th>
<th>General Distress</th>
<th>Traumatic Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>Intrusion (SD)</td>
</tr>
<tr>
<td>Non-Religious (n = 73)</td>
<td>51.58 (11.84)</td>
<td>13.32 (6.83)</td>
<td>1.10 (.91)</td>
</tr>
<tr>
<td>Non-Practising Religious⁵ (n = 37)</td>
<td>56.38 (11.39)</td>
<td>12.37 (6.09)</td>
<td>1.04 (.93)</td>
</tr>
<tr>
<td>Practising Religious (n = 149)</td>
<td>50.46 (12.87)</td>
<td>12.59 (6.71)</td>
<td>.98 (.88)</td>
</tr>
</tbody>
</table>

⁵n = 37 except for General Distress (n = 38).

A series of Kruskal-Wallis tests revealed that the three groups did not significantly differ in levels of general distress ($\chi^2[2, N = 260] = .62, p = .73$), avoidance distress ($\chi^2[2, N = 259] = .78, p = .68$), hyperarousal distress ($\chi^2[2, N = 259] = 2.23, p = .33$), or intrusion distress ($\chi^2[2, N = 259] = 1.20, p = .55$). However, at least one significant difference in coping self-efficacy was found among the religious groups ($\chi^2[2, N = 259] = 6.21, p = .045$), although it only accounted for 2% of variability in self-efficacy scores. Mann-Whitney U tests using a Bonferronni adjusted alpha of .017 revealed that practising religious individuals reported significantly lower levels of coping self-efficacy than non-practising religious individuals ($z = -2.46, p = .014$), however the effect was very small ($r = -0.18$).

In summary, there was no difference in levels of distress outcomes experienced by religious groups, but a significant, although minimal, difference in flood-related coping self-efficacy levels between the non-practising and practising religious groups.

**DISCUSSION**

This study explored the effects of non-religious factors (flood-related coping self-efficacy) on the distress of flood victims. Results generally supported the hypotheses as discussed below.

**All Flood Victims**

Regardless of whether a participant endorsed religious affiliation or not, those Queensland flood victims, who perceived greater levels of flood-related coping self-efficacy, reported decreased levels of general and traumatic distress. At an average of 10 weeks post-flood, participants typically felt capable of dealing with demands resulting from the floods,
experienced no increase in general distress, and reported only a little traumatic distress. Results are surprising given that 67% of the sample experienced moderate to severe material loss, and qualitative responses related to the impact of the flood commonly included descriptions such as “stressful”, “traumatic” and “devastating”. Yet findings are similar to coping self-efficacy and distress levels of flood victims surveyed at similar time periods following floods in the U.S.A. (Benight & Harper, 2002) and Asia (Assanangkornchai et al., 2004). Whilst results infer that humans are extremely resilient in coping with floods, the low distress levels could also be explained by sampling bias if participating flood victims were not overly distressed. Further, participating flood victims may still have been in the ‘honeymoon phase’ of disaster recovery where community cohesion can temporarily buffer victims from distress between two and six months post-disaster (Raphael, 1986).

Religious Group Differences

Practising religious individuals reported lower levels of flood-related coping self-efficacy than non-practising religious flood victims; however, the effect was only minimal. As predicted, no difference in psychological distress outcomes post-flood was found between non-religious, non-practising, and practising religious groups. However, a deeper understanding of religious classifications in the current study may have been obtained by distinguishing between individuals who have never been exposed to religion, actively rejected religion, or for which religion has never profoundly resonated with their personal beliefs. In our recent book chapter (Pritchard & Gow, 2011), we have already isolated differences within practising religious participants following a natural disaster with reference to whether they are influenced by intrinsic or extrinsic religiosity (Allport & Ross, 1967; Gorsuch & McPherson, 1989). Now, reflecting on the results reported in this chapter, it would appear that determining the exact differences between responses of people who report no religious affiliation and those who report non-practising affiliation is worthy of further investigation for future studies, in terms of the impact of beliefs and loss of beliefs on coping with natural disasters. A further question arises as to whether the higher levels of coping self–efficacy for the non-practising individuals and their lower general and avoidance distress levels indicates that they may have found a different kind of inner strength than the practising individuals to help them through difficult times.

CONCLUSION

This study adds to existing research in several ways. First, it adds to the relatively limited research on coping with Australian natural disasters. Second, it extends religious research beyond a bereavement, loss, and illness context. Thirdly, the effect of religion on distress of natural disaster victims was assessed within a community context by the inclusion of non-religious participants.

There is no doubt that the complex, multidimensional nature of the coping process needs further research if we are to unlock answers that may assist the growing number of victims of natural disasters, whether the disasters be floods or other types of disasters.
REFERENCES


Coping Self-Efficacy and Psychological Distress in Flood Victims


A QUALITATIVE STUDY OF ADVERSITY ACTIVATED DEVELOPMENT AND RESILIENCE IN YOUNG PEOPLE WITH CHD AND THEIR PARENTS

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2 The Prince Charles Hospital, Brisbane, Australia

ABSTRACT

The majority of infants born today with heart defects will survive to adulthood. Life for adults with Congenital Heart Disease (CHD) may appear ‘normal’, but be punctuated by illness-related events such as hearing a ‘bad’ prognosis, experiencing uncontrollable arrhythmias, or having complicated heart surgery. Therefore living with CHD can be traumatic. However, it is possible to develop attributes in response to trauma that enable not just survival, but also self-improvement. This important concept has been termed Post-Traumatic Growth (PTG) or Adversity Activated Development (AAD). We will adopt AAD terminology to emphasise the developmental component of coping and recovery.

Based on a thematic analysis of 10 CHD patients and 10 parents, our study participants described positive, neutral and negative personal consequences to living with CHD. The results indicate that achievement of AAD may be related to having acceptance, a sense of coherence (or a belief that obstacles can be managed and that life is meaningful with lessons to be learned), and a sense of connectedness (special relationships with peers, family and medical staff). These findings highlight psychological processes to facilitate in order to maximise AAD in young people with CHD.

Keywords: congenital heart disease, youth, thematic analysis, trauma, transition
INTRODUCTION

What is it like to have a medical condition that few people have ever heard about? How does it feel to question whether daily physical activities are dangerous, whilst you watch your friends enjoy those activities without a care? Can you imagine that you need to have complicated heart surgery with risks such as paralysis or death? Or even imagine facing the painful recovery period and scars after such surgery? Then imagine that you are a child or teenager dealing with this medical condition when all your friends are simply occupied with school and normal life. Now consider that surgery has been undertaken to extend your lifespan, but the operation is so new that the long-term outcomes are just not known? All you really know is that you might have ‘surgical repairs’ to your heart, symptoms may be relieved or managed by medications or cardiac devices, but you are never going to be cured. What if you had already experienced painful, frightening, lonely and tedious hospitalisations and you were forced to put your life on hold to re-enter that situation, time and time again? This may be your life, as a Congenital Heart Disease or CHD patient.

How do patients with CHD cope and in many cases even thrive? Our qualitative study of the perspectives of young CHD patients, and their parents, highlights the potential for patients with CHD related adversity to engage in personal development. We propose that medical staff can engage with patients and families to develop transition programs that also promote AAD.

Adults with CHD are a diverse and growing population, due to advances in cardiology. There are approximately nine heart defects per 1000 live births per year, and 85-90% of infants with CHD are surviving till adulthood (Chen & Chen, 2007). More adults are now living with CHD than children, and the percentage of adults with CHD with complex heart defects is rising. All patients with moderate to complex CHD require regular follow up in a specialist cardiac unit. It is extremely important that this population receives a biopsychosocial model of care to minimise the prevalence of disability and strain on health services. More adult congenital heart disease (ACHD) clinics are needed to manage patients in outpatient settings, prevent avoidable health complications, and optimise the individual’s functioning and quality of life. Also patients and their families need better education about CHD; and strategies are needed to reduce the number of youths with CHD who ‘drop out’ or become ‘lost to follow-up’ from specialist adult cardiac systems.

Many adults with CHD know little about their condition which jeopardises their self-management and prevention of CHD complications such as bacterial endocarditis. It has been reported that parents lack vital CHD information and their offspring with CHD in turn lack understanding (Cheuk, Wong, Choi, et al., 2004). Parents (often in collusion with medical staff) may use denial strategies to normalise their ill child’s life and to protect the child from distressing information. Many patients and families, and even healthcare providers, unfortunately have misconceptions that paediatric surgery is curative (Knauth, Verstappen, Reiss, et al., 2006). Misconceptions can arise from medical language such as “complete repair and correction” and from general lack of awareness of the life-long implications of CHD. Misinformed patients and those using denial and avoidance coping strategies, may drop out of cardiac services, be ill equipped to cope with their limitations later in life, and have a greater risk of developing medical and psychological complications.

Limited ACHD clinics and specialist training, plus emotional attachments between families and paediatric staff, have resulted in adults with CHD being inappropriately cared for.
by non-specialist and paediatric cardiologists (Moons, Hilderson, & Van Deyk, 2008). The placement of adults in children’s wards is inappropriate from the patients’ and professionals’ perspectives (Moons, Pinxten, Dedroog, et al., 2009). Young adults, who resent being treated like children when they are struggling to achieve age appropriate independence may drop out of child health services without a referral to adult services. Transition programs are rapidly becoming the ‘best practice’ intervention aimed at improving CHD patients’ level of disease knowledge and attendance to ACHD clinics (Hilderson, Saidi, Van Deyk, et al., 2009). ‘Transitioning’ is the staged medical and psychosocial preparation for transfer of young patients from children’s health care to adult healthcare. Transition programs were initially developed to improve efficient transfer of patients from paediatric health care to adult services.

**WHAT PSYCHOSOCIAL CHALLENGES FACE ADULTS WITH CHD?**

Young adults with CHD are today living with abnormal heart anatomies, and there is little information regarding how these unique hearts will function over time, or what treatments doctors may offer in the future. Thus CHD can imply a lifetime of uncertainty, medical complications and treatment adjustments. By adulthood, these young survivors may have experienced one or more heart operations, significant school or work absences due to illness, dependency on medication or cardiac devices, limited physical capacity, foreshortened life expectancy, and uncertainty about how CHD may threaten healthy procreation. Adulthood may be a time when psychological vulnerabilities are tested as the patient can face a widening array of medical problems such as degradation of prosthetic materials placed in the heart, new or progressive arrhythmias, increasing vascular resistance, worsening ventricular failure, complications from pregnancy, and acquired heart disease. All of this may occur at a time when youths and young adults are experiencing normal developmental life changes such as establishing future goals, serious relationships and independence from their parents; plus their executive cognitive functions may still be developing.

It has been documented that patients with CHD are at risk of having disturbed family interactions, developmental delays, cognitive impairments, dependent personality traits, low self esteem, barriers to social and occupational functioning, depression and anxiety, and sexual problems (Berant, Mikulincer & Shaver, 2008; Moons, Van Deyk, Marquet, et al., 2007; Vigl, Hager, Bauer, et al., 2009). Unfortunately the literature regarding prevalence of psychopathology in the CHD population is confusing due to varied study methodologies, small sample sizes, and the use of heterogeneous samples. Demographic studies may present a misleading positive impression of adults with CHD living independently, producing offspring, working, and engaging in leisure activities. These studies may not reflect the internal experiences of adults with CHD, their limitations or their failure to achieve full potential due to illness.

The psychological needs of this group have previously been overshadowed by the medical focus on survival past childhood, and because adults with CHD often self-report normal physical abilities and good quality of life (Van Rijen, Utens, Roos-Hesselink, et al., 2003). It will be highlighted in this study that adults with CHD may genuinely experience...
positive outcomes from living with CHD, even viewing CHD as a ‘gift’ and themselves as a ‘living miracle’ (Verstappen, Pearson & Kovacs, 2006). However, it has been suggested that CHD patients’ mental health issues are under-diagnosed and treated (Lyon, Kuel & McCarter, 2006). Fortunately, it is now recognised that psychologists play an important role in the ACHD unit and that many patients would benefit from psychology services (Cohen, Mansoor, Langut, et al., 2007; Kovacs, Bendell, Colman, et al., 2009; Miatton, De Wolf, Francois, et al., 2007). Unfortunately, there remains a dearth of information on the optimal treatment for co-morbid mental health disorders and CHD.

What Do We Know About the ‘Secret Life’ of Patients with CHD and Their Parents?

Patients have reported feeling ‘different’ from peers. The disease dominates their lives: they have limited control regarding occupation, relationships and procreation, and they feel inadequate and powerless. In Berghammer, Dellborg and Ekman’s (2006) qualitative study, adults with CHD presented as ambivalent and described ‘having the disease’ as a confusing struggle between being different and acting ‘normal’, being sick versus being healthy as CHD never goes away even when the person feels well, making choices to reveal or hide the CHD, and having an ‘invisible handicap’. For these young adults ‘living with illness’ meant wishing for another life, mastering the disease and refusing to be an invalid, accepting or not accepting the situation, suffering, fearfulness about the future, and feeling insecure during doctors’ visits. Adults with CHD report dilemmas of normality, disclosure, and management of illness, and challenges of achieving independence versus dependence, social integration versus isolation, and coping with uncertainty about their health (Tong & Kools, 2004). Claessens et al. (2005) refer to ‘discordance’ between the CHD patient’s world and the healthy individual’s world, which results in patients’ constantly struggling with themselves and their environment to be accepted as “normal”.

Mediators for psychological functioning may include the person’s level of physical disability, how they are parented, their social supports, academic and occupational opportunities, and appropriate preparedness for the progression of disease. Perceptions of body disfigurement such as clubbing of digits, cyanosis, small stature and chest scars, and body deficiency have been cited as stronger predictors of psychological adjustment than disease severity. Likewise social adjustment and health perceptions are cited as stronger predictors for anxiety and depression than CHD severity (Geyer et al., 2006; Kovacs et al., 2008).

There has been much speculation that parents may over-protect or under-protect offspring with CHD due to their coping style, incorrect estimations of their child’s emotional wellbeing and physical capacity, and lack of insight into CHD, with negative impacts on their child’s maturity, coping and mood (Spijkerboer, Utens, Bogers, et al., 2008). The concerns expressed by mothers of patients with CHD in Van Horn, Ray, Gonzalez-Heydrich, et al.’s (2001) qualitative study were categorised as fears related to medical prognosis, their child’s psychosocial functioning and quality of life, effects on family, and financial issues.
A Trauma Model for Understanding the Impacts of Adult Congenital Heart Disease

Although there is an absence of the use of trauma models in current CHD population studies, such models may inform clinical interventions for psychological recovery during health crises. It is known from the literature regarding Post Traumatic Growth (PTG) that individuals can be positively affected by adversity in terms of personal development, strengthening of interpersonal relationships, increased spirituality and positive life orientation changes (Tedeschi & Calhoun, 1996). We argue that the Adversity Activated Development (AAD) trauma recovery model, which uses positive language and accommodates individual responses to continuous traumatic circumstances, provides a useful framework for understanding the internal experiences reported by adults with CHD (Papadopoulos, 2007). Papadopoulos (2007) categorises trauma impacts as positive, neutral or negative. It is assumed that transforming adversity into positive development is a natural phenomenon, as reflected in sayings that adversity is “character building” or “what doesn’t kill us makes us stronger!” The AAD construct is ideally applied in health psychology as it recognises that adversity may be ongoing, changing or fluctuating. The ability for sufferers to learn, adjust, positively react, and demonstrate mastery does not necessarily develop post the trauma, but may occur simultaneous to the trauma and have an unpredictable evolution. Not all elements of the adversity may even be perceived as traumatic because the individual experiences unique feelings, hence the term ‘neutral impacts’. Being ‘neutrally affected’ may be observed as resilience, which refers to the individual’s ability to return to normal or to preserve psychological immunity.

There is some evidence that adults with CHD may endorse better Quality of Life than healthy counterparts, regardless of the complexity of their CHD (Moons et al., 2006). Moreover, the results of this study suggest that adults with CHD may have a stronger ‘sense of coherence’ or SOC than their healthy peers. If a person has a dispositional trait to competently and confidently handle unavoidable stress and make sense and meaning of events, then they are thought to have higher levels of SOC (Antonovsky, 1987). Moons and colleagues hypothesise that individuals with CHD can develop high levels of SOC when they have early and repeated exposure to stressful events for which they must develop and refine coping responses. Although Moon and colleagues do not presume a ‘challenge model of resilience’ (Evans, Marsh & Weigel, 2009), it can be hypothesised from their findings that some trauma or stress exposure is actually beneficial in developing SOC. They infer that SOC may positively influence an individual’s self-perceptions of life satisfaction. Sense of Coherence, particularly in light of the many uncertainties associated with CHD, may indeed be a pre-requisite for AAD. It has been reported that trying to make sense of a traumatic event using positive reinterpretation promotes adjustment and development; whereas ruminating about the event in a self-punitive and unproductive manner, or fearfully avoiding cognitions about the trauma, increases stress and poor coping (Park, Cohen & Murch, 1996).

The qualitative study described in this chapter aims to explicate positive, neutral and negative experiences of patients with CHD and their parents in accordance with the AAD model of trauma. Practical implications for the aims, implementation and evaluation of ‘transition programs,’ in ACHD clinics are discussed.
METHOD

Participants

Study participants were patients with CHD, and their parents, at an ACHD clinic in Queensland, Australia. Ten patients with CHD were interviewed (5 male, 5 female) and ten parents (8 mothers and 2 fathers), and all met inclusion criteria and provided informed consent. The patient participants were purposefully selected across two age groups: ‘teens’ (14 to 19 years old) and ‘young adults’ (25 to 35 years old). A thematic analysis was undertaken to gain an understanding of the nature of internal experiences across the two different life stages (adolescence and young adulthood). All patients had moderate to complex heart conditions requiring surgery.

Design and Procedure

Parent participants were interviewed about their experience of having a child with CHD. The interview was recorded and transcribed for explication of themes. The interview style relied upon open-ended questions and allowed the participant to talk about matters that were of importance to them. Active listening skills were used and prompts were given to encourage participants to comment specifically on cognitions and feelings. The interviewer prompted richer disclosures and reflections by simply asking: “Can you tell me more about that?” Patient participants also participated in a semi-structured interview pertaining to their experience of having CHD, and the procedures were identical to those used to collect parent participants’ data.

Data Management and Explication

The original verbatim interview data was subjected to an inductive qualitative process, based upon a ‘thematic analysis’ strategy (Braun & Clarke, 2006). This methodology allows the identification of themes in relation to the established interests of the researchers. For this study, each theme was identified by continually returning to the data to explore their consistency and interpretations. The themes were then linked to the study of resilience, SOC and AAD. Implications of the findings for improving the transition of young patients from paediatric to adult CHD services are explored in the Discussion section.

RESULTS

In keeping with the model underpinning the study, participants were asked about positive, neutral and negative experiences associated with their condition. Step one involved answering the question. “Do the young adult patients’ responses fit the AAD trauma model?” The

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1 The reason the age group 20-25 (young adults) were not included in this study was that they did not present as participants. Thus the 14-19 year olds were compared with the 25-35 year olds.
following narratives were explicated to illustrate that young adults with CHD indeed reported “character building” outcomes from having CHD, in keeping with the AAD model of trauma recovery. A 34-year-old female participant reported that she had developed greater empathy and personal courage through surviving CHD: “Having what I have has made me more compassionate for sick people, and strong and independent, because no one can go through what I have for me.”

A 30-year-old female participant with a history of self-harm developed greater appreciation of good health, respect for her body and self-care skills since receiving shocking news that she needed heart surgery: “I couldn’t look after myself any better – I am not reckless with my body, I’m very good, I eat very well and am more sensible.”

Young adult patients’ also reported neutral experiences related to having CHD. They reflected about being resilient teens and viewing ‘normalcy’ as important. However, adulthood was described as a time of greater insight into the seriousness of their condition. A 30-year-old female participant stated that she continues to normalise her life and mortality, but that this is more difficult than when she was a teenager because of her adult insight into the serious implications of her condition:

I wish I could just close my eyes and it would all go away…But people have diabetes, cancer. No one gets out of here alive. Everyone has got something. It will always require constant attention; it’s hard to normalise symptoms.

Young adults with CHD also reported negative psychological impacts. A 25-year-old male participant states:

I resent a lot of people who are physically healthy, that they have what I had originally…I get angry that they don’t understand how lucky they are. I have no sympathy for people who don’t look after their health, no sympathy at all.

Thematic analysis of the transcripts of the adult interviews revealed clear examples of young adult experiences that fit nicely into the AAD trauma model. That is, some young adults expressed very negative reactions to having CHD, others experienced neutral reactions, and some experienced very positive reactions to having CHD. These latter participants tended to consistently describe areas of personal growth as a result of having CHD, positive coping strategies and positive self-appraisals.

Step two involved answering the question: “Do the teen patients’ responses fit the AAD trauma model?” Whilst emphasizing ‘normalcy’ as imperative to wellbeing, teens did admit that their experiences have provided life-lessons not shared by peers and opportunity for personal development. A 16-year-old male participant stated: “I can cope with all that stuff so I can cope with anything now.” A 16-year-old female participant describes having greater empathy and self-respect as a consequence of her experiences with adversity:

…you kind of have to learn to be strong… I have grown up and would never pick on someone who is different… I just treat them like human beings because that is what mum and dad taught me; I respect myself and that’s how I treat others too.
There were many statements from the teens that revealed resilience in that they appeared to have neither a negative or positive reaction to having CHD, but rather just continued as if it was a neutral experience. A 14-year-old female participant stated:

People hate physical education anyway and try to sit out for no reason – I feel normal ... It’s easier for other people but some are still so slow and I’m not that far behind sometimes.

An athletic 16-year-old male participant confidently reported that he could cope if he had to quit sport:

I wouldn’t change my personality or anything... I would have to change my lifestyle but I’d probably still think the same...I know I could adjust; I could do something different.

The following negative psychological report was also explicated to illustrate that CHD is experienced as an ongoing trauma by some teen patients. A 19-year-old male participant discussed how his first experience of surgery had a positive impact but subsequent events were experienced as traumatizing and had negative or no positive impacts:

After the first heart surgery it changed my priorities. It is another chance at life...so you don’t worry about things as much...with the second heart surgery it doesn’t change your perspective on life as much. You have been through it before, you’ll probably go through it again – so you just don’t care so much.

He states that he is less empathic and more judgmental due to having CHD:

I’m more inclined to have a go at other people, if they were whinging or if they were overweight...you tolerate a lot less...you think ‘you’ve been through nothing’...it puts a lot of judgmental stuff in your mind about people.

Again the AAD model appears to fit nicely with the expressed perceptions and experiences of teenagers with CHD. Teenagers expressed positive experiences and stated that they had developed personal growth and better coping strategies as a result of CHD. There were also participants who verbalise neutral reactions to having CHD. These participants might be considered as being resilient to the adversities associated with CHD. Finally there were participants who expressed very negative reactions to CHD and who described poor coping strategies. Teenagers were not easily classified as positively, neutrally or negatively affected by CHD as coping responses tended to fluctuate within the interviews.

The third question we wanted to answer was: “Do parents’ responses fit the AAD trauma model?” Parents of both the teens and young adults made spontaneous AAD related statements. A mother of a 17-year-old participant stated: “The coping skills that I’ve been able to give to her... I probably didn’t have them myself as a child, so I think that I have learned and acquired them throughout her life.”

Parents’ statements reflected a new appreciation of their own qualities and a sense of gratitude: “I just feel very, very thankful and just lucky.”
A mother of a teenage participant indicated that she has consciously resisted being negatively affected by adversity because she prioritises her family duties, allowing her to demonstrate resilience or a neutral response:

Family and health is all that is important, always will be... If I don’t let some of the small stuff wash over me I don’t have energy for the big stuff… I’m determined to be positive.

In comparison, the mother of the 19-year-old participant previously noted to have been negatively affected by his experience of CHD, stated that her personal growth was limited by the demands of caring for a sick child:

I have the emotional strength I need for [my children], I don’t know if I have the emotional strength to put up with someone else, you would have to give something more and I don’t think I have that in me…parenting was emotionally draining… It would be fair to say that I didn’t develop myself outside of the maternal role.

Thus, parental responses to CHD could be easily coded as positive, neutral and negative in accordance to the AAD model. Interestingly, there were clear parallels between parents and their child’s level of resilience and personal development due to adversity.

The fourth question we set out to answer was: “Which themes help inform why some participants are positively affected, negatively affected or resilient to their CHD related experiences?” This section will explore three themes that appeared to distinguish teenagers, young adults and parents in the degree to which they experienced adversity affected development. These three themes were acceptance, sense of coherence and a sense of connectedness. Degree of acceptance, sense of coherence and sense of connectedness indicated level of positive personal outcomes due to living with CHD versus negative psychological consequences – opposite responses that are both accommodated by the AAD model of trauma. Each construct was identified to be a positive buffer from adversity.

**Theme 1: Acceptance**

The young adults who presented as coping well were able to describe cognitive frameworks for acknowledging, accepting and dealing with health-related crises, fears and worries. For example, a 34-year-old female participant’s interview was characterised by equal consideration and acceptance of the positive, neutral and negative aspects of her condition, which she referred to as ‘the good, the bad and the ugly’:

I could drop dead at any moment, but I suppose as could anyone else...I think a lot of people are worse off than me…finding out I had the arrhythmia problem and what that meant was frightening. It meant that more than anything that I am more vulnerable to dropping dead in front of [my son]. But hopefully I can live as normal a life as I can. I feel happy and secure in the future; I just put one foot in front of the other every day… if

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2 It is interesting that two different participants utilized this terminology, although no reference to the movie of this name or the expression were made by the interviewers. Later the researchers decided to use this term to group themes for record purposes.

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I can see my son turn thirty but I drop dead the next day then that’s fine…then I will have done more than I had have ever expected or meant to, so I’d be the happiest mum in the world.

In comparison, the 25-year-old male participant who presented as not coping had very little acceptance of his Cardiomyopathy and stated that fantasising and playing video games to avoid reality was his main coping strategy:

I still live in the past a lot of the time and I replay scenarios out in my head – like if I didn’t have the stroke…I make some fantasy world where everything is pretty good…living in reality sucks…I don’t really even know what Cardiomyopathy is.

The teens avoided reflection on the anxiety provoking aspects of their CHD, instead relying on their parents to understand their medical condition and make important health related decisions, and so they were focussed on ‘the good’ and minimised the ‘bad and the ugly’. This was presented as a coping strategy to maintain their sense of ‘being normal’. A 14-year-old participant reflected: “I’ll have a normal life; I will think about my heart more as I grow up.”

Thus these teenagers were deferring active acceptance and seeking out disease related knowledge, but they were also expressing a growing independence and confidence in their future ability to develop acceptance and informed self-responsibility: “When I was little, I used to just sit there and everyone just talked to mum and dad. But now they talk to me and make sure that I understand what is happening…it is just part of growing up. I just have to accept it and I do like it.”

All parents demonstrated acceptance of the seriousness of CHD and one stated: “Give me the good, the bad and the ugly and let me sift through it; do what I need to do with it and decide the best course of action for this kid… falling apart is not an option.”

The above quotes demonstrate an underlying attitude in many of the participants that we believe is best characterised as “acceptance”. That is, these participants appeared to acknowledge the challenges associated with CHD and then to accommodate these difficult experiences in a way where they recognised the severity of the adversity at an appropriate level (without minimising or catastrophising), as well as experiencing a fairly neutral emotional reaction to the adversity.

Theme 2: Sense of Coherence

Moons and colleagues (2006) have already identified sense of coherence as a useful concept in explaining positive reports of quality of life by adults with CHD. Indeed in our study, young adults who appeared to cope well also demonstrated SOC in their preparedness for future health complications, their gratitude for having survived surgeries and having the support of loved ones, their ability to reflect on how CHD impacts on each part of their internal and external life; their faith, hope and optimism; and their realistic future outlook. As a 35–year-old male participant simply states:

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If I anticipate bad news I’m more prepared and feel more in control. It’s a shock to hear something you are not prepared for, I mostly know how I’m going and what I need to be doing.

Within the interview transcripts from teens, there was an emerging thread of SOC. Excerpts from the 17-year-old female participant’s interview indicate that she has developed a level of mastery, given meaning to her CHD, and developed positive approaches to life plus gratitude:

I’ve done it (heart surgery) before and I can probably do it again because each time they are helping you a bit more…everybody’s been to hospital in their life …I would like to help people who do have heart problems to understand it more and how to react…to see the normal side of it and the positive side to it.

In comparison, the 19-year-old participant who was not coping well showed low SOC as his experiences were incomprehensible, intolerable, unpredictable, and unmanageable to him:

You never know when doctors are done with their tests and so you never see the light at the end of the tunnel. It’s confusing…it’s never ending… You’re not going anywhere so you give up on everything; I’ve gone through the two heart surgeries and I would personally prefer to die before I do it a third time.

All parents showed high SOC in their response style. They reported seeking out information, and voiced strong opinions that children with CHD should not be over-protected, should be given increasing independence, and prepared for challenges with appropriate information. Parents of offspring who were coping well made more spontaneous statements reflecting faith, hope and optimism, such as:

I’ve always had faith in my own ability – and [my daughter] has it too…and this is one of the reasons that she is here today. If you believe that everything is going to be okay, then you do everything in your power to make it all okay.

The thematic analysis identified a range of perceptions from teenager, young adults and parents that appeared to fit nicely with the construct of sense of coherence; that is, participants varied on a continuum of perceptions of predictability, manageability, and understanding of their experiences. In particular, participants who reported positive personal development due to experiences with CHD sensed that they could improve their chances of wellbeing and survival, and that they gave personal meaning to their suffering. Low sense of coherence was experienced as feeling out of control, confused and that suffering was meaningless and death preferable.

Theme 3: Sense of Connectedness

Sense of connectedness was reflected in terms of the bonds with family members, friends, religious and hospital communities. Feeling accepted and understood, honesty, receiving information and having an outlet to express or escape worries was valued in relationships. Feeling connected to treating medical staff was reported to be particularly
instrumental in feeling optimistic, hopeful, safe, and confident in managing the disease. One male young adult participant stated: “I’ve known my doctor since I was born; she’s like a second mother so it’s not hard to trust her. It’s helped a lot to have that continuous relationship.”

Statements made from teens about doctors and nurses included: “They know what they’re doing … and can fix you… you can always rely on them. You grew up with them and developed a trust with them.”

When it came to the parents, they made statements such as the following:

I have so much faith in (our surgeon), you place your child’s life in his hands … even though we have faith in God, the surgeon is the one that does the work at the end of the day. A lot of the nurses have been there from when our daughter was born so there is a relationship… As soon as you get here (hospital) you feel safe because they know [our daughter]… it’s a comfort… the doctors don’t lie to you which builds that important bond… you develop a level of friendship and understanding with the doctors… it’s like a second home.

**DISCUSSION**

The AAD trauma model was very useful for understanding the internal experiences of participants because their responses could be interpreted as positive, neutral or negative impacts of having CHD. Using the AAD framework for understanding trauma may assist in the management of patients and their families in clinical settings because it encourages the exploration of positive, neutral and negative impacts of trauma and states that each individual’s trauma response is unique. Using the AAD model may help professionals to avoid minimizing trauma impacts, avoid collusion with denial strategies being used by patients and families, and avoid failure to recognize and appropriately refer psychological problems to mental health specialists. Likewise, the AAD framework promotes a practice of discussing resilience and personal development, which can highlight the individual’s strengths and resources that can be built upon for optimal recovery from traumatic CHD-related experiences.

AAD may be manifested by improved assertiveness, self-esteem and sense of self-identity, calmness, compassion, motivation, passion, philosophical insights, independence, spirituality, and endless possibilities for subtle or dramatic personal evolution. Teens were more concerned with being unaffected by CHD and so presented resilient (neutral) responses more than AAD. AAD related statements were made more clearly by the adults and parents, suggesting that maturity and exposure to health-related events are prerequisites for AAD. Resilience may be an earlier developmental achievement that promotes later AAD.

Parental and offspring statements tended to mirror each other, and so where parents reinforced ‘normalcy’, coping behaviours, positive thinking and meaning making, so did their children. Interestingly, parents seemed to intuitively know that ‘being normal’ was most important for their teen’s wellbeing, and so they emphasized that their teens were normal. Indeed, it appeared that parents reinforced resilience in their teens and AAD in their adult offspring. Parents’ positive and negative responses also seemed to be influenced by their
assessments of their child’s level of adjustment, whereby parents reported feeling more optimism and mastery when their child demonstrated coping skills and positive attitudes.

Three themes or constructs may differentiate participants who had resilient and personal growth responses from participants who voiced adverse trauma responses; acceptance, sense of coherence and sense of connectedness.

Acceptance: The degree of acceptance and insight into all aspects of CHD varied across groups, with young adults who were coping well and their parents being most accepting. Teens deferred acceptance and insight into both the negative and positive implications of CHD. They instead conveyed that “It is important to be normal and I am normal!” As stated by a 16-year-old boy “It’s very important [to be seen as normal]. I wouldn’t care if I was different – one arm and one leg – as long as other people didn’t bother me”. A 14-year-old girl showed some awareness that experiencing adversity can create positive changes in self identity, but reiterated that being normal is most important: “It (CHD) will make me stronger, but it doesn’t change me – I’m just the same as all my friends”. In comparison, participants who were currently demonstrating poor coping capacity verbalised less acceptance and their language was predominantly about the negative trauma outcome that “It is important to be normal and I’m not normal!” Young adults who were coping well reported personal developments due to living with CHD and having to accept and overcome negative impacts. They commonly presented this self-empowered and pragmatic sentiment: ‘I accept the good, the bad and the ugly because I have to!’ Parents also expressed this sentiment, stating that adversity had made them more accepting and determined not to dwell on their worries, less likely to ‘sweat the small stuff’, and to be more assertive and self-confident.

Sense of Coherence: SOC and AAD appeared to be closely related and likely interdependent. Both constructs appear to rely on developmental readiness and appropriate support from others. Teens’ responses indicated emerging SOC, whereas adult patients and parents made explicit statements related to SOC. Youths may not have the necessary life experiences or the executive cognitive functioning required for recognising adverse events as opportunities for growth. Moreover, youths may value peer acceptance and immediate gratification more than the concept of personal growth. Also parents and medical staff often use ‘normalisation’ to encourage teens’ coping and ‘protect’ teens from disease related information, and so these prominent adults may be promoting resilience rather than SOC/AAD during adolescence.

Sense of Connectedness: Participants who presented with resilience, SOC and AAD had a strong sense of connectedness with peers, family and medical staff. It was beneficial for participants’ own positive outlook to perceive others as being optimistic, accepting of the condition and the patient, insightful and honest.

**IMPLICATIONS FOR TRANSITION PROGRAMS**

Firstly, the outcomes of this pilot study indicate that parents should be encouraged to model positive AAD (Adversity Activated Development) related behaviours and language to their young children. In addition to information sharing, transition programs should aim to foster acceptance of CHD, sense of coherence, and connectedness between young patients
and their parents, peers and medical staff. Acceptance-based therapies such as Acceptance and Commitment Therapy (ACT) may be important for youths to be able to develop AAD.

Information sharing should aim to increase patients’ and parents’ SOC as well as disease knowledge. Education of parents and patients should be individualised to their intellectual abilities and delivered repeatedly. It is important that parents have a clear understanding of the heart defect and future implications, and are able to convey to the child in age-appropriate messages the need to avoid complications and to maintain follow-up care that extends into adulthood. The parents of offspring who were coping well in this study reported that they shared information about the disease with their child from an early age. Although these offspring reported using denial as a strategy to promote resilience when younger, as adults they had developed SOC and AAD.

Transition programs can play a role in making AAD related behaviours and language more explicit to parents, as all parents may not be implicitly modelling AAD as well as the parents in this study. Transitioning should start at a pre-teen age with a focus on activating resilience by emphasising the normal aspects of the child’s experiences and encouraging peer relationships. However by adolescence, the meaning of CHD and both its positive and negative impacts should be discussed to activate greater SOC and personal growth. A very important theme of this study was ‘sense of connectedness with medical staff’ and so doctors and nurses should be involved in transitioning children with CHD into adulthood and also leading parents in using AAD related language, health-care staff should foster hope, knowledge, and close bonds with patients and parents.

Transition programs should target negative impacts of CHD such as patients’ fear of exclusion from peers, dependency on parents and clinicians, uncertainty regarding the future, and avoidance of relationships and occupational endeavours. Transition programs should also highlight positive implications of living with CHD such as having a sense of gratitude, reflection on personal values and priorities; connectedness to others (family, peers, medical staff), and development of internal fortitude. Peer support within transition programs can provide much needed feelings and experiences of belonging. Skills training and psycho-education has the potential to increase self-care, autonomy, goal setting and decision-making capacity. Depression, anxiety and stress that arise from poorly developed disease management skills and a lack of personal control may then be addressed. Thus transition programs should not just aim to improve attendance to the ACHD clinic and treatment compliance, but rather to improved patients’ functioning and mental health. The success of transition programs may be measured by improved clinic attendance rates, behavioural measures of compliance, assessments of knowledge and understanding of CHD, reduction in unplanned hospital admissions, improved Quality of Life self-reports, better management of psychiatric symptoms, and more effective relationships between patients and medical staff.

**CONCLUSION**

There is a growing population of adults with heart defects who, along with their families and medical practitioners, are the pioneers of new surgical and medical cardiac treatments. These adults are survivors, but more importantly many are ‘thrivers’. We suggest that in order to thrive, patients must accept their condition, give meaning to their suffering, develop
masterful coping strategies, and recognise and appreciate positive events and supportive caregivers and loved-ones. As such, we identified three constructs which we attribute as being instrumental in the formation of adversity activated development: acceptance, sense of coherence and sense of connectedness. Insights into the coping styles and attitudes of adults with CHD will greatly inform any person or professional dealing with health related trauma.

REFERENCES


Chapter 14

**CONTRIBUTION OF INTEGRATION PERSONALITY FACTOR IN HIGH STRESS MEDICAL PROCEDURES: ORGAN TRANSPLANT ADJUSTMENT**

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**ABSTRACT**

Lack of knowledge about personality factors in assessing adjustment to multifaceted and potentially traumatizing stress such as organ transplantation limits the understanding of variables contributing to treatment outcome. Stable multidimensional personality constructs such as coherence, hardness, resilience, and integration have more relevance in complex medical stress conditions than trait or transactional models. Integration’s contribution to lung transplant adjustment was assessed relative to postoperative psychological distress, appraisals of physical and psychosocial functioning, specific transplant adjustment tasks, and perceived life satisfaction. Thirty-two lung transplant recipients were assessed at candidate phase and posttransplant with Integration, age, stamina, extent of complications, and buffering effect of Integration by extent of complications as predictors of adjustment. Semi-structured narratives were included for recipient appraisals of the transplant experience. Results indicated Integration was a predictor for some of the postoperative adjustment indices, either alone or as a buffering effect, with the exception of life satisfaction. Taking into account stamina improvement, the model was a better predictor of transplant adjustment. The multidimensional Integration model can assist transplant teams with candidate selection and identification of high risk recipients for poor physical and psychological outcome.

**Keywords:** multidimensional personality integration, resilience, traumatic stress, lung transplant, adjustment

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INTRODUCTION

At one time in standard medical literature, psychological response to medical intervention was considered justified, but of limited consequence in treatment outcome. As medical and surgical treatments became more complex to address catastrophic illness, impending mortality and the high risk of pain, disability, and helplessness were prime conditions for development of traumatic stress. Knowledge of stress resistant factors that minimize risk of trauma response is vital in reducing psychiatric morbidity, poor surgical outcome, and mortality. Organ transplant is a recent surgical advancement fraught with risk and a myriad of associated physical and psychosocial stressors that can overwhelm the body and mind and be traumatic, or on the other hand promote positive psychological change.

For more than fifty years, an organ transplantation has improved health and life quality for thousands of recipients. Investigations of the psychological effects of such a near-death experience with end-stage disease followed by life enhancement after vital organ transplant began mainly in the late 1970's with psychiatric morbidity and quality of life reports after renal transplants. Success in cardiac, lung, liver, bone, and more recently, facial transplantation, followed with similar investigative foci regarding psychiatric morbidity and life quality, but with limited conceptual understanding of factors associated with good psychological outcome.

Essentially, facing organ transplant signifies that all previous medical treatments and procedures cannot halt the progression of an acute or chronic disease process. This is ‘the end of the line,’ and those who accept this challenge choose to fight for life rather than succumb to the gradual debilitation and death characteristic of a life-threatening or end-stage disease. Uncertainty colours the transplant process, while ambiguity accompanies each step from the time the person learns that no further medical intervention can control symptoms of the disease to resuming a relatively normal lifestyle after transplantation. Disbelief, fear and despair accompany the knowledge that without a new organ, one’s remaining life will be short. Those who choose transplantation face the uncertainty of a risky procedure over the certainty of death.

TRANSPLANT PROCESS AND PSYCHOLOGICAL ADJUSTMENT

Specific situational stresses, adjustment tasks, and emotional correlates characterize each phase of the process [1 -20]. Potential candidates suffer debilitating physical and emotional effects of chronic illness prior to the medical and psychosocial assessments for transplant selection. This phase is hopeful yet promotes anxiety about acceptance and the decision for or against surgery. Waiting, sometimes for several months, follows until an acceptable donor organ is available. The medical goal of the preoperative phase is to prevent further physical debilitation, while psychologically, candidates fear death, feel a lack of control and guilt about waiting for the donor’s death, and vacillate between hope and despair – a very traumatic time for the candidate and others close to them.

With notification of an available donor, candidates must manage anxiety about physical pain and potential failure of the surgery. Varying lengths of time are spent in postoperative intensive care units depending on extent of complications. Often, this is followed by a

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‘honeymoon’ period [15] when recipients perceive a ‘new lease on life’, or experience a sense of ‘rebirth’. The first organ rejection episode or infections temper the euphoria and confirm to the recipient that one set of problems or sickness may substitute for another. Drugs necessary to manage organ rejection can lead to postoperative cognitive and affective disturbances. Successful treatment of organ rejection and the side effects resolve fear and demoralization, and encourage a more realistic appraisal of the need for close medical monitoring.

Recipients gain physical strength during convalescence and awareness that the new organ replaced a diseased one. Fantasies and questions about the donor’s characteristics and cause of death arise. Drug and exercise regimes are necessary along with medical tests and boring hospital routines to maintain the transplanted organ. Side effects from the immunosuppressant drugs change body proportions, emotions, and present other symptoms. The possibility of organ rejection, infection and medical complications due to immunosuppression are a constant medical management focus. Trusting the viability of the organ is a major psychological task.

With discharge, recipients leave the protective environment of the hospital and must accommodate toward greater independence with a shift from the sick role to resuming previous family, marital and social responsibilities. Such changes can cause strain for both recipients and their social network, and may exacerbate discord or pre-existing problems. A ‘normalizing’ process occurs as routines in social, work, and recreational spheres recommence. The identity of the ‘transplant survivor’ and consistent medical monitoring by transplant teams reinforce the uniqueness of their situation, while the deaths of other candidates or recipients reminds them of the fragile nature of their situation. A precarious balance exists; recipients must recognize permanent vulnerability and the unpredictability associated with the threat of death, organ rejection, infections and complications, while maintaining hope, optimism, and a sense of stability. Medical complications disrupt the fantasy that life will return to normal, and psychological adjustment involves designing the dream about the future [9]. Unpredictability and the growing realization that life can end suddenly warrant a redefinition of ‘normal’ and a new perception and lifestyle that consider personal vulnerability and the possibility of organ failure. Recognition of the risks and vulnerability management must balance a second chance at pursuing life goals. It is a major psychological integration process that involves both the acknowledgment and denial of reality. The outcome of this process is living with continual unpredictability and establishing the realization that stability is not assumed as normal.

Psychologically, recipients face the task of adjusting to uncertainty and vulnerability while striving toward a sense of stability in the context of incorporating parts of another human being. Since organ transplantation signifies impending death, candidates and recipients must manage the psychological impact of the wait period, debilitating disease symptoms, as well as medical demands. Specific psychological adjustment challenges are managing the fear of dying, threats to bodily integrity, physical discomfort, emotional disequilibrium, adapting to disability, loss of control and dependency on others, inability to fulfill social roles, change in body and self concept, and modification of life plans. Changes associated with end-stage physical disability and the threats to self concept and social roles can have a direct negative impact on morale and social functioning, and indirectly, on the course of the illness [21].

Adaptation warrants psychological capacities to tolerate, compensate, and adjust to the negative realities of the illness and transplant, maintain emotional equilibrium through the
process, manage concrete life tasks and treatment regimes, and maintain a satisfactory self image and sense of worth in the context of the new reality. The complexity of demands, specific to the transplant process, can overwhelm and extract a tremendous psychological toll. Understanding factors that enhance threat management and psychological adaptation in facing the wait for, and actual transplant adjustment, is critical in context of this life saving surgery.

**Clinical and Research Findings**

Elucidating psychological effects is necessary to assess the overall risks and benefits for recipients. Early publications [1-16] of psychological effects were mainly anecdotal with psychodynamic emphasis of recipient success incorporating the assimilated organ and donor characteristics, and body image changes. For instance, Muslin [1] discussed narcissistic identification with the diseased organ and defective self representation that changed to a new self image by merging the new organ with other precepts of the total body. Understanding the manner of the new organ’s acceptance and effect on body image was central to understanding recipient psychological reaction to the graft [5]. Castelnuovo-Tedesco [4] stated adding warrants a different dynamic than removing a body part, and this fundamental difference accounted for the post surgery higher occurrence than normal of serious emotional disturbance, since the new organ is not psychologically inert but has meaning to the recipient.

Studies of psychiatric morbidity and quality of life began to emerge in the 1980’s and research became more focused over the following decades. As recipient survival improved and organ availability became scare, appropriate candidate selection and increasing survival rates emerged as central concerns of transplant programs. The paucity of psychological information and studies provided limited guidance to transplant teams, and understanding of the transplant process and adjustment was mainly through accumulated clinical observation and experience.

During the late 1980's and early 1990's, The Toronto Hospital’s Lung Transplant Program in Canada was the primary site for single and double lung transplants in North America [19]. The increasing survival rate provided an opportunity to observe recipients’ physical and psychosocial adjustment post transplant. In this clinical setting, qualitative differences were noted across recipients’ overall adjustment, and their personal appraisals of the waiting, post surgery, and transplant outcome.

Recipient reports of perceived changes in sense of self were noted in comments about the psychological benefits of the procedure. Some indicated that the benefits were mainly freedom and flexibility in functional activities after transplant, but for some, differences were identified in attitudes such as a willingness to experiment more with life’s opportunities, gratitude for each day lived, less worry and anxiety about life’s problems, greater sensitivity toward others’ feelings, and an expansion of self toward more altruistic goals. Conversely, negative descriptions were verbalized in dissatisfaction with body changes; desire to avoid other recipients to reduce reminders of the sick role, and perception that others, and not the recipient, changed after transplant. Differences were noted in recipient comments regarding incorporation of the new organ such as feeling the graft was part of ‘myself,’ appreciation of and interest to know the donor, and desire to take care of the organ like an “adopted child”. Others had negative perceptions about the grafted organ, ambivalence toward the donor, or
displayed affect constriction regarding body changes and the donor. One woman expressed fear that the organ might reject her.

For some, vulnerability was acknowledged while for others, denial or anxious concerns about survival, was expressed openly. Perception of inner strength, realistic appraisal of risks and benefits of surgery, and problem-solving and affect regulation strategies were associated with a broad and varied repertoire in maintaining vulnerability within manageable limits. Some recipients indicated feeling less control of their lives and limitations in others’ understandings of the tasks and emotional burdens associated with transplant. Most recipients articulated clear reasons for staying alive and improving life quality. While some emphasized improved functional capacities, others indicated gains and losses concerning deeper interpersonal connections. Differences in causal attribution of illness meaning and recovery were evident with some suggesting intervention by a powerful other, while others had richly demarcated values or life philosophy that they desired to live out behaviourally.

Clearly, replacing a defective organ and facing death resulted in powerful psychological changes, both adaptive and maladaptive, with some recipients developing psychiatric symptoms. As previous investigations were mainly anecdotal, reported psychiatric morbidity, or quality of life studies, no specific theoretical orientation was proposed to account for the variability of psychological response to the transplant process. With such a lengthy stress-filled process and expensive medical procedure, a conceptual model was important to guide assessment teams with candidate selection and identification of high risk individuals for psychiatric complications or psychosocial maladaptation.

Ability to predict post operative psychological adjustment was considered vital to recipient survival and life quality, but also for the viability of organ transplant programs. In the transplant literature of that time, no studies addressed psychological outcome from a conceptual or predictive focus. The next step was to undertake an investigation of psychological factors within a conceptual model that accounted for noted differences in coping and adjustment to the transplant process.

**Coping and Adjustment Models**

An extensive history of coping and stress literature existed at the time with particular attention being given to which coping behaviours facilitated adjustment in chronic illness [21]. A primary controversy concerned behavioural consistency and whether coping behaviours reflected underlying traits, that is, behaviour consistent across a variety of situations, or reflected continual, changing transactions between the person and the situation. Trait models assume that stable dispositions govern behaviour across situations, and are separate from individual context. A broad, unidimensional construct that failed to consider complexity of evolving demands, motivations and interpretations associated with life threat, limited understanding of coping and adaptation in the transplant context.

A second option was the ‘ways of coping’ and transactional process models [22] that concentrated on descriptors of coping behaviours and their consequences as well as individual cognitive appraisals of situations. Appraisals evaluating the nature of the stressful encounters, and behavioural strategies, such as problem-solving and emotion mechanisms, were implemented to maintain a sense of mastery, affect regulation, and psychological equilibrium. The methodological challenges of this model were the difficulties in monitoring responses in

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complex situations, resulting in descriptions of behaviours, but limited predictive power in relation to general adaptive processes.

A third proposition was the expansion of behavioural consistency beyond the trait model to include transactional characteristics. Termed ‘interactionism’ [23], a major postulate of this model was that behaviour is a function of a continuous, bidirectional process between an intentional, active agent and the situation. Mediating variables, such as emotion, cognition, motivation, and meaning, are primary determinants of behaviour. Although lower in consistency across differing situations, behaviour is predictable without the unidimensionality proposed by traditional trait theorists. This predictable variation was termed ‘coherence’ [24], which implied an idiographic pattern of stable and changing reactions across situations. Stability of this pattern of cognitive, emotion-focussed and action elements was the basis for explaining individual behaviour, consistent in a global sense but variable in relation to specific stressors.

Behavioural coherence implied that consistent cognitive, emotional, and action elements were activated in coping with multidimensional stressors. Viewed from a developmental and cognitive social learning perspective, specific psychological dispositions, patterns of interpretation and coping competencies are applied, which in total, represent a coherent individual profile of thoughts, emotions and behaviours about how persons function in stressful situations. Contained within these profiles are unique strengths and vulnerabilities that are major determinants of coping and adaptation to specific or groups of stressors. Successful and repeated mastery of stressful encounters reinforce previous conceptions, coping behaviours and unique strengths. A perceived pattern of personal effectiveness thus becomes a consistent individual interpretation. Conversely, limited mastery, in varied stressful encounters, reinforces perceived ineffectiveness and a pattern of vulnerabilities and poor coping behaviours. Effectively managed stress results in positive outcomes and appraisals of negative or ambiguous situations. Competence reinforces the perception that personal and social resources are adequate to meet environmental demands. These appraisal processes and profile of resources and vulnerabilities are major determinants in both short and long term adaptation to chronic stressors.

With multifaceted stressors such as chronic illness or life threat, a profile of perceived competence contributes positively to the adaptation process. Individual appraisals emphasize capability, competence and access to resources necessary to deal with threats, ambiguities, and the required changes necessary to cope with life threatening health conditions. Conversely, a profile of perceived ineffectiveness, negative expectancies, and poor coping behaviours sustains psychological vulnerabilities, and may contribute negatively to the disease course. Such vulnerabilities and negative expectancies can result in psychological disequilibrium with distressed emotions, inhibition of a positive self image and satisfying social relationships, and interfere with coping and morale, ability to manage instrumental tasks, and erode one’s sense of personal meaning.

**Multidimensional Constructs**

A profile of competences implied a multidimensional or higher order construct with individual consistency across situations that develop in relation to successful transactions with stressful situations and perceived ability to use internal and external resources. In the
vernacular, ‘survivor’ is a term that often describes successful coping and adaptation, and was the attention of anecdotal reports and investigations. With extreme stress, Frankl [25] and Eitinger [26] defined adaptive qualities associated with survival and maintaining personal meaning as humour, spiritual freedom, independence of mind, perceived freedom to choose attitudes and plan actions, demonstrated interest in others’ problems, love and compassion, upholding moral values, an attitude of perceived challenge, and a search for meaning in suffering.

Perceived challenge, along with commitment and control, were components of ‘hardiness’ that mediated the stress-illness relationship to maintain physical health [27]. Antonovsky’s [28] global ‘Sense of Coherence’ contained core elements of comprehensibility, manageability and meaningfulness, and were stress resistant resources associated with salutogenesis. Such psychological stress-resistance factors had conceptual similarities to ‘self efficacy’ [29], ‘ego resiliency’ [30], ‘stamina’ [31], ‘stress-resistant children’ [32], ‘resilient personality’ [33], and ‘dispositional optimism’ [34], and more recently, resilience and resourcefulness [35-37]. Whether from a psychoanalytic, existential, social learning, psychobiological, or clinical perspective, the function of these multidimensional cognitive, affect, and action elements is to maintain psychological equilibrium or personality integration. The central thesis of the personality integrity profile is an overall ego strength or vitality to engage living in positive and meaningful ways. This robustness, or lack of it, is a determinant in health and mediates the stress-illness relationship. Such a pattern suggests longstanding personality cohesiveness and coping resourcefulness with confidence about managing the tensions of living.

 Eleven specific dimensions of the coherent or integrated personality were extrapolated from a review of central elements of these constructs. The profile of behaviours consisted of:

- positive self esteem
- perceives experience constructively
- system of values or philosophy
- active approach to life’s problems
- perceived control or efficacy
- sense of commitment
- openness and flexibility to change
- balance of demands and resources
- perceived consistency
- accurate reality testing
- social connection

These qualities are protective against the cumulative effects of stress, and conceptually, represent a multidimensional resilience construct with applicability to understanding individual responses to stress. A key factor in stress response is the ability to retain a balanced or new state of psychological equilibrium through the application of these elements. Life change increases the possibility of inner destabilization, which if extended, can lead to vulnerability for unsuccessful resolution of future disruptions, whether stress engendered or related to the normal transitions of the life cycle. These disruptions have potential also for reintegration at new levels of psychological functioning, and can enhance the capacity to
Integrated Personality and Transplant Adjustment

Constructs such as hardiness, coherence and resilience were theoretically relevant to investigations of adjustment to health and illness [21], and had greater explanatory power in complex change or stress than molecular models characteristic of trait or transactional models. Such constructs had applicability in understanding how such personality factors contributed to the psychological challenges associated with the multifaceted stress of organ transplant. The central psychological task facing recipients was maintenance of psychological equilibrium and integration in the face of continual unpredictability and vulnerability. Clinical findings indicated that the transplant process influenced intrapsychic functioning, interpersonal relations, social roles and responsibilities, future plans, and life meaning. The question raised was whether recipients who possessed higher levels of personality cohesiveness or integration and coping resourcefulness managed the changes and challenges of transplant better and demonstrated better post surgery adjustment.

A prospective study was undertaken to investigate whether higher levels of integration predicted psychosocial and physical outcomes after lung transplant. Integration was defined as a higher-order construct representing a compilation of healthy psychological characteristics that play a role in coping with multifaceted stress and promote psychosocial adjustment in organ transplantation.

Thirty-two lung transplant recipients admitted to The Toronto Hospital’s Lung Transplant Program, across a 4 year period, were asked to participate in the study. These individuals met the program criteria of suffering from end-stage lung disease with a life expectancy of less than 18 months. They represented 67 percent of the total surviving recipients registered in the program. Reasons for the remaining recipients not participating were fragile medical status, living in distant parts of North America, and attrition by death. Only 26 of the 32 recipients completed the preoperative psychological measures because six were transplanted prior to participation in the required psychosocial assessment.

Measures were part of the clinical assessment for candidate selection. Candidate battery (T1) included the California Psychological Inventory, Basic Personality Inventory, and Sickness Impact Profile as well as a physical measure, the 6-Minute Walk Test. Recipients completed the same battery post transplant (T2) with the addition of The General Index of Wellbeing, The Transplant Adjustment Scale, and a semi-structured interview conducted approximately four months to four years after transplant. A minimum of 16 months lapsed between pre and post transplant administrations of the psychological measures to recipients.

Personality Integration was measured by the Vector 3 Sense of Integration (SI) subscale of the California Psychological Inventory (CPI) [38], a revised 462-item personality inventory that measured a broad range of characteristics of personal and social relevance in normal adults. The revised version included three higher-order factors labelled Vector scales that assess the themes of Internality/Externality, Norm-favouring/questioning, and Sense of Integration. The SI Vector contained 58 of the total CPI item pool with higher scorers being relatively free of neurotic trends and conflicts; they were modest, mature, insightful and...
optimistic, had a wide range of interest, felt themselves capable and able to cope with life
stress, and were reasonably fulfilled and actualized. Lower scorers were unsure of and
dissatisfied with themselves, uncomfortable with uncertainty and complexity, had a narrow
range of interests, felt themselves lacking in resolve and vulnerable to life’s traumas, and
were not at all fulfilled or actualized. SI was not correlated with measures of intelligence, but
moderately correlated with measures of emotional stability, trust, objectivity, friendliness, ego
strength, ego resilience, autonomy, low anxiety and altruism. Moderate negative correlations
were found with apprehensiveness and self-reproaching attitude, frustration, neuroticism,
practical outlook and non-intellectual disposition, and locus of control.

The SI variable was a higher-order personality construct measuring differential
psychological strength and resilience that was potentially protective in coping with the
transplant process, and associated with adaptive coping behaviours and fewer psychiatric
complications.

Psychological distress and psychopathology were measured by the Basic Personality
Inventory [39] which consisted of 12 intrapsychic and interpersonal subscales with higher
scores indicating a greater degree of psychopathology. The BPI was used in its entirety to
assess intrapsychic and interpersonal change on all subscales pre to post transplant, and as a
measure of intrapsychic adjustment. The Psychological Distress (PDis) score was obtained by
averaging scores on scales representative of self perception and intrapsychic distress. The
subscales were Depression, Anxiety, Persecutory Ideas, Social Introversion, and Self-
deception.

The Sickness Impact Profile (SIP) [40] was a 136-item self assessment instrument
measuring effects of illness on physical and psychosocial functioning by indicating
dysfunctional health-related behaviours in 12 activity areas. Scores were obtained for three
clusters measuring Independent Behaviours, Physical (PD) and Psychosocial (PsD)
functioning, and a Total (Tot) score. Independent category was sleep and rest, eating, work,
home management, and recreation. The physical category included ambulation, mobility, and
body care and movement, while the psychosocial domain was social interaction, alertness,
emotional behaviour and communication. PD and PsD scores were used as measures of
perceived physical and psychosocial impact of illness on functioning with higher scores
indicative of more dysfunction.

Regarding physical measures, physical energy and medical complications were deemed
as stamina and stress factors that contribute to perceptions of physical functioning. Two
physical measures were used - The 6-Minute Walk Test [41] (Walk) and Extent of
Complications (Comp) experienced by recipients. The former measured the walking distance
covered by recipients in six minutes and corresponded more closely to the demands of
everyday activity than ergometer exercises or pulmonary function tests. Since more
complications result in more stress that influence physical and psychological functioning,
extent of complications was garnered from hospital records and calculated using the number
of hospital days excluding routine post operative assessment admissions in relation to time
since transplant. Post operative subjective life quality was measured by The General Index of
Wellbeing (GIW) [42], a global assessment of perceived life satisfaction which has a single
item question about overall life satisfaction and a semantic differential scale of relevant
emotions. Since no specific scale existed specifically for transplant populations, the
Transplant Adjustment Scale (TAS) [43] was developed based on a rational approach to test
construction with items developed from clinical issues and literature review. It consisted of 26

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items with a 5-point Likert response scale about attitudes and behaviours specific to the physical and emotional demands of organ transplantation. Higher scores represented positive adjustment, while less adjusted recipients endorsed worry about continuing physical and social limitations, a restricted approach to living, problems in adapting to medical requirements, guilt about dependency on others, inability to accept body changes, rumination about solvency of the graft, failure to incorporate changes into self concept leading to feelings of vulnerability, and a negative appraisal of transplant outcome. Questions about recipient perception of the transplant experience were posed in a semi-structured interview that clustered into three main thematic categories: Change in Self and Body Schema, Vulnerability Management, and Life Meaning. In order to systematically assess qualitative responses, 5 of the highest and lowest SI scorer interviews were examined by psychologist raters who judged the taped interviews according to the 11 Integration dimensions and obtained an overall qualitative Integration score. Inter-rater reliability was 0.84 ($p = .001$).

**RESULTS**

Tables 1 and 2 summarize sociodemographic and disease characteristics of the recipients.

**Table 1. Sociodemographic Data at Transplant ($N = 32$)**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>(%)</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>(56)</td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
<td>(44)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
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</tr>
<tr>
<td>Mean</td>
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<td></td>
</tr>
<tr>
<td>Range</td>
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<td><strong>Marital Status</strong></td>
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<tr>
<td>Single</td>
<td>6</td>
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</tr>
<tr>
<td>Married</td>
<td>23</td>
<td>(71.9)</td>
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<tr>
<td>Separated/Divorced</td>
<td>2</td>
<td>(6.3)</td>
</tr>
<tr>
<td>Widow</td>
<td>1</td>
<td>(3.1)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>3</td>
<td>(9.4)</td>
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<tr>
<td>Secondary</td>
<td>22</td>
<td>(68.7)</td>
</tr>
<tr>
<td>College</td>
<td>2</td>
<td>(6.2)</td>
</tr>
<tr>
<td>University</td>
<td>5</td>
<td>(15)</td>
</tr>
<tr>
<td>Post-graduate</td>
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<tr>
<td><strong>Occupation</strong></td>
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</tr>
<tr>
<td>Managerial/Professional</td>
<td>4</td>
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<tr>
<td>Technical</td>
<td>7</td>
<td>(21.9)</td>
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<tr>
<td>Clerical</td>
<td>3</td>
<td>(9.4)</td>
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<tr>
<td>Sales/Service</td>
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<td>(15.6)</td>
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<tr>
<td>Student</td>
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<td>(3.1)</td>
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<tr>
<td>Homemaker</td>
<td>7</td>
<td>(21.9)</td>
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<tr>
<td>Unemployed</td>
<td>4</td>
<td>(12.5)</td>
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Table 2. Diagnosis & Transplant Outcome (N = 32)

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<tr>
<th>Disease Category</th>
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<tbody>
<tr>
<td>Alpha 1 Antitrypsin Deficiency</td>
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<tr>
<td>Bronchiecasis</td>
<td>2</td>
<td>(6.3)</td>
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<tr>
<td>Bronchiolitis Obliterans</td>
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<td>(3.1)</td>
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<tr>
<td>Cystic Fibrosis</td>
<td>8</td>
<td>(25.0)</td>
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<tr>
<td>Emphysema</td>
<td>5</td>
<td>(15.6)</td>
</tr>
<tr>
<td>Pulmonary Fibrosis</td>
<td>9</td>
<td>(28.1)</td>
</tr>
<tr>
<td>Pulmonary Hypertension</td>
<td>3</td>
<td>(9.4)</td>
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<table>
<thead>
<tr>
<th>Transplant Type</th>
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<tr>
<td>Single</td>
<td>15</td>
<td>(46.9)</td>
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<tr>
<td>Double</td>
<td>17</td>
<td>(53.1)</td>
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<th>Employment After Transplant</th>
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<tr>
<td>Part Time</td>
<td>4</td>
<td>(12.5)</td>
</tr>
<tr>
<td>Full Time</td>
<td>4</td>
<td>(12.5)</td>
</tr>
<tr>
<td>Not employed</td>
<td>24</td>
<td>(75.0)</td>
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<th>Return to Previous Occupation</th>
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<tr>
<td>Yes (including homemakers)</td>
<td>12</td>
<td>(37.5)</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>(62.5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons for Not Working</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Working</td>
<td>8</td>
<td>(25.0)</td>
</tr>
<tr>
<td>Medical</td>
<td>7</td>
<td>(21.9)</td>
</tr>
<tr>
<td>Not Ready</td>
<td>14</td>
<td>(43.7)</td>
</tr>
<tr>
<td>Previous Job Unsuitable</td>
<td>3</td>
<td>(9.4)</td>
</tr>
</tbody>
</table>

Table 3 is pre and postoperative SI and the BPI subscale scores along with PDis score. Candidates (T1) had an SI score within the normative sample range, as were the BPI scores except for a trend toward defensiveness and repression of unpleasant thoughts and emotions, and preoccupation with somatic concerns. Test for gender differences indicated that females were more likely to express conflict in interpersonal relationships and more deviant attitudes, and have more negative appraisals of self. The Candidate 6-Minute Walk Test (392.9 metres) was significantly different compared to normal subjects (683 metres) (p = .05). Group mean SIP scores indicated elevated levels of reported disease impact that healthy subjects would not be expected to endorse. No gender differences were evident on Candidate Walk and SIP subscales. Tables 3 and 4 report change from pre (T1) to post transplant (T2). The SI personality dimension was stable over time with T1 to T2 score consistent (p = .80) and within normative sample values, while significant change was found in PDis (p = .01). Lower BPI scores on Hypochondriasis and Depression occurred after transplant. Improvement in physical performance (Walk) occurred (651.7 metres) and was within the range of healthy controls. The transplant produced less reported dysfunctional health-related behaviours on PD and PsD with the majority of functioning improved. Hierarchical regression models assessed SI relative to psychological distress, transplant adjustment, wellbeing, and perceived physical and psychosocial functioning. The small sample size restricted the number of predictor variables entered including tests for their interaction effects. Pre and post transplant models were tested separately due to differences in pre and post sample size which also imposed limitations for including pre to post change scores.
Table 3. Mean Change Pre & Postoperative Integration, Basic Personality Inventory, Psychological Distress

<table>
<thead>
<tr>
<th></th>
<th>T¹ Pre Mean</th>
<th>sd</th>
<th>T² Post Mean</th>
<th>sd</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>California Personality Inventory (CPI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration (SI)</td>
<td>49.1</td>
<td>7.6</td>
<td>50.0</td>
<td>7.4</td>
<td>0.80</td>
</tr>
<tr>
<td>Psychological Distress (PDis)</td>
<td>47.8</td>
<td>5.6</td>
<td>44.6</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td><strong>Basic Personality Inventory (BPI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypochondriasis (Hyp)</td>
<td>56.4</td>
<td>8.3</td>
<td>49.5</td>
<td>9.6</td>
<td>12.63</td>
</tr>
<tr>
<td>Depression (Dep)</td>
<td>52.6</td>
<td>10.5</td>
<td>45.2</td>
<td>9.2</td>
<td>23.37</td>
</tr>
<tr>
<td>Denial (Den)</td>
<td>57.8</td>
<td>12.1</td>
<td>56.5</td>
<td>13.4</td>
<td>0.24</td>
</tr>
<tr>
<td>Interpersonal Problems (IPs)</td>
<td>44.1</td>
<td>10.0</td>
<td>42.5</td>
<td>10.7</td>
<td>0.91</td>
</tr>
<tr>
<td>Alienation (Aln)</td>
<td>41.9</td>
<td>6.1</td>
<td>42.9</td>
<td>8.0</td>
<td>0.41</td>
</tr>
<tr>
<td>Persecutory Ideas (Pid)</td>
<td>45.0</td>
<td>7.6</td>
<td>44.2</td>
<td>6.7</td>
<td>1.04</td>
</tr>
<tr>
<td>Anxiety (Axy)</td>
<td>44.4</td>
<td>7.9</td>
<td>41.3</td>
<td>7.0</td>
<td>2.75</td>
</tr>
<tr>
<td>Thinking Disorder (ThD)</td>
<td>44.5</td>
<td>4.3</td>
<td>44.1</td>
<td>5.4</td>
<td>1.74</td>
</tr>
<tr>
<td>Impulse Expression (ImE)</td>
<td>40.7</td>
<td>8.3</td>
<td>44.1</td>
<td>5.4</td>
<td>0.08</td>
</tr>
<tr>
<td>Social Introversion (Sol)</td>
<td>48.7</td>
<td>7.6</td>
<td>49.2</td>
<td>7.6</td>
<td>0.18</td>
</tr>
<tr>
<td>Self Depreciation (SDp)</td>
<td>49.0</td>
<td>6.0</td>
<td>47.9</td>
<td>6.0</td>
<td>0.69</td>
</tr>
<tr>
<td>Deviation (Dev)</td>
<td>42.7</td>
<td>7.4</td>
<td>41.1</td>
<td>8.0</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Note: ² p = .01; ³ p = .001

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Table 4. Mean Change in Pre & Postoperative 6-Minute Walk, Sickness Impact Profile

<table>
<thead>
<tr>
<th></th>
<th>T¹ Mean</th>
<th>sd</th>
<th>T² Mean</th>
<th>sd</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Minute Walk (metres)</td>
<td>392.9</td>
<td>171.9</td>
<td>651.7</td>
<td>120.7</td>
<td>-9.07³</td>
</tr>
</tbody>
</table>

Sickness Impact Profile

<table>
<thead>
<tr>
<th>Subscales</th>
<th>T¹ Mean</th>
<th>sd</th>
<th>T² Mean</th>
<th>sd</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>11.4</td>
<td>5.3</td>
<td>2.1</td>
<td>3.8</td>
<td>7.84³</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>18.2</td>
<td>17.2</td>
<td>5.8</td>
<td>6.3</td>
<td>3.93²</td>
</tr>
</tbody>
</table>

Subscales

- Sleep & Rest: 25.6, 19.0
- Emotional Behaviour: 14.6, 20.6
- Body Care & Movement: 5.5, 5.1
- Home Management: 35.1, 20.5
- Mobility: 14.5, 11.3
- Social Interaction: 20.0, 16.9
- Ambulation: 22.8, 8.3
- Alertness (n=11): 9.1, 13.2
- Communications (n=11): 5.4, 9.2
- Work (n=11): 61.4, 28.3
- Recreation (n=11): 39.0, 27.6
- Eating Habits: 1.5, 2.6

Note: ¹ p < .05; ² p < .01; ³ p < .001

A logical strategy was used with Age and physical stamina (Walk) being entered before the influence of the SI personality variable was measured. Controlling for these two variables removed the influence of physical characteristics, leaving a clearer understanding of the contribution of SI personality integration or resilience to the adjustment indices. T² Comp was entered in the regression after SI, since the SI personality variable was stable across time and a precursor to situational stress factor of complications post transplant.

The SI X Comp was entered because of SI’s possible buffering effect on stress.

The pre-transplant model (Table 5) was significant relative to PDis (p = .009) with SI being the main predictor, but was a poor predictor of PD (p = .73) and PsD (p = .16).

Table 6 shows that with post transplant the inclusion of the SI and Comp interaction improved R² to 54% for PDis (p = .005) with the main effects for Age contributing 20% (p = .01) and only 9% (p = .07) for SI indicating that lower Integrated or resilient SI scorers with frequent or low complications reported higher psychological distress relative to higher SI scorers, with frequent or low complications having the least psychological distress.

Thus, higher SI or resilience buffered the effects of complications and was associated with less psychological distress overall.
Table 5. T¹ Multiple regression analysis for psychological distress, physical dysfunction, psychosocial dysfunction variables

<table>
<thead>
<tr>
<th>Outcome variables</th>
<th>PDis ($R^2$)</th>
<th>PD ($R^2$)</th>
<th>PsD ($R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.02</td>
<td>.04</td>
<td>.06</td>
</tr>
<tr>
<td>T¹Walk</td>
<td>.00</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Integration</td>
<td>.39³</td>
<td>.01</td>
<td>.15¹</td>
</tr>
</tbody>
</table>

Note: ¹ $p=.05$; ² $p=.01$; ³ $p=.001$

Table 6. T² Multiple regression analysis for psychological distress, physical dysfunction, psychosocial dysfunction, transplant adjustment, wellbeing variables

<table>
<thead>
<tr>
<th>Outcome variables</th>
<th>PDis ($R^2$)</th>
<th>PD ($R^2$)</th>
<th>PsD ($R^2$)</th>
<th>TAS ($R^2$)</th>
<th>GIW ($R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.20²</td>
<td>.14</td>
<td>.06</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>T² Walk</td>
<td>.06</td>
<td>.14</td>
<td>.04</td>
<td>.18¹</td>
<td>.02</td>
</tr>
<tr>
<td>Integration (SI)</td>
<td>.09</td>
<td>.01</td>
<td>.43³</td>
<td>.09</td>
<td>.04</td>
</tr>
<tr>
<td>Complications</td>
<td>.03</td>
<td>.00</td>
<td>.06</td>
<td>.12¹</td>
<td>.15¹</td>
</tr>
<tr>
<td>SI x Complications</td>
<td>.17²</td>
<td>.02</td>
<td>.04</td>
<td>.01</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note: ¹ $p=.05$; ² $p=.01$; ³ $p=.001$

The T² model was not successful in predicting PD ($p = .09$), but was for PsD. With the latter, 43% of PsD was accounted for by the influence of SI ($p = .00$). That is, integration or resilience was the significant factor in explaining self reports of psychosocial functioning. Bivariate correlations indicated less Integration was associated with greater self reported psychosocial dysfunction.

For SIP Total (Tot), $R^2$ improved to 80% with 23% explained by Age ($p = .009$), 26% by SI ($p = .001$), and SI X Comp, 12% ($p = .002$), respectively. Younger recipients with higher Integration were less likely to report total dysfunction on the SIP measure, and the model as a whole explained dysfunction better than each subscale alone.

For TAS, the model explained 41% ($p = .01$) with the main effects for Walk and Comp of 18% ($p = .015$) and 12% ($p = .03$), respectively, with SI of 9% ($p = .8$). Both physical indices, and only marginally SI, were predictive of transplant specific adjustment with greater physical stamina and minimal complications resulting in greater adjustment, and no buffering effect from SI.

As a measure of transplant adjustment, recipients’ rating were judged according to physical stamina and extent of complications, and Integration or resilience played a marginal role only in this sample’s self reported transplant outcome.
Table 7. T² Revised multiple regression analysis for psychological distress, physical dysfunction, psychosocial dysfunction, transplant adjustment, wellbeing variables

<table>
<thead>
<tr>
<th>Outcome variables</th>
<th>Predictors</th>
<th>PDis (R²)</th>
<th>PD (R²)</th>
<th>PsD (R²)</th>
<th>TAS (R²)</th>
<th>GIW (R²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.26²</td>
<td>.12</td>
<td>.06</td>
<td>.02</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>T¹/T² Walk Change</td>
<td>.03</td>
<td>.00</td>
<td>.03</td>
<td>.16¹</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Integration (SI)</td>
<td>.08</td>
<td>.23²</td>
<td>.60³</td>
<td>.07</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Complications</td>
<td>.00</td>
<td>.05</td>
<td>.04</td>
<td>.05</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>SI x Complications</td>
<td>.23²</td>
<td>.07</td>
<td>.05</td>
<td>.13¹</td>
<td>.21¹</td>
<td></td>
</tr>
</tbody>
</table>

Note: ¹ p=.05; ² p=.01; ³ p=.001

The GIW model failed to reach significance (p = 0.15). Reconfiguration resulted in 71% (p = .00) variance explained using 0.10 as the maximum probability of F-to-remove. Selection indicated 67% was accounted for by TAS, PDis, and PD. Recipients’ wellbeing ratings were a function of less intrapsychic distress and perceived physical impairment, and coping better with transplant specific tasks.

Hypothetically, general improvement in physical stamina after transplant may account for ratings on the adjustment indices. Further, changes in bivariate correlations T¹ to T² raised questions about change in physical strength and not the personality variable, SI, as the main contributor on the indices. Thus, Table 7 summarized the revised model substituting Walk Change for Walk in pre to post change on the 6-Minute Walk Test. Predictive ability improved for PDis to 60% (p =.01) with Age and SI X Comp contributing 26% (p =.01) and 23% (p =.004), respectively. Change in physical strength was not a significant predictor for PDis; rather mainly older recipients were at risk for increased intrapsychic distress after transplant. Moreover, higher SI recipients with more complications had the least psychic distress relative to less Integration in general, and supported the relevance of SI’s overall buffering effects.

The revised model explains 47% for PD (p = .02) and 78% for PsD (p = .00) with SI contributing 23% (p =.02) and 60% (p =.00) respectively. Thus, change in stamina was not a contributing factor to psychological distress, but had more power in explaining psychological distress, and physical and psychosocial dysfunction. For TAS, 43% (p =.05) was explained with the main contributors Walk Change at 16% (p =.05), and 13% (p =.05) for the SI X Comp interaction. Improved physical stamina was a significant factor in transplant adjustment across the groups, but higher SI irrespective of high or low complications fared better overall than low SI with either high or low complications on transplant adjustment. The revised model for GIW explained 39% (p =.07) with Walk Change not being a significant contributor to wellbeing ratings. The SI X Comp interaction explained 21% (p =.02) and suggested higher SI or resilient recipients, in the context of least complications, rated wellbeing most highly. Less Integration or resilient recipients with high complications indicated the lowest wellbeing.

Including effects of better physical stamina improved predictive ability of the model, but the change in this physical indice alone, in response to transplant did not account for psychological improvement. With improved physical stamina, greater age remained a risk factor for psychological distress, along with lower levels of Integration and more complications. Personality integration or resilience alone was relevant to perceived physical

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and psychosocial functioning once recipients experienced better physical functioning. Change in physical status resulted in better adjustment to specific transplant tasks with the best adjustment being a reflection of more Integration and fewer complications.

The semi-structured interview assessed several qualitative aspects of the transplant experience that psychological measures did not capture adequately. A series of t-tests compared narratives of $SI^H$ relative to $SI^L$ regarding Change in Self and Body Schema, Vulnerability Management, and Life Meaning across the physical performance and psychological indices. Significant differences were found on the Persecutory Ideas subscale of the BPI ($p = .02$), PsD ($p = .001$), SIP Total score ($p = .01$), 6-Minute Walk Test ($p = .04$), TAS ($p = .05$) and Complications ($p = .05$). Results indicated $SI^H$ was associated with feeling less victimized by circumstance, greater reported adjustment with transplant related tasks, greater physical stamina, and fewer complications after transplant, and appraisals of less impaired physical and psychosocial functioning in general.

**DISCUSSION**

Treatment success, as measured by emotional and functional life quality and survival, is dependent upon good candidate selection and preoperative assessment of a person’s ability to cope with intense transplant stress and medical management adherence. While selection of candidates is ethically bound, the realities of treatment outcomes contribute significantly to reducing individual, social and hospital resource costs and ultimately the decision to continue hospital transplant programs. So far, studies have suggested that organ transplant is a viable treatment for end stage diseases, but in order to reduce disability and death, understanding the psychological factors associated with poorer surgical outcomes is necessary. Selection of candidates who benefit most from improved health, and provision of psychological interventions to those at risk of poorer emotional and medical outcomes is most efficient in utilizing limited organ and economic resources.

This investigation occurred at a nascent period in transplant medicine when knowledge about the psychological and psychiatric effects was rudimentary. Historically, emphasis on psychopathology softened the relevance of individual differences in understanding coping resourcefulness and maintenance of psychological functioning in the face of life threat. Integration was consistent with other theoretical higher-order constructs encompassing a broad range of intra and interpersonal behaviours that mediate negative effects of multifaceted stress, protect psychologically, and enhance stress coping, resilience and self development. Application of Integration in organ transplant reinforced the relevance of higher-order constructs in such a stressful process and its contribution in adjustment.

In transplant candidates, lower level of Integration was associated with a pattern of decline in psychological functioning with depression, interpersonal problems, alienation, persecutory thoughts, and self depreciation. Appraisals of physical and psychosocial functioning were not influenced by Integration or stamina, but possibly related to other factors such as specific organ and related cognitive impairments. In conditions of marked debilitation such as end-stage disease, specific disease effect and impaired cognitive abilities may override the influence of personality factors and are of greater relevance when
psychometric measures are used with candidates to evaluate physical and emotional functioning.

Overall for the lung transplant recipients, the outcome was positive with the exception that the majority failed to return to full or part time employment. The high percentage of non-employed recipients did not fulfil the social aim of returning the medically disabled to gainful employment, and instead, life quality enhancement was a more realistic outcome than returning recipients to being financially productive members of the community.

The fact that Integration’s stability across the debilitating and stress effects of lung disease and transplant did not change lends support to personality consistency and the importance of assessing protective psychological characteristics in candidates. Relevance of Integration’s prognostic validity in assessing psychological adjustment is identification of vulnerable candidates for psychosocial intervention. With improved physical stamina after transplant, Integration remained a predictor of the adjustment indices either alone or as a buffering effect with stress factors such as extent of complications. Lower Integration recipients have a higher vulnerability post transplant for psychological maladjustment with greater perceived physical and psychosocial dysfunction.

Once effect of physical stamina was removed, relevance of Integration in psychological maladjustment and appraisals of functioning was clearer. Stamina appeared to have greater influence in specific transplant related tasks with stamina change than Integration accounting for greater transplant adjustment. This configuration changed when Integration, combined with complications, was considered, and thus emphasized the importance of Integration’s buffering response in managing post surgical complications. If complications are a measure of medical intervention and possible mortality, Integration may contribute to longer recipient survival, not only in a current sense, but in overall resilience to vulnerability and the unpredictability of the transplant process.

Appraisals of wellbeing after surgery were not a function of Integration, but were influenced more by psychological distress, perceived physical dysfunction, and specific transplant adjustment tasks. The General Index of Wellbeing, a quality of life measure, may be sensitive to other factors and not the most efficient means of assessing intervention outcome, or benefits of one treatment over another. Since it contained both cognitive and affective dimensions, the latter in particular may be state dependent and influenced by other factors such as medications, treatment interventions, current medical status, and social support. If wellbeing and life satisfaction measures are used in outcome studies, repeated ratings across time may provide more consistency and minimize state dependent influences, because personality predispositions may shape responses on some domains, while state factors might outweigh the influence of others.

Appropriate selection of instruments is of vital importance in assessing treatment outcomes in high stress and expensive medical procedures. Limited attention has been given to pre-transplant predictors of transplant adjustment and life quality. A few studies [44-47] investigated the contribution of preoperative factors such as psychiatric diagnosis, psychosocial evaluation, and quality of life to transplant outcome. Some standardized measures were used but varied which made cross study and cross organ comparisons difficult. For instance, a prospective liver transplant study by O’Carroll et al. [47] used the Eysenck Personality Scale and the Hospital Anxiety and Depression Scale with candidates and found that elevated levels of neuroticism and anxiety pre-transplant were associated with lower quality of life at 1 year posttransplant as measured by the World Health Organizations’

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WHOQOL-100 scale. Other studies used only psychiatric diagnosis [20, 45] as predictors of transplant outcome.

Fukunishi et al. [48] found alexithymia and abnormal projective drawings were predictive of paradoxical psychiatric syndrome while anxiety and psychopathology predicted subjective sleep disturbance, self reported cardiovascular and pulmonary symptoms, and quality of life [46]. Conversely, Vermeulen et al. [49] used the Nottingham Health Profile, State-Trait Anxiety Inventory, Self-Rating Depression Scale, Karnovsky Performance Scale and Index of Wellbeing with results indicating that these measures did not predict transplant adjustment or survival at 1, 3 and 5 years, and were considered not useful in selection of lung transplant candidates.

Goetzmann et al. [44] opined that the value of using a few isolated psychosocial predictors had limited prognostic utility with respect to outcome, which may explain equivocal findings across studies, and proposed a psychological framework known as the multidimensional psychosocial vulnerability model with lung, liver and bone-marrow recipients. Psychosocial vulnerability was defined as congenital or acquired disposition toward psychosocial nonadjustment with specific cognitive, affective, and social components. Stable cognitive traits was measured by Antonovsky’s Sense of Coherence Scale and Life Orientation Test, a measure of optimism, while the Hospital Anxiety and Depression Scale and Social Support Questionnaire assessed affect and social support components. Quality of life as measured by the SF-36 Health Survey, which included a Mental Health subscale, a general life satisfaction scale (Questions of Life Satisfaction), need for counselling as measured by psychologist raters, and survival rate were assessed 12 months post surgery. The candidate variables accounted for 21 to 40% of the variance in transplant outcome variables with cognitive beliefs predicting mental health; depression and social support predicting life satisfaction; and expert-rated psychosocial functioning predicting life satisfaction and need for counselling.

The multidimensional vulnerability model had prognostic utility by considering personality-related factors such as Sense of Coherence and Optimism as determinants in recipient adjustment as similar to the Integration model. It not only suggested candidate psychological factors contributed to coping and treatment outcome, but that the predictors were not unidimensional in nature. The explanatory power of the model included cognitive, affective, and social parameters relevant to individual coping, as well as clinical evaluation of adjustment. Similarly, Goetzmann concluded that the ability to give meaning to life changes, with confidence to deal with emotions and instrumental tasks, and the ability to garner social support may promote success in psychological management of transplant stress.

Convergence occurred also between the psychometric measures and qualitative discourse about specific aspects of the transplant experience. Differences occurred between high and low Integration regarding feelings of victimization, physical stamina, adjustment to transplant specific tasks, complications, and appraisals of total physical and psychosocial functioning. Moreover, the narratives exhibited qualitative differences about vulnerability, changes in self concept, and what was now important in living. Rather than just functional improvement, more highly Integrated recipients reported an expanded sense of self through self reflection, openness, mutuality, and active interest in developing themselves and the world. Sense of self remained relatively stable through the transplant process and these recipients perceived a constructive meaning to the donor’s sacrifice. Assessing differences in high/low Integration narratives clarified the qualitative interpretations of recipients’ transplant experiences, and

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findings were consistent with adjustment behaviours that were observed in the clinical setting prior to undertaking this study.

**CONCLUSION**

Contribution of Integration as an assessment tool provided a potential means of identifying candidates at risk for psychiatric complications or psychosocial maladaptation. Although limited by a small sample size and the clinical pressures associated with conducting research in sensitive medical contexts, Integration was shown to promote success in managing intrapsychic distress and coping with traumatic stress and personal change. Early identification increases opportunities to address coping deficits such as stress management, provide support and education regarding transplant specific challenges, and cultivate a climate that maximizing treatment adherence. Less Integration should not preclude acceptance for transplant, but rather guide treatment teams with respect to individual needs and areas for psychological intervention. Assessing recipients’ cognitive appraisals of their transplant experience through clinical interview can provide as much meaningful information about their adjustment as relying on psychometric measures alone.

Many studies approached transplant adjustment from the perspective of maladaptive personality characteristics and psychiatric symptoms. Conversely, Integration represents emotional and social health and has a significant protective role in psychological management of traumatic and complex stress of organ transplantation. These findings suggest that multidimensional personality constructs such as Integration, Coherence and Resilience hold greater promise in explaining individual coping and adjustment in high stress surgical contexts, and have a role in determining allocation of scarce medical resources.

**REFERENCES**


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Chapter 15

PSYCHOSOCIAL EXPERIENCES OF CANCER: SURPASSING SURVIVAL AND RECOGNISING POSTTRAUMATIC GROWTH AS WELL AS DISTRESS

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1 National Institute of Health, Bethesda, MD, US
2 Queensland University of Technology, Australia
Griffith University, Australia

ABSTRACT

Cancer can represent a life-threatening diagnosis that may be perceived as traumatic as well as pose significantly challenging experiences associated with aggressive treatments. In addition to the documented adverse repercussions of cancer, we also outline the recent shift that has occurred in the psycho-oncology literature regarding positive life change that is commonly reported. Adopting a salutogenic framework acknowledges that the cancer experience is a dynamic psychosocial process with both negative and positive repercussions. We describe the situational and individual factors that are associated with growth and the types of positive life change that are prevalent in this context and discuss the implications of this research in a therapeutic context. This chapter presents quantitative and qualitative research that indicates the potential for personal growth from adversity, rather than just survival and return to pre-diagnosis functioning. It is important to emphasise, however, that the presence of growth and prevalence of resilience does not negate the extremely distressing nature of a cancer diagnosis for the patient and their families and the suffering that can accompany treatment regimes.

Keywords: cancer, traumatic stress, posttraumatic growth, strengths, coping

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INTRODUCTION

The publication of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) introduced the notion that a life-threatening illness can be a stressor and catalyst for Posttraumatic Stress Disorder (PTSD). Since then, a solid body of research has been established investigating the potentially traumatic nature of the post-diagnosis experience of cancer. These studies have identified a number of short and long-term life changes, resulting from a diagnosis of cancer and associated treatments, such as symptoms of Post Traumatic Stress Disorder in breast cancer survivors (e.g., Cordova et al., 2007) and both positive and negative affect in prostate cancer survivors (e.g., Thornton & Perez, 2006). In this chapter, we discuss the psychosocial response to the cancer experience and the potential for cancer-related distress. The potential for future trauma through the lasting effects of the disease and treatment, and the possibility of recurrence, can be a source of continued psychological distress. However, a diagnosis of cancer and subsequent treatments can also act as a catalyst for positive changes, which are referred to as posttraumatic growth (Tedeschi & Calhoun, 1995). Indeed, it will be explained that for growth to occur, the experience must be one that quite literally shatters previously held schemas in order to act as a catalyst for change.

What is Cancer?

Throughout this chapter, the term cancer survivor is used in line with the American Cancer Society (Smith et al., 2007) and the National Cancer Institute (2010) which defines cancer survivorship as beginning at diagnosis and continuing for the rest of his or her life. Generally, cancer is characterised by abnormal cells that multiply and spread out of control (Australian Institute of Health and Welfare [AIHW], 2007). The term cancer is used to describe a wide variety of diseases including malignant tumours, leukaemia (white blood cells), lymphoma (lymphatic system), myeloma (plasma cells), and sarcoma (bones) (Australian Bureau of Statistics [ABS], 2006). Cancers can develop in most types of cells in any part of the body, and have the ability to invade and spread to other parts of the body (metastasise) via the bloodstream or lymphatic system to create secondary cancers (AIHW, 2007). Cancers tend to interfere with normal functioning of the tissue region where cancerous cells have developed. Many cancers cannot be attributed to a specific cause; however, lifestyle (e.g., smoking, diet), exposure to environmental toxins (e.g., ultraviolet radiation or asbestos), or genetic influence have been implicated in this disease (AIHW, 2007). Cancer Council Australia (CCA; 2007) estimates that one in three cancer cases can be prevented through modifying behaviour such as smoking, sun exposure, poor diet, alcohol consumption and inadequate physical activity.

Incidence rates of cancer in developed nations are high and continue to increase. The incidence of cancer in Australia is higher than the United Kingdom and Canada, with an estimated 106,000 new diagnoses each year, but lower than the United States of America and New Zealand. However, the mortality rate is lower in Australia than any of these four countries (CCA, 2007) and has decreased by 12% over a ten year period from 1993 to 2003 (AIHW, 2007). Taken across all cancer types, 60% of people will survive five years post-
Survival rates vary dependent on factors such as the type of cancer diagnosed, stage at diagnosis, treatment protocols, additional illnesses and individual differences in biology and health behaviour. For example, the five year survival rate is 82% for prostate cancer, 84% for breast cancer, 58% for colorectal cancer, and 55% for Non-Hodgkin’s lymphoma (ABS, 2004). The prognosis for lung cancer survivors has improved over the last couple of decades, although this diagnosis remains the cancer with the lowest survival rate of 12% (ABS, 2004). Early detection and diagnosis greatly contribute to improving prognosis and increasing survival rate for each type of cancer (ABS, 2004). Despite a decreasing mortality rate, cancer remains the leading cause of deaths in countries such as Australia (ABS, 2005) and in the United States of America (American Cancer Society, 2008).

Surgery, radiotherapy, chemotherapy, and hormone therapy are common forms of treatment for these diseases (CCA, 2007). Surgery removes cancerous cells from the body and can be used in conjunction with chemotherapy or radiotherapy in order to ensure that all cells have been targeted and destroyed. Radiotherapy is usually administered externally and uses high energy radiation to destroy cells; whereas chemotherapy is the internal administration of drugs to destroy cancer cells. As some cancers rely on hormones to grow, hormone therapy suppresses hormone production through drugs or by surgically removing the hormone producing glands to control cancer growth. Also, immunotherapy has become a promising treatment that utilises and stimulates the body’s own immune system to slow down the growth of the cancer cells (O’Rourke, Johnson, Davern, See, Yang, & Bell, 2003). Some cancers are associated with aggressive treatments and have the potential to be invasive, painful, disfiguring, cause functional impairment, and disrupt daily activities (Cordova & Andrykowski, 2003). A wide range of side-effects have been recorded. For example, patients have reported nausea, vomiting, bowel problems, hair loss and scalp problems, fatigue, concentration deficits, and irritability after cancer treatment (CCA, 2007; Kangas, Henry, & Bryant, 2002). In some cases, treatment can only be used to control the disease by slowing down the proliferation of cancerous cells and extending survival time, rather than curing the disease.

The Traumatic Nature of the Cancer Experience

As a result of high incidence, yet improved survival rates, more studies are focussing on the long-term impact of diagnosis and treatment of cancer and the best ways we can provide supportive care for cancer survivors and their families (Hagedoorn, Sanderman, Bolks, Tuinstra, & Coyne, 2008). Despite the statistics showing an improved survival rate for people diagnosed with cancer, to the individual a diagnosis of cancer can represent a life-threatening situation associated with aggressive treatments, making this a highly stressful situation for all involved (Andrykowski, Brady, & Hunt, 1993; Kangas et al., 2002). The person’s journey, that begins from the moment symptoms are detected or from time of diagnosis, can initiate an entire reality previously unknown. This new reality can comprise treatment regimes, doctors, hospital visits, acute and chronic pain, and physical and mental duress.

The overwhelming nature of the cancer experience, the sense of helplessness, fear and confusion that can accompany diagnosis and treatment, can be traumatic for those diagnosed as well as for their loved ones. Studies investigating the traumatic nature of cancer have

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reported a range of emotions, most commonly reported as shock, numbness, dread, fear, anxiety, and disbelief (Thornton, 2002; Urcuyo, Boyers, Carver, & Antoni, 2005). The following quote from a breast cancer survivor exemplifies such responses as she explains her initial reaction to the confirmation of her diagnosis:

First reactions are of the most acute kind of animal panic and thoroughly old fashioned kinds of dread. (Louise1; participant in study by Morris, 2009).

In general, research consistently finds that this traumatic response to diagnosis is not uncommon. The connotations attached to a cancer diagnosis mark this time with ambiguity, and may leave the person with an unpredictable future and a new identity as a cancer survivor (Zebrack, 2000). Following diagnosis, patients commonly report a threatened locus of control, intrusive thoughts about the cancer experience, fear of recurrence, uncertainty about health and future plans, a heightened sense of their body and symptoms, and physical limitations due to the cancer and treatment. A traumatic stress response has been shown to occur for approximately 28% of cancer survivors which was irrespective of disease status or prognosis (Kangas, Henry, & Bryant, 2007). This acute stress may also predict long-term comorbid psychopathology, particularly depression.

The prevalence of stress response symptoms declines markedly within three months post-diagnosis or post-treatment (Kangas et al., 2002) and only a minority of patients meet the formal diagnostic criteria for PTSD after the initial period of post-diagnosis adjustment (Cordova & Andrykowski, 2003). A review of the literature shows that the incidence of Posttraumatic Stress Disorder (PTSD) after cancer ranges anywhere from 1% to 58% (Kangas et al., 2002). This wide variability in incidence of PTSD can be attributed to factors such as heterogeneity in cancer site, disease stage, and study methodologies. For those cancer survivors who remain distressed, a considerable number of subclinical symptoms of PTSD are commonly reported, which persist over time and are associated with a decreased quality of life (Cordova & Andrykowski, 2003). For some cancer survivors, distress and life disruption instigated by the disease and treatment may manifest into long-term psychopathology that remains even after the disease is no longer active. After treatment completion a range of possible stressors may remain, including; side-effects, altered body image, loss of bodily functions (Cordova & Andrykowski, 2003), and the enduring possibility of recurrence or secondary cancers (Black & White, 2005). The potential for future trauma can be a source of continued psychological distress including depression, anxiety, confusion, anger, and fear (e.g., Thornton, 2002; Urcuyo et al., 2005).

**SHIFTING TO A HOLISTIC PERSPECTIVE ON ADJUSTMENT TO CANCER**

Quality of life (QOL) and well-being are recognised as important health outcomes that have been traditionally used to signify positive adjustment to a diagnosis of cancer (Stanton & Revenson, 2007). While there is no concise assessment of QOL or well-being, they are often indicated through factors such as mobility, self-care, social functioning, and levels of

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1 Name changed to protect participant confidentiality

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psychological distress assessed as levels of depression, anxiety, fatigue, shock and stress (Huppert & Whittington, 2003). The traditional emphasis by health professionals and research has been to assess treatable maladaptive physical and psychological symptoms (Schaefer & Moos, 1998). A positive outcome has usually been assessed as an absence of psychological symptoms, diagnosed psychological disorder, or negative mood, and a return to premorbid levels of functioning (Brennan, 2001; Huppert & Whittington; Stanton & Revenson, 2007).

Over the past few decades, there has been a shift from this pathogenic legacy, as studies have embraced a more holistic framework of assessment. A salutogenic paradigm proposes that rather than solely focussing on disease and psychopathology, health promotion and adaptive strategies also need to be incorporated into the management of the well-being of the individual (Antonovsky, 1996). This paradigm acknowledges that stressors and illnesses are inevitable in life, but that there are factors that can influence positive outcomes and the promotion of healthy individuals (Antonovsky, 1996; Brennan, 2001; Cordova & Andrykowski, 2003; Folkman, 2008; Stanton, Revenson, & Tennen, 2007). In this view, the cancer experience can be perceived as a dynamic psychosocial process that is a catalyst for both negative and positive repercussions (Brennan, 2001).

The notion that positive life changes or personal gain can be perceived after adversity is not a new concept. Personal development through suffering has been discussed and written about through many different contexts and forums including religions, literature, psychotherapy, and philosophy. Various terms have been used to describe positive life change or personal growth after a traumatic experience, including: posttraumatic growth (Tedeschi & Calhoun, 1995), adversarial growth (Linley & Joseph, 2004), benefit finding (Affleck & Tennen, 1996), flourishing (Ryff & Singer, 1998), perceived benefits (McMillen & Fisher, 1998), positive reappraisal (Carver, Scheier, & Weintraub, 1989), thriving (O'Leary & Ickovics, 1995), and stress-related growth (Park, Cohen, & Murch, 1996). These terms are often used interchangeably in the literature, occasionally without regard to differentiating between coping processes (e.g., positive reappraisal) and an outcome of struggling with the traumatic experience (positive life change) (Tennen & Affleck, 2005). The term posttraumatic growth (PTG) will be used throughout this chapter, as this model embodies the sense that the person has truly changed and perceives that their life has improved in the aftermath of struggling with the potentially traumatising nature of their cancer experience.

**POSTTRAUMATIC GROWTH AFTER CANCER**

Within psycho-oncology, PTG investigations have predominantly been conducted with breast cancer survivors (e.g., Cordova, Cunningham, Carlson, & Andrykowski, 2001). To a lesser extent, studies have also been published with prostate cancer survivors (e.g., Thornton & Perez, 2006) and people diagnosed with haematological malignancies (e.g., Carboon, Anderson, Pollard, Szer, & Seymour, 2005). Whilst the perception of positive life changes after cancer is a common phenomenon (Stanton, Bower, & Low, 2006), PTG does not always occur and this raises the question about why one person can perceive positives after struggling with their diagnosis with cancer, while another dwells in despair, and yet another person does not ever perceive that their cancer and treatment was a major life challenge. Studies identifying situational and individual elements associated with PTG contribute to our
understanding of post-diagnosis adjustment. Recognising these factors allows us to create a supportive care environment that promotes the holistic well-being of all those affected by cancer.

The most widely accepted model of PTG has been proposed by Calhoun, Cann, and Tedeschi (2010) and gives us an overall picture of factors that contribute to the perception of positive life change. In the context of a cancer diagnosis, research has shown that the variables related to PTG are not always consistent with general trauma research. Therefore it is important to highlight the context of the study when suggesting individual or situational factors that could potentially be associated with PTG. We will now apply this model to the context of a diagnosis of cancer and highlight the demographic and disease-related factors that contribute to PTG after struggling with this disease and subsequent treatments.

**Appraisal, Coping and Rumination Factors Associated with PTG**

The basis of Calhoun et al.’s (2010) model encompasses Janoff-Bulman’s (2006) work regarding traumatic events having a seismic nature. Research shows that it is this initial appraisal of whether the cancer experience is traumatic that contributes to the psychosocial outcome (Morris & Shakespeare-Finch, 2010, August). For some, a diagnosis of cancer is perceived as a life-altering event changing the way the person views the world and/or themselves and it is this shift in life schemas that creates the potential for positive life changes (Calhoun et al., 2010). This is synonymous with Folkman’s (2008) Cognitive Theory of Stress and Coping that includes primary appraisal of the cancer and treatment and extends into secondary appraisals of the resources that are available to manage it. A diagnosis of cancer represents the potential for continued or future trauma, and coping with cancer requires a continual reappraisal and adjustment process (Zebrack, 2000). Research has shown that coping strategies that are directed toward actively dealing with the cancer and treatment are predictive of PTG (Morris, Shakespeare-Finch, & Scott, 2007; Morris, Shakespeare-Finch, & Scott, 2011); whereas coping strategies that continually avoid the stressors associated with this experience are not associated with PTG (e.g., Urcuyo et al., 2005; Widows, Jacobsen, Booth-Jones, & Fields, 2005).

Another coping strategy shown to be related to PTG is social support seeking behaviour (see Morris & Shakespeare-Finch, 2010; Thornton & Perez, 2006) and is a component of the proximate sociocultural environment described in Calhoun et al.’s (2010) PTG model. Social support can provide tangible assistance and also promote the expression of, and processing of, the variety of emotions experienced after being diagnosed with a life-threatening illness (Taylor, 2007). Social support may also assist in cognitively processing the cancer experience through improving mental functioning during adaptation (Roberts, Lepore, & Helgeson, 2006). Cognitive processing or rumination may be an essential factor contributing to PTG as the person diagnosed with cancer begins to comprehend what has happened to them and assess how their circumstances have been altered. Rumination, that is deliberate and which reflects on active problem solving and potential benefits from the adversity, is associated with perceived positive life changes (Manne, Ostroff, Winkel, Goldstein, Fox, & Grana, 2004; Morris & Shakespeare-Finch, 2010; Taku, Calhoun, Cann, & Tedeschi, 2008).

For cancer survivors, sociocultural contexts, provided by peer support programs, can play an integral role in influencing cognitive processing, appraisal of the cancer experience, and
PTG. In particular, challenge-based peer support programs such as dragon boat racing or motorcycle riding have been shown to promote shifts in cancer identity and PTG (e.g., Morris, Chambers, Campbell, Dwyer, & Dunn, 2011; Sabiston, McDonough, & Crocker, 2007). The mechanisms identified in such peer support groups that may promote PTG include physical activity, group cohesion, emotional expression, active coping, acceptance, and overcoming challenges. As expressed by a participant in one such group, the sense of personal strength promoted through taking part in this peer support activity was evident in many women:

We were all breast cancer survivors and we’re going out and we’re telling the world we can do it. We’re not sitting at home, crying or whatever. We still have a lot of life left in us. (Participant in study by Morris et al., 2011)

The sense of strength conveyed by this participant is gained through her group membership with the peer support group and feeling that she is capable of achieving great things rather than being depressed about being diagnosed with cancer. Group membership within this peer support network can also contribute to the attachment of positive meaning to the term cancer survivor and allow for the perception of many positive life changes such as personal strength and new life priorities (Morris et al., 2011).

Demographic Factors Associated with Posttraumatic Growth

The inherent wisdom gained through life experience indicates that older persons may be more likely to perceive positive life changes after experiencing trauma (Tedeschi, Park, & Calhoun, 1998). However, research with cancer survivors has tended to show an inverse relationship between age and PTG (Carboon et al., 2005; Cordova, et al., 2007; e.g., Lechner, Carver, Antoni, Weaver, & Phillips, 2006; Manne et al., 2004). These studies suggest that being confronted with a life-threatening illness at a younger age is more distressing than a diagnosis of cancer at an older age; thereby inducing a greater potential for reappraisal of life and the possibility for PTG to occur.

In a meta-analysis of PTG literature, Helgeson, Reynolds and Tomich (2006) state that studies looking at differences in expression of PTG between males and females tend to show females reporting greater PTG. Few studies have investigated gender differences specifically with cancer survivors, as PTG research with cancer survivors has predominantly been conducted with singular cancer diagnosis groups such as breast cancer or prostate cancer. Studies that have examined the effect of gender on PTG, either show no effect (e.g., Ho, Chan, & Ho, 2004; Lechner, Zakowski, Antoni, Greenhawt, Block, & Block, 2003; Widows et al., 2005) or females reporting higher levels of PTG than males (e.g., Bellizzi, 2004; Jaarsma, Pool, Sanderman, & Ranchor, 2006).

Two studies have highlighted the possibility that gender may affect particular domains of PTG. For example, in a sample of haematological cancer survivors, Carboon et al. (2005) showed that when compared to males, females perceived higher levels of PTG only in domains representing new possibilities and personal strength. A study of breast and prostate cancer survivors showed that women reported enhanced relationships with others, while the men reported higher levels of personal growth (Weaver, Llabre, Lechner, Penedo, & Antoni, Complimentary Contributor Copy
However, these results may be an artefact of cancer type rather than gender as they may be compromised by factors unique to that particular diagnosis and associated treatment (Hagedoorn et al., 2008; Weaver et al., 2008). Further studies are needed with larger samples of participants, such as those diagnosed with colorectal or haematological malignancies, to investigate the impact that both gender and cancer type may have on post-diagnosis adjustment and PTG. Specific studies related to cancer type are now discussed further.

**Disease-Related Factors Associated with PTG**

The type of cancer diagnosed may affect appraisal of the experience, coping, distress, and PTG. Research has shown that those diagnosed with breast cancer are more likely to complete treatment compared to people diagnosed with colorectal, bladder, and gastrointestinal cancers (Simmons & Lindsay, 2001). This study showed that the cancer diagnostic group difference in behaviour was not merely a function of gender, as differences remained when comparing only females across a variety of cancer types. A meta-analysis also showed that women with breast cancer are more likely than individuals diagnosed with other types of cancer to use approach coping when appraising their cancer as a challenge or threat (Franks & Roesch, 2006). Levels of distress have been shown to differ between cancer diagnostic groups (Zabora, Brintzenhofeszoc, Curbow, Hooker, & Piantadosi, 2001). This study showed that lung cancer patients exhibited the highest levels of distress across 14 types of cancer diagnoses, followed closely by brain and pancreatic cancers, suggesting that distress is related to poorer prognosis.

The type of cancer diagnosed has also been shown to impact levels of PTG, with a study of four diagnostic groups revealing higher levels of PTG for breast cancer survivors compared to haematological and colorectal cancer survivors (Morris & Shakespeare-Finch, 2011). Prostate cancer survivors had the second highest PTG mean which was not significantly different from any other cancer group. While breast cancer survivors were more likely to record higher levels of growth after diagnosis than two of the other diagnostic groups, this was also dependent on perception of trauma severity and distress levels. In other words, for breast cancer survivors to perceive higher levels of positive life change, they also had to perceive that their diagnosis was traumatic and have high levels of distress. Perhaps the increased advocacy and media coverage surrounding breast cancer that has evolved over the last five decades has resulted in an open discussion forum for this diagnostic group (Kedrowski & Sarow, 2007; MacKenzie, Chapman, McGeechan, & Holding, 2010). Such awareness may provide women diagnosed with breast cancer the opportunity to openly discuss their own experiences thus allowing for modelled behaviour from others who may have perceived positive life change and promoting the potential for their own personal growth (Weiss, 2004).

Subjective perceptions of disease severity tend to be more important than stage of disease or prognosis and it is this perception of trauma that may impact on both PTG and cancer-related distress (Cordova et al., 2007; Morris & Shakespeare-Finch, 2010; Widows et al., 2005). As discussed earlier in this chapter, a diagnosis of cancer and its treatments can be a source of much distress for both the patient and their loved ones. For most people, this distress diminishes soon after diagnosis and/or treatment completion (Kangas et al., 2002). Research has shown mixed results when investigating the association between distress and...
PTG with cancer survivors. Studies have shown no relationship (e.g., Cordova et al., 2001; Morris & Shakespeare-Finch, 2010), a positive linear relationship (Jaarsma et al., 2006), a negative linear relationship (e.g., Ho et al., 2004), and a curvilinear relationship (Lechner et al., 2006) between distress and PTG. Variation in results can partly be attributed to the conceptualisation and measurement of distress. Cancer-related distress has been indicated by PTSD symptomatology, negative coping styles, negative affect, anxiety or depression. However, there appears to be a general trend within psycho-oncology for PTG to be unrelated to PTSD symptoms, depression, and anxiety (Cordova et al., 2007; Thornton & Perez, 2006; Widows et al., 2005). This trend indicates the independence of these constructs. In other words, the reduction of distress will not promote personal growth, nor will the perception of PTG reduce cancer-related distress. Independent predictors of growth and distress also highlight that adverse and positive outcomes co-exist after a diagnosis of cancer (Morris & Shakespeare-Finch, 2010).

Types of Posttraumatic Growth after Cancer

Both qualitative and quantitative research has indicated the multidimensional nature of positive life change after a traumatic experience. A review of the PTG literature (Linley, Andrews, & Joseph, 2007) states that the most widely used measure of PTG is the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). The PTGI measures positive life changes as a multidimensional construct across five domains: personal strength; relating to others; appreciation of life; new possibilities; and spiritual change, which has been replicated multiple times in different countries (Linley et al., 2007; Morris, Shakespeare-Finch, Rieck, & Newbery, 2005; Taku, et al., 2008).

A review of the quantitative PTG research with cancer survivors suggests that reporting PTG after a diagnosis is highly prevalent and the types of life changes commonly reported by cancer survivors include strengthened relationships, increased appreciation of life, and enhanced spirituality (Stanton et al., 2006). However, recently qualitative studies have highlighted the potential underestimation of PTG in quantitative studies. For example, people affected by cancer will often report an increased sense of compassion for others and positive health-related behaviours after their diagnosis (Morris et al., 2011; Tomich & Helgeson, 2004). Yet these are PTG domains not currently assessed in existing measures of PTG. Health-related changes described by participants include an improved diet, physical fitness (sport and exercise), accessing natural therapies, increased body awareness, regular medical check-ups, meditation, adherence to treatment, and cessation of risky behaviours (e.g., smoking) (Morris et al., 2011). Increased compassion for others and an improvement of health-related behaviour highlights the unique set of circumstances occurring after being diagnosed with a potentially life-threatening illness. For example, a diagnosis of cancer, the associated treatments, and the potential for recurrence may represent a potentially ongoing threat, and trigger recurring challenges. Thus, there may not be a clear delineation between the traumatic event and the aftermath of trauma, as the patient and their family continually negotiate the challenges associated with the cancer experience. The unique circumstances associated with an illness experience may also be unique from some other types of traumatic events, as it may raise personal concerns, such as mistrust of their body’s physical integrity, or feeling a lack of control over their body’s functioning. Positive outcomes may also ensue
such as taking responsibility and monitoring one’s own health, listening to one’s own body, improved health behaviours and health checks, cessation of risky behaviours, and a positive identification with one’s own body.

**Implications and Future Research**

In this chapter, we have discussed the circumstances in which PTG is more likely to occur and the types of positive life changes commonly reported after a diagnosis of cancer. But why is it important to investigate positive life change in this context? We have already stated that research indicates that the presence of PTG will most likely not impact cancer-related distress. So why do we continue to invest time and resources in studying this phenomena and why have we dedicated a chapter to PTG in this book on trauma and recovery?

Adopting a salutogenic framework within psycho-oncology allows us to capture a holistic picture of how someone adjusts to, takes meaning from, and deals with a diagnosis of cancer and associated treatments. This approach extends the pathogenic focus on treatable symptoms and acknowledges that the individual’s post-diagnosis journey can comprise both positive and negative aspects. It must be explicitly stated that the investigation of positive life changes reported by cancer survivors does not disregard the adverse aspects of this experience. Assessment of both positive and negative post-diagnosis repercussions allows us to explore the best ways to provide supportive care to those affected by cancer.

Promising studies have shown that posttraumatic growth may improve physical health (Bower, Epel, & Moskowitz, 2009) and studies that have identified factors shown to promote positive life change allow us to design interventions for people affected by cancer that target modifiable behaviour and cognitions. For example, rumination and active coping strategies that are associated with positive life change are two such factors that can be addressed within a therapeutic context. People diagnosed with cancer can be encouraged to engage in reflective practices. By listening to the patient work through his/her feelings about being diagnosed with cancer, a therapist can identify maladaptive cognitions and assist the patient to identify ways in which to constructively ruminate (Tedeschi & Calhoun, 2009). A number of coping strategies that are associated with well-being and PTG can also be targeted in supportive care interventions. Generally, the promotion of active management of the stressors associated with cancer and treatment, and identification of individuals who are experiencing avoidant styles of coping can assist in providing an environment conducive to PTG. These are cognitions, behaviours, and elements of the post-diagnosis experience that can potentially be identified and overcome. The emphasis on health-related life change and compassion by cancer survivors also shapes potential interventions that can be designed to promote PTG. Qualitative studies have indicated a greater awareness of one’s body and number of improved health behaviours, such as an improved diet, physical fitness, and meditation (Morris et al., 2011). Patients have also reported a greater adherence to treatment regimes and cessation of risky health-related behaviours.

To date, published research investigating PTG interventions in any context are scarce. Tedeschi and Calhoun (2009) suggest that in a therapeutic context the clinician can act as an “expert companion” (p. 215) to guide the client through the process described in their model

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of posttraumatic growth. Other methods of service delivery that may promote posttraumatic growth include group-based interventions and peer support programs. To date, such studies have only been published with women diagnosed with breast cancer. One such published study indicated the potential for group-based interventions to contribute to stress reduction, emotional processing, and benefit finding (Antoni, Carver, & Lechner, 2009). Studies have also been published describing how peer support programs can contribute to the perception of positive life change (Morris et al., 2011; Sabiston et al., 2007).

In summary, a diagnosis of cancer and subsequent treatments is frequently experienced as an extremely distressing or traumatic event for the patient and their loved ones. The post-diagnosis trajectory has both physical and psychological ramifications and can provide a catalyst for a variety of short and longer term outcomes such as ongoing distress, but also for posttraumatic growth. These outcomes are not mutually exclusive, but rather appear to be independent constructs. Listening for signs of strength, resilience and growth is an initial step in clinicians’ assisting their clients to successfully negotiate their journey. Reflecting identified strengths at appropriate times enhances the survivor's perception of their capacity to cope with and adjust to life post-diagnosis, and in some cases make significant and positive life changes. Importantly, such therapeutic approaches do not dismiss the very real challenges associated with diagnosis and treatment, but can give permission and a framework to assist cancer survivors and their support persons to perceive positive outcomes. By providing a holistic approach to supportive care, we can assist the cancer survivor to transform from an individual merely trying to recover, into an individual who experiences adaptation and personal growth.

REFERENCES


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PART 4: MOVING CLIENTS FROM TRAUMATIC EFFECTS TO RECOVERY
**Narrative**

**FROZEN IN TIME: A THERAPEUTIC ENCOUNTER**

*Kathryn Gow*

In the movie, the *Green Flash* (2008), Cameron Day is depicted as a person who has achieved great acclaim through his top sporting achievements. However, in a single moment in time, he loses that position and status during a game and from that point, he is no longer who he was. He disappears from his normal life and hides out, licking his wounds, for about ten years. From this one experience, which he interprets as traumatic, he has been frozen in time; it badly affects his self image, his self esteem, his confidence and his prospects. The fall from a great height in the past is projected forward and mars his future.

As fate would have it, a decade later at the age of 30, Cameron wanders into pro beach volleyball in Southern California and although his skills are obvious, he plays it safe. However, even in the soft sands of beach volleyball, he is impeded by flashbacks taking him back to the point in time when he failed. Over and over again, just when the audience thinks he might win through, the powerful flashback wins and he loses.

As the film plot would have it, he meets a beautiful woman called Mia who seems to be the best all-round therapist a man could ask for. She senses the impasse in his mind, while she watches him playing volleyball and tells him about the “green flash” (to readers who live near the ocean and can see the sun go down in the west, this will resonate with your visual experiences). She even makes him sit with her (not a difficult feat) and watch a sunset and wait for the green flash which is elusive, and she passes on the teaching from her father that one has to be in a certain state to see it. [However, she is actually implanting an image which will become an extremely useful metaphor in the future.] He is not sure what he is looking for, even though he is told that for a brief moment, just as the sun drops over the far horizon, there is some type of brilliant green visual aura that moves across the horizon, and everything becomes bright and crystal clear as in a Holy Grail experience.

Even after the implant, we see that repetition is required to change the power of the flashback, with its ensuing immediate loss of concentration and interrupted focus on the goal.

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resulting in a physical drop in energy. Obviously something else is missing in the healing equation; the old image has to be replaced with the new and there has to be a stimulus.

Fortunately, the self healing comes together at a critical point in the competition match, and we see the change in mental images and his whole concentration becomes clear and purposeful; naturally he wins the game with this impediment out of the way. We see that he is now “over it” and he is free from the imprisonment of that one traumatic instant in his past sporting history.

While this may seem like a minor trauma, compared to other traumas we have portrayed in this book, it is a real one. And in his renewal, Cameron (or more likely the script writer) leaves us with this message:

Life is filled with lessons,
Fortunately, none of us are too old to learn.
Somehow, you just have to open up your mind
And find that just as life is filled with pain,
It’s [also] filled with laughter and love.
EMDR THERAPY AND ADAPTIVE INFORMATION PROCESSING:
THE DEVELOPMENT OF RESILIENCE AND COHERENCE

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ABSTRACT

Eye Movement Desensitization and Reprocessing (EMDR) is an empirically supported psychotherapeutic approach for treating trauma, which is also applicable to a wide range of other experientially based clinical complaints. It is guided by the Adaptive Information Processing Model (AIP), which conceptualizes the effects of traumatic experiences in terms of dysfunctional memory networks in a physiologically based information processing system. The AIP model helps explain why some people have a strong sense of resilience, coherence, resourcefulness and self-empowerment and others do not. Thus it follows that EMDR therapy may be used to help clients regain these personal attributes when they have been impaired by a traumatic event or other disturbing life experience. The application of EMDR therapy with such individuals is illustrated by means of case histories in the context of the eight phases with which this modality is implemented.

Keywords: trauma, EMDR, adaptive information processing, resilience, resourcefulness

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**INTRODUCTION**

Eye Movement Desensitization and Reprocessing (EMDR) is an integrative psychotherapeutic approach that views present problems as originating from disturbing life experiences that have remained unprocessed and unable to be integrated within the individual’s adaptive comprehensive memory network. Guided by the Adaptive Information Processing (AIP) model, EMDR is utilized to process and consequently integrate these disturbing memories, resulting in an increase in resilience and adaptive functioning. This chapter will describe EMDR therapy, the AIP model upon which both case conceptualization and the phases of EMDR treatment are based, and offer case examples demonstrating both the reduction of overt symptoms and the development of resilience.

**RESILIENCE, EMDR, AND ADAPTIVE INFORMATION PROCESSING**

Eye Movement Desensitization and Reprocessing (EMDR) therapy was introduced in 1989 with a randomized controlled study that showed substantial effects on post-traumatic stress (Shapiro, 1989a, 1989b, 2001). Over the past 20 years, more than 20 randomized studies have established its efficacy with a wide range of populations (see Bisson and Andrew, 2007). Currently, EMDR is recognized and recommended as a first-line treatment for trauma in numerous international guidelines (e.g., American Psychiatric Association, 2004; Bisson and Andrew, 2007; Departments of Veterans Affairs and Defense, 2004; National Institute for Clinical Excellence, UK, 2005). It has also become clear that EMDR therapy can be effective with a wide range of disorders that are caused or exacerbated by experiential factors (see Shapiro, 2001; Shapiro, Kaslow and Maxfield, 2007; Solomon and Shapiro, 2008). Therapeutic effects are derived from processing targeted memories, which results in an adaptive resolution that promotes psychological health (Shapiro, 1995, 2001). As predicted by the Adaptive Information Processing (AIP) model that guides EMDR practice, clinical studies have demonstrated that beneficial effects result from processing the experiences that underlie current problems, which often include a sense of vulnerability and a lack of resilience in the face of personal difficulties. Issues of resilience will be explored through case examples later in this chapter.

EMDR is an integrative psychotherapeutic approach comprised of eight phases and a three-prong methodology that (a) processes past memories that underlie current problems, (b) identifies present triggers that elicit disturbance, and (c) incorporates into the client’s repertoire positive templates for adaptive future behaviors. Bilateral stimulation in the form of eye movements, taps, or tones is used as part of the procedures.

The eye movement component of EMDR has been found in numerous controlled studies to have a direct effect on memory, including retrieval, attentional flexibility, vividness and associated emotionality (e.g., Andrade, Kavanagh, and Baddeley, 1997; Barrowcliff, Gray, Freeman, and MacCulloch, 2004; Christman, Garvey, Propper, and Phaneuf, 2003; Kuiken, Bears, Miall, and Smith, 2002; Sack, Lempa, Steinmetz, Lamprecht, and Hofmann, 2008; Van den Hout, Muris, Salemink, and Kindt, 2001). The eight phases of EMDR therapy are listed in Table 1 and will be elaborated later.
### Table 1. Overview of EMDR Treatment (Shapiro, 2005)

<table>
<thead>
<tr>
<th>PHASE</th>
<th>PURPOSE</th>
<th>PROCEDURES</th>
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| Client History | • Obtain background information.  
• Identify suitability for EMDR treatment.  
• Identify processing targets from positive and negative events in client’s life. | • Standard history-taking questionnaires and diagnostic psychometrics.  
• Review of criteria and resources.  
• Questions regarding (1) past events that have laid the groundwork for the pathology, (2) current triggers, and (3) future needs. |
| Preparation    | • Prepare appropriate clients for EMDR processing of targets.  
• Stabilize and increase access to positive affects. | • Education regarding the symptom picture.  
• Metaphors and techniques that foster stabilization and a sense of personal self-mastery and control. |
| Assessment     | • Access the target for EMDR processing by stimulating primary aspects of the memory. | • Elicit the image, negative belief currently held, desired positive belief, current emotion, and physical sensation, and baseline measures. |
| Desensitization| • Process experiences and triggers toward an adaptive resolution (0 SUD level).  
• Fully process all channels to allow a complete assimilation of memories.  
• Incorporate templates for positive experiences. | • Process past, present, future.  
• Standardized EMDR protocols that allow the spontaneous emergence of insights, emotions, physical sensations and other memories.  
• “Cognitive Interweave” to open blocked processing by elicitation of more adaptive information. |
| Installation   | • Increase connections to positive cognitive networks.  
• Increase generalization effects within associated memories. | • Identify the best positive cognition (initial or emergent).  
• Enhance the validity of the desired positive belief to a 7 VOC. |
| Body Scan      | • Complete processing of any residual disturbance associated with the target. | • Concentration on and processing of any residual physical sensations. |
| Closure        | • Ensure client stability at the completion of an EMDR session and between sessions. | • Use of guided imagery or self control techniques if needed.  
• Briefing regarding expectations and behavioral reports between sessions. |
| Reevaluation   | • Evaluation of treatment effects.  
• Ensure comprehensive processing over time. | • Explore what has emerged since last session.  
• Re-access memory from last session.  
• Evaluation of integration within larger social system. |
Adaptive Information Processing Model

EMDR treatment is guided by the Adaptive Information Processing (AIP) model, emphasizing both memory networks and the physiological information processing system (Shapiro, 2001), which transfers experiences into physically encoded memories that are stored in associative memory networks. These, in turn, provide an important basis for the person’s interpretation of new experiences, and significantly influence his or her current perception, behavior, and feelings. Under normal circumstances, the information processing system integrates new experiences with previous ones, gleaning the information that is useful and discarding that which is not. This information, along with the appropriate emotional states, is stored in interconnected memory networks that are available to guide the person’s future actions.

However, high levels of disturbance, which can occur during even ubiquitous events (e.g., humiliations), can disrupt the system and cause the unprocessed memories to be stored in excitatory, distressing, state-specific forms (Shapiro, 1995, 2001). As a result, these experiences contain the perspectives, affects, and sensations that were encoded at the time of the disturbing event, and are dysfunctionally stored in a way that does not allow them to connect to more adaptive information, therefore preventing assimilation within more comprehensive memory networks. For instance, a rape victim may continue to experience the emotions, physical sensations, and frame of mind that occurred during the traumatic event, including the sense of vulnerability and lack of resources that were associated with the original incident. Perceptions of additional similar experiences (both external and internal) link into and activate these unprocessed memory networks, giving rise to the stored negative perspective, affects, and sensations. These, in turn, color the perceptions of present circumstances and events. These new experiences are then stored as memories in the dysfunctional network, with the expanding network reinforcing the previous experiences.

Predictably, if an event triggers memory networks of dysfunctionally stored information, the emotions and physical sensations inherent in the unprocessed memory automatically arise. These affects underlie the negative beliefs and perspectives that emerge and define the individual’s response in the present. For instance, a person can be “stuck” in negative beliefs and perspectives, such as, “I am not good enough” or, “I am not lovable,” unable to bounce back from personal setbacks or cope with present circumstances. Counter examples and positive experiences are also stored, but are unable to link into networks containing the unprocessed memories. Consequently, a memory network with dysfunctional information can be small (e.g., a simple phobia), with a circumscribed lack of self-efficacy, or quite large, comprehensively underlying a person’s sense of self, and the global sense of resilience in the face of a disturbing event.

The goals of the procedures and protocols of EMDR therapy are to access the dysfunctionally stored experiences and stimulate the innate information processing system in such a way that these isolated memories are linked up to, and assimilated with, new or currently existing functional neurological networks. Clinical observations of recovery observed in EMDR treatment sessions show a rapid progression of intrapsychic connections, as emotions, sensations, insights, and memories emerge and change with each new set of bilateral stimulation (directed lateral eye movements, alternating taps or tones). In addition to a decline in trauma symptoms, clients give evidence of a comprehensive perceptual and psychological reorganization. Indeed, diagnoses that are usually considered to be resistant to
treatment have been alleviated by processing the target memories associated with these diagnoses. These include changes in affect regulation and personality characteristics (e.g., Brown and Shapiro, 2006), and rapid elimination of body dysmorphic disorder (BDD; Brown, McGoldrick, and Buchanan, 1997), olfactory reference syndrome (ORS; McGoldrick, Begum, and Brown, 2008), phantom limb pain (e.g., Russell, 2008; Schneider et al., 2008; Wilensky, 2006), and deviant sexual arousal (e.g., Ricci, Clayton and Shapiro, 2006).

With successful processing of the negative experience, adaptive, self-enhancing perspectives emerge, which can then start to generalize across the memory network that contains the maladaptive information. Such changes are readily observable in the remediation of depressive states, manifested either as the primary diagnosis (e.g., Bae, Kim, and Park, 2008) or co-morbid with another condition (e.g., Gauvreau, and Bouchard, 2008; Schneider et al., 2008; van der Kolk et al., 2007). Physiological changes have also been evidenced by neuroimaging studies (e.g., Bossini Fagiolini, and Castrogiovanni, 2007; Lansing et al., 2005; Levin, Lazrove, and van der Kolk, 1999; Oh and Choi, 2007; Ohta ni et al., 2009).

The basis of EMDR’s effects appears not to be extinction (Lee, Taylor and Drummond, 2006; Rogers and Silver, 2002), but rather reconsolidation (Solomon and Shapiro, 2008; Suzuki et al., 2004), through accessing and reprocessing the original memory and re-storing it in an altered form by a process that may be similar to that which occurs during rapid eye movement sleep (Elofsson, von Scheele, Theorell, and Sondergaard, 2008; Shapiro, 1995, 2001; Stickgold, 2002, 2008). Reconsolidation might explain the ability of EMDR therapy to produce a lasting elimination of chronic pain by processing the salient underlying memories, in contrast to the simple pain management that results from other forms of therapy (Ray and Zbik, 2001). With the memory components altered, reconsolidation of the memory subsequent to processing also decreases the likelihood of relapse. In addition, unlike extinction based therapies (Craske, Hermans, and Vansteenwegen, 2006), the type of associative process used in EMDR fosters a generalization effect, which allows multiple memories to be addressed simultaneously during a single processing session (Shapiro, 1995, 2001).

It is posited by the AIP model that successful EMDR treatment causes the targeted memory to emerge from its isolated state to become appropriately integrated with the larger comprehensive memory networks comprising the totality of the individual’s life experience. Hence, processing is understood to involve the forging of new associations and connections enabling learning to take place. The memory is now stored in a new adaptive form, able to be recalled and verbalized by clients without the negative affect and physical sensations that characterized their previous psychological condition. Once processed and adaptively stored, experiences that previously caused disturbance and self-denigration may now be the foundation of resilience and self-empowerment.

Zaghrout-Hodali, Alissa and Dodgson (2008) report on a group of Palestinian children who were fired upon from a military watchtower close by, while playing in their yard. In the first two sessions of Group EMDR therapy, the children responded well and showed recovery from their somatic and behavioural symptoms. However, between sessions two and three of the four-session EMDR treatment the children were subjected to another traumatic experience in which they were held in one room in their house by people in dark clothes and balaclavas, whom they believed to be the Israeli military. Although previous experience with serial traumatization after treatment with other therapies had led the clinicians to expect the children to have relapsed, they discovered that the level of disturbance experienced by these children
after the second event was actually less than their disturbance had been to the previous event. Although the children recognized the trauma, they felt able to deal with it and were able to respond effectively to events in their internal and external world. This resilience was reflected in their narrative of the second event, which was largely told as an account of an unpleasant memory, not as a re-living of the experience.

This outcome is consistent with the predictions of the AIP model. If the dysfunctional stored memories have been processed and assimilated into adaptive memory networks, then the learning that has taken place becomes the functional basis for interpretation and response to any newly encountered situation. Basically, a new experience of a similar disturbing event will automatically connect with the same adaptive networks and the individual will respond with a sense of resourcefulness and resilience derived from the processed information. Similar results are suggested by Rost et al. (2009) who provided EMDR to bank employees and a transportation worker who had suffered repeated acute traumatization. Their results showed that EMDR effectively reduced their symptoms and, in addition, may have provided them with a protective buffer in situations of ongoing workplace violence. That is, they found that after EMDR treatment, the victims had less symptom reactivation when involved in a subsequent traumatic event as compared to victims who only received a debriefing procedure.

**Resilience, Coherence, and Resourcefulness**

Resilience is the positive capacity of people to cope with stress. It has been described as a dynamic process where people exhibit positive behavioral adaptation when they encounter significant adversity or trauma (Luthar, Cicchetti, and Becker, 2000). Antonovsky (1981) similarly proposed the existence of a ‘sense of coherence’ (SOC) which is a global orientation pertaining to a person’s feeling of confidence, and the ability to comprehend a stressful situation and to use available resources for movement in a health-promoting direction. The SOC is achieved through an individual’s belief that his or her life is comprehensible (rational, predictable, structured and understandable), manageable (the perception that adequate resources exist to deal with adversity), and meaningful (adversity is viewed as a challenge worthy of engagement). In AIP terms, this SOC is a manifestation of the adaptive information networks that include the fully processed memories of previously traumatizing events. A subsequent stressful situation stimulates the adaptively stored experiences, thereby providing the base of stability, comprehension, and manageability. It may be posited that these memory networks also underlie the repertoire of coping resources or strategies inherent in Rosenbaum’s (1983) formulation of “Learned Resourcefulness” (LR), which he describes as cognitive and behavioral strategies acquired through conditioning, modelling, life experience and instruction. The strategies, which AIP posits to be the result of adaptively processed memories of past experiences, are used to control potentially disturbing inner events and minimize distressing thoughts, feelings and impulses in order to maintain normal functioning.

In terms of AIP, resilience, coherence and resourcefulness are responses based upon the affects and perspectives that characterize the memories that are stimulated by the current experience. When people are confronted by adversity, adaptive information stored in their memory networks is available for coping with the challenge. A high level of resilience, sense
of coherence, and learned resourcefulness results from the person’s ability to make full use of functionally stored information and abilities acquired in his or her life. However, if the associated memories contain negative affects (e.g., powerlessness, defectiveness), they will be manifested in current dysfunctional responses/behaviors. When disturbing life experiences become dysfunctionally stored, they are prone to activation by present stressors, resulting in maladaptive behavior, negative emotions, negative self-beliefs and diminished capacity to cope. In turn, the negative effects of diminished coping may also become dysfunctionally stored, broadening one’s maladaptive networks, lowering resilience, sense of coherence and learned resourcefulness, thereby creating further vulnerability for future stressful situations.

**EMDR Treatment**

EMDR therapy is designed to identify and process the past memories that underlie difficulties in coping, to address present situations that trigger disturbance, and to enable the development of a positive memory template for future adaptive behavior. The processing of pivotal memories facilitates a rapid learning experience that transforms the negative perspective and affects into more neutral or even positive ones. These then become the basis of resilience by enhancing one’s ability to cope effectively with subsequent related stressors. Processing the dysfunctionally stored memories that underlie current maladaptive behaviors enables a person to bring to bear on future adverse circumstances the full potential of his or her functional capacity and available personal resources.

In AIP terms, the level of dysfunctionality with respect to self-esteem, self-reliance, and resilience is a function of the number and nature of the individual’s unprocessed memories. Take, for example, someone who is extremely confident, successful and resilient in personal relationships, but lacks these characteristics at work. Such a profile suggests that their unprocessed memories involve issues of authority, or achievement. In contrast, another person may have a pervasive absence of resourceful coping in many or all of life’s domains. In the first case, a sense of resilience on the job might be handled by processing only a circumscribed number of memories that are salient to that area of debilitation. For the latter, the achievement of a robust sense of coherence and resilience would be dependent upon a comprehensive processing of the memories underlying the global debilitated sense of self. Clearly, there will be a lack of resilience and flexibility in any area that defines a particular diagnosis. EMDR treatment can be customized to assist the client to achieve autonomy and health along the full range of individual and systemic functioning by identifying and processing the experiences that underlie current deficits.

Clinical observations indicate that with adaptive resolution of targeted memories the client is: (a) able to glean useful information from the event (e.g., take appropriate precautions under certain circumstances or around certain people) and discard what is not useful (e.g., negative sensations, irrational cognitions, etc.); (b) experience and manifest appropriate affect in relation to the event; and (c) acquire the capacity to effectively guide his or her future actions (Shapiro, 1995, 2001). Reprocessing the dysfunctional information enables the client to progress through the appropriate stages of affect and insight regarding such issues as (i) appropriate levels of responsibility, (ii) present safety, and (iii) the availability of future control and choices. As a result, the client’s level of resilience and coherence is increased.

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Trait versus State Changes

Clinically, rather than specifically teaching skills to assist in managing subsequent stress, memory processing is provided to allow changes to take place at the “trait level” in order to produce enduring changes in coping and increase the individual’s overall level of resilience, coherence, and available resources. For example, after memory processing, the previously traumatized earthquake victim will respond adaptively to future earthquakes because the fear/terror/helplessness is no longer being triggered (Shapiro, 2001, 2002). He or she now possesses stored memories of successfully weathering past episodes and is prepared to take the appropriate measures in the present. Similarly, after EMDR treatment, bank tellers who were previously traumatized because of successive robberies may not be traumatized by a similar new event (Rost, Hofmann, and Wheeler, 2009), because they already have a survival experience incorporated into their memory network.

EMDR therapy can also be used clinically as a means of enabling psychological “state” changes until comprehensive processing treatment has been completed. EMDR procedures have been developed to enhance adaptive, functionally stored information (e.g., experiences of courage, positive motivation, self-esteem) and increase conscious and deliberate access to personal resources (Korn and Leeds, 2002). For example, an Afghanistan war veteran who had just entered treatment was very nervous about an upcoming job interview, which was to take place in three days. He had symptoms of PTSD, his worst incident being a battle where several soldiers, including a number of friends, were killed. To help him deal with the job interview, positive emotional states were accessed by stimulating memories of courage and competence from his war experience, martial arts training and high school sports, and were enhanced with Resource Development and Installation protocols (Korn and Leeds, 2001).

During the interview, he was able to maintain his composure by accessing these states. However, the goal of EMDR therapy is a fully developed capacity to respond to a stressful situation in an adaptive manner, without having dysfunctional emotional or physical reactions triggered. Therefore, it was important for the soldier described above to process the underlying experiences associated with his present problems and vulnerabilities. With this in mind, after the job interview, further sessions of EMDR therapy were used to treat his war trauma. He suffered a foreshortened sense of future and part of him felt “dead”. A turning point in his treatment was processing the fear experienced during a major battle and the grief for his buddies killed. In targeting his worst moment - putting a fellow soldier in a body bag - he remembered the face of the soldier and realized, “It is not my face .... it’s not me”. He then could feel fully alive and that he made it home. He had not previously been conscious of this vicarious identification. After this session, most of his symptoms were resolved, and were fully eliminated during the subsequent processing.

Enhancing Resilience, Coherence, and Resourcefulness

Resilience, coherence and resourcefulness are further strengthened by processing memory templates for future adaptive behavior. For example, the first author (RS) has extensive experience in working with railroad personnel who have experienced traumatic incidents (e.g., fatal crossing accidents). After processing the critical incident, the engineers are asked to imagine responding appropriately to a similar incident in the future. Using
appropriate protocols, anticipatory anxiety is processed and feelings of efficacy enhanced (Solomon and Kaufman, 2002).

**Case Example – Railroad Engineer**

A collision occurred between a train and a gasoline truck, resulting in an explosion that killed the truck driver and injured the train engineer. Naturally, this was very traumatic for the engineer. Because of his fear that a similar incident might occur someday, he became anxious and hesitant on the job. After processing the memory, future templates were processed in which the engineer imagined the occurrence of a similar incident, coupled with his chosen adaptive behaviors (e.g., how he would respond, where he would place himself in the engine for maximum safety, and how he would brace himself for impact). During EMDR processing of memory templates, imagery becomes more vivid and there is an increase in positive affects associated with efficacy and self-confidence, as all disturbing physical sensations are processed during the memory integration process. After recovering from his injury, the engineer returned to work, but within a month another crossing accident occurred, this one involving a truck. For the engineer, the event was a tragedy, but was not traumatic; that is, he reacted as he had mentally envisioned during the future template and felt in control during the incident.

For clients who have demonstrated long-standing coping impairment, the clinician assesses whether they have the necessary skills and behaviors for adaptive functioning in the face of a traumatic event. To overcome any skill or developmental deficits, the clinician first provides appropriate information and interactive experiences. For example, individuals with a history of abuse may not have learned how to stand up for themselves. After processing the past memories underlying the pervasive dysfunction, the client may now benefit from social skills education or assertiveness training. After the skills have been described and understood, a memory template for future adaptive behavior is integrated through the additional processing of imagined positive cognitive, emotional, and behavioral responses to anticipated problematic situations. Real-world experience and interaction provide feedback to determine what else should be processed.

Life’s tragedies can take away life’s meaning and the motivation to persevere in the face of adversity. For example, the sudden loss of a loved one can shatter a person’s world and pose significant challenges (Solomon and Rando, 2008). EMDR can help facilitate the working through of affect and cognitions necessary for healthy mourning and thus result in increased resilience.

**Case Example – Mother**

A 16-year-old boy was killed in an auto accident, which was devastating to his mother. A year later, EMDR treatment was initiated, in conjunction with grief counselling, to deal with the trauma. Initially, it was difficult for the mother to have positive memories of her son. According to the AIP model, the trauma surrounding a death can become dysfunctionally stored and prevent other memory networks with positive memories of the loved one from being accessed, experienced and felt (Solomon and Rando, 2008). Therefore, EMDR was utilized to process the traumatic circumstances and enabled the mother to have positive memories of her son (see also Sprang, 2001). However, every time she would think of “his smiling face,” she would again be overwhelmed with loss as she realized he was not alive. As she put it, “it’s just like totally gut-wrenching, devastating, horrible feelings . . . it’s like
losing him over and over again”. She felt she could not go on with life. Situations where these feelings were triggered were targeted with EMDR. During the session, she processed the raw emotion associated with his loss, enabling her to again think of him (“his smiling face”) with loving feelings. She could then imagine not only surviving, but investing in her life again. As awful as her loss was, processing the trauma left her with a feeling that she had overcome a challenge, which felt like a positive accomplishment.

This case illustrates how EMDR therapy can be used to deal with traumatic loss, processing the obstacles that complicate the mourning (e.g., trauma) to enable assimilation of, and accommodation to, the loss. After this session, she was able to think of her son and feel love instead of devastation. Further, her sense of resilience increased, as she emerged from this session with an enhanced ability to engage in life.

In the next section, the eight phases of EMDR will be discussed in the context of resilience. The goal of these phases is to access and process conscious and non-conscious memories that are contributing to current difficulties. Thoroughly processing memory networks that are the basis of pathology, including vulnerability to stressors, results in the development of robust health, including a strong sense of resilience, coherence, and the ability to access and utilize personal resources. A variety of cases will be used to illustrate the treatment and outcomes.

ENHANCING RESILIENCE, COHERENCE, AND RESOURCEFULNESS WITH EMDR: CASE APPLICATIONS

Phase 1: Client History Taking

The History phase of EMDR therapy includes identifying experiences that have contributed to present difficulties, as well as current triggers and resources needed for the future. Often, etiological events are associated with a sense of self-blame, self-defectiveness, powerlessness, or lack of safety, and underpin vulnerability and a lack of resilience when confronted with adversity. These focal experiences may be major traumas or more ubiquitous disturbing life events (e.g., humiliations, school failures, bullying) that have left the individual feeling powerless or without personal resources to deal with similar events in the future. Childhood humiliations can have as great an impact as identified trauma, and provide the basis for affective, cognitive and behavioral symptoms. For instance, a client was unable to comfortably face a new teaching assignment, and the cause was found to be an experience of being called “stupid” by his father. Once processing was completed, he no longer froze at the first sign of student resistance. Published reports have also indicated that 1-3 sessions of EMDR processing have been able to eliminate long-standing symptoms of ORS and BDD caused by insulting statements made to clients about their appearance during childhood (Brown et al., 1997; McGoldrick et al., 2008). Clearly, individuals lack both confidence and resilience, if they believe that they are an object of scorn and rejection. These affects and beliefs are the direct manifestations of the unprocessed childhood memories. Also identified during History-taking are positive experiences (e.g., moments of confidence, feeling loved, experiences of accomplishment) that can be used to increase personal resources.

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Case A: Police Officer

Two police officers were attacked by a very large man with a knife. He pushed one police officer to the ground and jumped on top of the other. This second officer was able to hold on to the hand with the knife, using both hands, and prevent being stabbed. However, the man continually hit him with his other hand, making it difficult for the officer to hold on. The officer who was initially knocked down then joined the fight and ended up having to shoot the man to prevent the death of the other officer. The second officer who had struggled with the knife was traumatized by the situation. After a week off, he returned to work. However, he froze once in a situation where he thought there would be violence, and found himself avoiding calls where there was the potential for violence. After two months of continued difficulty, the officer received EMDR treatment. During the History-taking phase, memories of being frightened in childhood were identified. The officer also had numerous examples of overcoming obstacles both in childhood and as an adult.

Phase 2: Preparation

The Preparation phase of EMDR therapy involves establishing a therapeutic alliance, providing education regarding the symptom picture and the EMDR process and its effects, and developing stabilization, depending on the needs of the client. Resources identified during the History-taking phase, or introduced through education and rehearsal, are integrated into the memory network through processing with bilateral stimulation.

With processing, in which new connections are forged between the targeted dysfunctional memory network and the memory networks containing more adaptive information, the clinician must determine whether the necessary memory networks containing this information actually exist. If not, memory networks will need to be supplemented with appropriate experiences and information. For example, a client with a history of attachment difficulties may need experience with an accepting, nurturing therapist to encode positive relationship experiences to serve as counterexamples to their previous negative experiences. Once these positive experiences are encoded, they become part of the client’s memory network involving relationships that is now available to link into and reconfigure memory networks containing negative relationship experiences.

For processing to take place, it is necessary for the client to access the dysfunctionally stored information as it is currently encoded, and maintain a dual awareness; that is, to stay present (“one foot in the present”) while the earlier memory is being experienced (“one foot in the past”). If the client lacks the ability to maintain dual awareness, preparation will need to include teaching him or her self-control techniques, such as relaxation skills, that foster stabilization, a sense of personal self-mastery, resourcefulness and control, which thus become encoded into the appropriate memory networks. These techniques may, in turn, contribute to the person’s Learned Resourcefulness (Rosenbaum, 1983). However, the ultimate goal of EMDR therapy is to enhance the client’s inner strength, which is accomplished through a comprehensive processing of the contributing dysfunctionally stored memories.

Since the essence of EMDR treatment is the integration of adaptive information into the memory networks containing the dysfunctionally stored information, positive memory networks must actually exist if processing is to occur. While other forms of therapy may rely
on corrective information elicited by in-and between-session habituation (Foa and Kozak, 1986), EMDR views this corrective information as stemming from adaptive memory already encoded in the brain. In AIP terms, positive memory networks that contain the adaptive information link into the networks of dysfunctionally stored information, which results in comprehensive integration and assimilation. Much of the information needed for processing may already exist within the memory networks as a result of life experience (Shapiro, 1995, 2001). However, as noted above, deficits can be resolved by providing new information (e.g., education, new life experiences) that can be encoded as memories. Additionally, positive experiences identified in the History phase can be enhanced to provide the resources needed for processing (Korn and Leeds, 2002), and assist in stabilization by increasing access to memories that incorporate positive affect states. While other therapeutic interventions and methods for client stabilization may also be appropriate in the Preparation phase, in AIP terms, these techniques are used for the construction and enhancement of positive memory networks. Therefore, this phase serves to increase the client’s resources and resilience, to provide stabilization and positive coping by encoding adaptive information that can be linked into dysfunctionally stored memory networks.

Phase 3: Assessment

The Assessment introduces the reprocessing phases of EMDR therapy and it is in this phase that specific elements of the targeted memory are called to mind. After accessing the disturbing experience to be used as the initial target for reprocessing, the client identifies the worst image, negative belief and emotion associated with the recall of that experience, and the location of the associated bodily sensations. The negative self-referencing belief that arises when the disturbing experience is brought to mind might be something like, “It is all my fault”, “I am not good enough”, “I am vulnerable”, “I am powerless.” A preferred, positive cognition (or positive, adaptive belief) is also identified to ascertain and verbalize the client’s desired outcome. Baseline measures include the Validity of Cognition (VoC; Shapiro, 1989) scale, on which clients rate how true the positive cognition feels to them on a 1-7 scale, where 1 = totally false and 7 = totally true, and a Subjective Units of Disturbance (SUD; Shapiro, 1989a; Wolpe, 1969) scale, which uses a 0-10 scale, where 0 = calm/neutral and 10 = the worst it could be.

Case A: Police Officer - Assessment Phase

With the police officer described previously, the fight was targeted first because the distress from this incident was most acute. His image was holding on to the suspect’s hand, which held the knife. The negative cognition was, “I am going to die,” while the positive cognition was, “I survived, I am safe now”, with a VoC score of 2. The emotions were fear and anger, with a SUD score of 8, and sensations were experienced in the stomach and neck.

Case B: Clinician - Assessment Phase

A clinician was attacked by a male client who hit her and threatened to kill her. She felt frozen during the attack, but did manage to keep talking to him, and he finally left without further violence. After this incident, the clinician found it difficult to work at her office, and the feeling of freezing would intrude on her when she thought of the event. She sought

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EMDR therapy, and the event was targeted. The negative image was of the client moving from his seat toward her, his hand coming toward her. Her negative cognition was, “I’m not safe,” while her positive cognition was “I survived,” with a VoC score of 3. Her emotions concerned fear, with a SUD score of 7 and sensations that were localized in her chest.

**Phase 4: Desensitization**

The Desensitisation phase is the first of the three active reprocessing phases. Here, the client initially focuses on the image, negative belief, and physical sensations associated with the disturbing memory, while simultaneously engaging in sets of bilateral stimulation. The goal of this phase is to address the dysfunctional aspects of the memories and allow their full integration within adaptive memory networks. Spontaneous shifts in cognition, emotion, and physical sensation demonstrate the in-session treatment effects. Positive templates for adaptive future behavior are also incorporated, as described below.

**Case A: Police Officer**

The attack by the man with the knife was targeted. During processing, the officer recounted the details of the attack and was able to put into words his feelings of fear and helplessness. A childhood memory of being frightened that arose during the session was also processed. According to the AIP model, memories can be linked to each other by similar emotions, beliefs, or sensations (Shapiro, 1995, 2001), and during processing associated memories can spontaneously arise. The EMDR clinician will process memories as they emerge, and then return to the originally targeted memory to determine if there are further negative associations that need to be addressed. After processing the earlier event, the officer became aware of how he had succeeded in controlling the knife-wielding hand, and his determination to survive. The session ended with him fully accepting the fact that he had prevailed and was alive, and the situation was over. Earlier, when he thought about the incident or a memory of it was triggered, he would relive the horror; now the situation felt over, in the past. The level of disturbance was now very low (a “1” on the SUD scale, a value considered appropriate to the situation (i.e., ecological/not “0”), given its intensity and recency.

**Case B: Clinician**

During the processing of a female clinician who was assaulted by the male client, she relived the freezing that she had experienced, and then said, “Now I understand how my body reacted and that I got through it . . . and I was able to keep talking even though I was scared . . . and should something like this happen again, I know I will be able to do something.”

In this case, the clinician processed the “freeze” response and as a consequence was able to distance herself from it and understand her reactions. She was also able to realize that she was capable of responding appropriately even when frightened, which gave her a sense of confidence and resilience. As in the previous case of the police officer, the attack initially caused a sense of powerlessness and vulnerability, but in both instances, processing resulted in a full integration of the experience, which entailed the recognition of both survival and competence. Now, thinking of these events brought up a sense of efficacy. Templates were
then provided to the client, in which she imagined future situations in which clients became aggressive while she responded with a calm presence.

The above examples illustrate how traumatic events, when processed, can enhance resilience and sense of coherence. The traumatic memories no longer trigger maladaptive responses, and are assimilated into adaptive memory networks that can provide the basis of a resilient response to stressful situations in the future.

**Phase 5: Installation**

Beginning with her original studies, Shapiro (1989a,b, 1005, 2001) observed that the negative beliefs that people hold about themselves in relation to traumatic incidents often spontaneously change into positive beliefs, and that, as the result of reprocessing, their psychological state will shift from distress to calmness, from negative to positive emotions, and from negative to positive self-beliefs. Hence, with the consistently emergent adaptive, positive perspective that arises through processing, EMDR can be conceptualized as a paradigm for enabling resilience and coherence. The Installation phase harnesses this naturally occurring shift toward resilience by coupling the positive cognition with the traumatic memory and continuing the processing with additional bilateral stimulation. Processing continues by enhancing the connection of dysfunctionally stored information with currently existing positive cognitive schemata and facilitating the generalization effects within associated memories networks. The VoC scale is used to measure treatment effects.

**Case A: Police Officer**

With the police officer, the positive cognition “I survived and it’s over” was held in mind while he thought of the traumatic event. Due to the previous processing, the VoC score had increased from the initial assessment of “2” to a “6.” Bilateral stimulation continued with the officer holding in mind the positive cognition and the event, for another few sets, until the VoC level was at its maximum 7 (i.e., feels completely true).

Sometimes processing can become blocked during the Installation phase, perhaps because of previous traumas as illustrated below.

**Case C: Viet Nam Veteran**

A Viet Nam war veteran who suffered from panic attacks was referred for EMDR therapy (Shapiro, 1995, 2001). A recent episode involving panic was targeted, with the negative cognition being, “I am not in control” and the positive cognition being, “I can be comfortably in control.” The memory became desensitized, but when the positive cognition was focused on, the veteran replied, “I am not worthy of being in control.” When the basis of this belief was explored, he focused on a recent incident in which he had an unsuccessful sexual performance with someone he cared about. This memory was then targeted and processed, but before the installation of the positive cognition could be attempted he said, “I should probably talk to her about it, but I’ll probably fail the way I have with everything else.” In exploring the basis of this negative blocking belief, the veteran revealed a war memory where he was transporting plasma to a hospital. On the way to the hospital, his vehicle hit a roadside bomb. Despite being knocked out and having both arms dislocated, he regained consciousness and was able to deliver the plasma to the hospital (by carrying the bag with his teeth!). The
person who greeted him when he delivered the plasma said, “Congratulations, it took you so long, two men died.” The feeling of failure, despite his unacknowledged heroic best effort, was overwhelming. However, once this memory was processed, the positive cognition, “I can be comfortably in control” was installed with a VOC score of “7” (“totally true”). This case illustrated how multiple memories can underlie and exacerbate many symptom clusters, including negative beliefs that define the person’s sense of self and self-efficacy. When processed, an adaptive perspective can emerge that becomes the basis of more resilient attitudes.

Phase 6: Body Scan

One of the strengths of EMDR is the attention to non-verbal information, including imagery, smells, tastes and sounds, and the bodily sensations associated with tension or discomfort. At this point in the therapy, when the processing appears to be complete in relation to a specific target, clients are asked to close their eyes, hold in mind the positive cognition, and bring their attention to the different parts of their body, starting with their head and working downward, while noticing any tension, tightness or unusual sensation. If such a sensation is experienced, it is processed with bilateral stimulation.

Not uncommonly, the body sensations that arise during the Body Scan can be connected to earlier, dysfunctionally stored memories. For example, after processing a memory of childhood abuse, the Body Scan revealed a feeling of discomfort in the back. When bilateral stimulation was applied, she remembered that was where she was held down during the assault. Although the physical sensations are part of the stored memory, they are experienced through the afferent/efferent nervous system. Therefore, the body sensations themselves function as a direct link to the stored memory until it is fully processed. Processing is complete when no more disturbing physical sensations are associated with the memory. However, it is common for positive affective responses that are associated with strength and confidence to emerge and strengthen during this phase.

Phase 7: Closure

The Closure Phase may incorporate methods to return clients to equilibrium, if needed, and ensure client stability. In addition, the client is advised that processing may continue between sessions and that it is helpful to take note of any disturbance that arises so that this can be addressed at a subsequent session. The client is also reminded of self-care techniques such as relaxation and “safe place” exercises. No specific “homework” is assigned.

Phase 8: Re-Evaluation

At the following session, clients are assessed on their current psychological state and the thoughts and feelings that may have emerged since the previous session. The result of this assessment guides the direction of further treatment.
Case A: Police Officer

At the session following the processing of the knife attack memory, the officer said he felt very relieved and could think about the incident with the feeling that he survived and it was over. However, the fact that he had frozen momentarily during a subsequent call a few weeks later bothered him, and he wondered if he possessed the necessary qualities and characteristics to continue as a police officer. The moment of freezing was targeted and reprocessed.

During reprocessing, he remembered that during a practice fight while receiving boxing instructions in the police academy, the instructor stopped the match because he thought he was on the verge of being knocked out, although he praised him for never giving up. This, in turn, made him realize that during the fight with the large man he had also persevered and was able to control the knife. His epiphany was, “I have what it takes” to be a police officer. He then began additional training to improve his unarmed combat skills. Future memory templates were used to deal with anticipated future conflictual situations. After two months of treatment, the officer returned successfully to full operational duties, including responding to potentially violent situations. Treatment gains were monitored in occasional follow-up sessions, and were maintained. In this case, the two memories (i.e., knife fight and momentarily freezing) caused the client to question his ability to continue as a police officer, and represents how stored memories of negative events can influence perceptions of the future and one’s efficacy. During processing, building upon the results of the previous session, earlier positive memories (e.g., not giving up) were recalled, and appeared to link into the memory network that held the negative event. With adaptive information now integrated into the memory networks in which the dysfunctionally stored information was located, the officer’s sense of efficacy increased, illustrating how the previously disturbing memory had now become a resource and part of an adaptive memory network pertaining to his ability to survive. Now, when the memory is recalled, it is associated with not giving up and “having what it takes.” In a future adverse situation, this experience becomes part of a memory network with adaptive information that will help him respond in an effective manner.

DISCUSSION

The ability to learn from experience, regardless how traumatic, and demonstrate equanimity and resourcefulness when confronting subsequent adversity is the hallmark of resilience. As demonstrated in this chapter, these are both a focus and an expected outcome of EMDR treatment. The Adaptive Information Processing (AIP) model that guides EMDR practice conceptualizes the neurophysiological underpinnings of resilience, as well as both a Sense of Coherence (Antonovsky, 1981) and Learned Resourcefulness (Rosenbaum, 1983). According to the AIP model, all three are founded in processed memories of previous experiences that have been fully integrated within the individual’s comprehensive memory networks that define personality and sense of self, and form the basis of emotional, cognitive, and behavioral reactions to the world. When past experiences of challenge and adversity have been fully processed, what is useful is learned, stored with appropriate affect, and available to guide the person adaptively in the future. When memories of perceived failures and flaws have not been fully processed, they incorporate the negative perspectives, affects, and physical sensations that were part of the event, which in turn hamper current functioning and
result in feelings of lack of worth and resourcefulness. For the afflicted individual, the world is not viewed as manageable, nor can he or she feel worthwhile or competent when buffeted by the emotions and physical sensations associated with past failures. EMDR processing allows individuals to be liberated from the dysfunctional ties of the past, and function instead in an adaptive, positive, and coherent manner. The goal of psychological treatment is not only to resolve emotional and behavioral problems, but also to enhance functioning and the ability to deal appropriately with future adversity. Whether working with emergency service personnel involved in traumatic incidents, war veterans, or victims of terrorism, crime, or disasters, psychological treatment should aim to restore a sense of control and strengthen the capacity to face life’s difficulties. EMDR is a therapeutic framework that can increase a person’s capacity to deal with current life problems and future challenges, thereby enhancing a person’s sense of coherence, increasing personal resources, and strengthening resilience.

For high-risk populations exposed to trauma on a frequent basis, such as emergency service personnel, trauma is not only personally devastating, but has implications for the people with whom they come in contact. The inability to confront and cope with stressful situations can often result in misguided actions that can harm others. Over- or under-reaction by the emergency service provider, a potential consequence of posttraumatic stress (Solomon and Horn, 1986), can have wide-reaching negative consequences. When their traumas are processed and integrated in an adaptive manner, resilience can be restored, further developed, and enhanced using the three-pronged EMDR protocol. By this means, the emergency service provider is given a broader experiential base that allows more effective service and proper functioning in these very responsible and stressful positions. Unresolved personal trauma can underlie anger, aggression, and violence (Gelbach, 2008; Shapiro, 1995, 2001); processing trauma to an adaptive resolution, which includes increasing resilience, coherence and learned resources, can be a vital component of breaking the cycle of violence and promoting peaceful resolution of conflicts (Shapiro and Forrest, 1997; Shapiro and Maxfield, 2003). Given the pervasive negative mental health effects of both natural and man-made disasters, efficiently applied interventions are needed. By means of a group protocol, EMDR has been used with children and adults who have survived traumatic events, including natural and human-provoked disasters, even in areas of ethno-political violence (e.g., Aduriz et al., 2009; Fernandez, Gallinari, & Lorenzetti, 2004; Jarero et al., 2008; Zaghrou-Hodali, Ferdooos, and Dödson, 2008). The EMDR group protocol was used with Palestinian children from a refugee camp in Bethlehem, and appeared to foster resilience despite exposure to ongoing war trauma (Zaghrou-Hodali et al., 2008). It has also been used successfully to treat traumatized children in Latin America, Asia, and Europe, including Kosovo refugee camps (Gelbach, 2008; HAP, 2009; Jarero et al., 2006). The possibility of utilizing EMDR as one component of a comprehensive system of interventions that promote healing and enhance resilience post disaster has important global implications (Shapiro, 2009).

**CONCLUSION**

In summary, EMDR therapy and the AIP model on which it is based indicate the ways in which dysfunctional responses, including lack of resilience, self-efficacy, self-esteem, and self-reliance, are caused by the dysfunctionally stored, unprocessed memories of a wide range of traumatic experiences.
of disturbing events. These can be memories of major traumas, or the more ubiquitous experiences of childhood humiliations, failures, and lack of appropriate parental guidance. Initial phases of EMDR treatment include attention to resources that can be developed to establish positive, adaptive memory networks which, during reprocessing, can enable the person to spontaneously integrate dysfunctionally stored memories in a way that accesses resourcefulness and enables the individual to build a positive sense of self and ability to cope with internal and external events. It is posited by the AIP model that processing with EMDR therapy facilitates access to adaptive information, forging new associations that result in the comprehensive integration of the disturbing experiences within the wider memory network. An additional important finding in EMDR therapy is the spontaneous development of a sense of resilience, often reported in re-evaluation sessions following the reprocessing of a traumatic memory. When the experience is functionally stored, it becomes available to guide adaptive future behavior and thus, in this capacity, EMDR treatment can be said to provide a paradigm of resilience.

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Chapter 17

THE ROLE OF MINDFULNESS IN TREATING TRAUMA CLIENTS THROUGH DIALECTIC BEHAVIOR THERAPY

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ABSTRACT

Mindfulness meditation practices, traditionally an Eastern technique, have been increasingly adopted by Western behavioral psychologists and mental health practitioners. Although perhaps centuries old in Tibet, China, and other Oriental cultures, this strategy has been found to be effective through Western science only since the early 1970’s. Extreme traumas emotionally and behaviorally paralyze the individual, leaving volitional behavior impaired and psychological comfort compromised. Trauma causes neuronal, neuroanatomical, and psychological impairments that ill-equip the patient to overcome past experiences and make negative feelings linger. The impairment, from a Dialectical Behavior Therapy perspective, is centered on emotional sensitivity, a lowering of the threshold for emotional reactivity, resulting in emotional avoidance and escape. Mindfulness is described as a methodology to overcome these persistent negative emotional reactions resulting from past trauma.

Keywords: mindfulness; acceptance-based strategies; dialectical behavior therapy; emotional sensitivity; trauma recovery

INTRODUCTION

Mindfulness meditative strategies are in some ways antithetical to traditional Western-scientific logic. In the Western tradition of scientific logic new objects (plants, organisms, events, and processes) are categorized into genotypes and phenotypes, with similarities and differences between similarly categorized objects being noted. This “grouping” of objects

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(plant, animal, mineral) allows quick classification such that new and different objects may be examined. The Western tradition thus predicts quick examination, classification into categories, and retrieval of additional information on a “need to know basis.” Mindfulness, on the other hand, is the reverse process. Mindfulness invites us to “experience” through acute observation, every element of the object or process being observed. If you are being mindful of a tree, for example, one does not simply say to oneself “It’s a tree.” Instead, one watches the quivering of the leaves resulting from the wind flow, the different colorations of the leaves as they grow and die, the contrast between the color of the leaves and the bark from the branches that hold the leaves in place, the stature of the tree, the movement of the tree and its branches in the wind, etcetera. In other words, one does not, with Mindfulness, seek to identify and “leave” the experience, but to invite and welcome new and additional information that might be forthcoming from prolonged and extensive observation. Professionals can image when this process of Mindfulness is brought to bear on emotions. The individual is invited to “watch” emotions as they shift and change, to label and identify emotions more precisely, to observe emotions without attempt to change them; thus offering a level of exposure and acceptance to emotions that patients with trauma frequently attempt to avoid and to escape. Mindfulness is thus offered as a behavioral strategy that desensitizes patients to painful emotional affect, reduces emotional escape and avoidance, and offers acceptance of that which is such that patients reduce secondary emotional reactions to their experiences of the world.

RESEARCH ON ACCEPTANCE-BASED APPROACHES

Acceptance-based therapy procedures, unlike traditional behavior therapy that attempts to solve problems and engage in behavior and affect change, invite patients to experience their situation without struggle or expectation of change (Kabat-Zinn et al., 1998). Mindfulness is the most widely accepted technique used to accomplish acceptance-based decreases in agony (Goleman, 2003; Kabat-Zinn, 1994; Kabat-Zinn, Lipworth, Burney, & Sellers, 1986; Kabat-Zinn, Massion, Kristeller, & al, 1992; Miller, Fletcher, & Kabat-Zinn, 1995; Segal et al., 2002; Teasdale et al., 2000; Wegner, 1994). The pioneering research work with mindfulness (to be reviewed below) was originally conducted on chronic pain patients (Kabat-Zinn et al., 1986), but was adopted as a “core” strategy of DBT in use with borderline personality patients (Allmon et al., 1991; Linehan, 1987; Linehan et al., 1993).

Chronic pain patients pose an unusual challenge to traditional behavior therapy. Behavior therapy offers patients the hope of change of the status quo, while chronic pain patients by definition have little hope of substantially changing their physical pain. Chronic pain patients typically have had multiple evaluations by physicians, physical therapists, pain specialists, occupational medicine specialists, as well as mental health specialists. It is unusual for the chronic pain patient to not also be depressed because of the chronicity and intensity of their discomfort.

Dr. Kabat-Zinn is the acknowledged leader in using mindfulness-based interventions to treat pain patients. He taught mindfulness meditation in a 10 week stress education and relaxation program to train 51 chronic pain patients in self-regulation (Kabat-Zinn, 1985). Detached observation of their pain was taught, specifically having the patients attend to their

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pain rather than avoid or escape experience of their pain. At the time, he couched his intervention as increasing a patient’s knowledge of their own proprioception. His research showed a reduction of 33% in the mean total of a pain rating index at the conclusion of the 10 week program. Large and significant reductions in mood disturbance and psychiatric symptomatology accompanied these changes and were relatively stable up to 1.5 years later.

The next year the same experimenter and colleagues (Kabat-Zinn, Lipworth, & Burney, 1985) conducted another study on 90 chronic pain patients. These pain patients were also trained in mindfulness meditation in a 10-week stress reduction and relaxation program. Self-report indices show statistically significant reductions in measures of present-moment pain. This is significant in that patients were not taught how to reduce pain experience per se, but how to attend to their physical pain in a detached and nonjudgmental manner. In addition to the reduction of perceived pain, these experimental subjects showed scores indicative of reductions in negative body image, inhibition of activity by pain, pain symptoms, mood disturbance, and psychological symptomatology, including anxiety and depression. Reduction in perceived pain and increases in psychological health were thus observed through group mindfulness meditation practice. More objective measures such as pain-related drug utilization decreased, and activity levels and feelings of self-esteem increased. A comparison group of 21 pain patients did not show significant improvement on these measures after traditional treatment protocols. At follow-up, the improvements observed during the meditation training were maintained up to 15 months post-meditation training for all measures except present-moment pain (suggesting the importance of continued practice of the meditation techniques with an experienced therapist, in spite of the fact that the majority of subjects reported continued high compliance with the meditation practice as part of their daily lives).

In addition to the robust effectiveness of mindfulness-based treatment effects with chronic pain patients, the experimenters (Kabat-Zinn et al., 1986) demonstrated that these effects were long-lasting and that patients continued to use the mindfulness-based procedures up to four years after the initial 10-week intervention. Few short-term interventions have documented the staying power and effectiveness that mindfulness-based procedures have shown.

A substantial body of evidence suggests that experiential avoidance is harmful in a variety of psychopathological areas (Hayes, Wilson, Gifford, Folette, & Strosahl, 1996). They provide a poetic discrimination of acceptance-based psychological treatment strategies from traditional cognitive-behavioral approaches:

These new methods...seek to increase the range and flexibility of functions that occur in contexts that previously had only literal, avoidant, or evaluative functions. They carry the same message as old-fashioned, functionally oriented behavior therapy, but in a new package that validates and dignifies the importance of human thoughts and feelings and their role in human suffering. Mindfulness, acceptance, and defusion are not just a different way of treating traditionally conceptualized problems of depression or anxiety. They imply a redefinition of the problem, the solution, and how both should be measured. The problem is not the presence of particular thoughts, emotions, sensations, or urges: It is the constriction of a human life. The solution is not removal of difficult private events: It is living a valued life. (pp. 164-165)
The review of mindfulness research presented here is categorized as acceptance-based research because mindfulness training is proposed to have several components, only one of which is the actual practice of the meditative process. First, mindfulness is an intentional act. It requires that the meditator be aware of his/her own attentional and observational process. It thus predicts that there are various kinds of attention and consciousness, and that “ordinary” or automatic consciousness is only one of many ways of experiencing the world. Second, mindfulness encourages nonevaluative contact with events in the moment. Such attention to the functions of evaluative language itself serves to change one’s historical and immediate experience. It thus separates analytical thought from experience per se (discriminating observation itself from thoughts about observation). Rather than informing the meditator that their thoughts are distorted (that the patient is wrong), as some cognitive-behavioral theories presume, mindfulness invites the meditator to simply notice the evaluations and let them go when possible. Third, mindfulness invites acceptance of private events that previously may have been ignored or avoided. It increases contact with what is occurring in the meditator’s private world. Fourth, mindfulness promotes a principle that experience is valuable. By inviting participation with one’s experience (noticing what is going on in the meditator’s private world), there is implicit understanding that there is existential meaning to be found by training the mind to observe better and more fully.

In an early review of the literature, Davidson and Goldman (1977) noted that meditative attention appeared to enhance cortical specificity, but a simple concentration technique did not. Their early conclusion has been more recently confirmed by Dunn (1999) who used electroencephalographic recordings from 10 subjects (including 19 scalp recording sites) in meditation, concentration, mindfulness, and a normal relaxation control condition. The subjects were assessed both after initial training and after prolonged training. During each recording session, all subjects performed 3 tasks; (i) an eyes-closed relaxed baseline, (ii) a concentration meditation, and (iii) a mindfulness meditation. Analysis of all standard frequency bandwidth data showed strong mean amplitude frequency differences between the two meditation conditions and relaxation over numerous cortical sites. Significant differences were obtained between concentration and mindfulness states at all bandwidths, showing the superiority of mindfulness. Results suggest that concentration and mindfulness “meditations” may be unique forms of consciousness and are not merely degrees of a state of relaxation.

Valentine and Sweet (1999) studied the performance of 19 concentrative and mindfulness meditators (aged 24-43 years) on a test of sustained attention, and compared the results with that of 34 controls. Both groups of meditators demonstrated superior performance on the test of sustained attention in comparison with controls. Long-term meditators were superior to short-term meditators, suggesting the progressive gain that can occur with increased practice.

Mindfulness-based strategies appear to change the scope and accuracy of attention (Brown, Forte, & Dysart, 1984). Both experienced mindfulness meditators (when measuring simple objective criteria) and patients (when measuring global psychological criteria) experience changes; thus there is powerful experimental evidence for the effectiveness of mindfulness-based procedures.

Twenty-two patients with generalized anxiety and panic disorder were administered the same mindfulness-based group meditative practice as used with chronic pain patients (Kabat-Zinn et al., 1992), and significant improvements in several measures of anxiety and depression were found at posttreatment as well as at 3-month follow up. A three-year follow
The Role of Mindfulness in Treating Trauma Clients …

up of the same participants showed that the treatment gains had been maintained (Miller, Fletcher, and Kabat-Zinn, 1995).

Kabat-Zinn et al. (1998) studied 37 psoriasis patients treated with mindfulness meditation in combination with phototherapy or photochemotherapy treatment. The patients scheduled for medical treatment were randomly assigned to one of two conditions: a mindfulness-based stress reduction intervention guided by audiotaped instructions during light treatments, or a control condition consisting of the light treatments alone with no taped instructions. Psoriasis status was assessed by direct unblinded inspection by clinic nurses, direct inspection by blinded physicians (tape or no-tape), and blinded physician evaluation of photographs of psoriasis lesions. Four sequential indicators of skin status were monitored during the study, with the mindfulness-treated group showing significantly more rapid response to treatment than those in the no-tape condition, for both medical treatments. The authors conclude that a brief mindfulness-based stress reduction intervention delivered by audiotape during ultraviolet light therapy can increase the rate of resolution of psoriatic lesions.

There is even evidence that meditative techniques, including mindfulness, can extend longevity of life and increase psychological well-being (Alexander et al., 1989). Kutz and colleagues (1985) early noted the beneficial effects of adding meditative practices to traditional psychotherapy techniques. He studied the effect of a 10-week meditation program on 20 patients (mean age 38 years) undergoing long-term individual dynamic-explorative psychotherapy. The length of the patient-subject psychotherapy ranged from 1 to 10 years. Their diagnoses varied from severe narcissistic and borderline personality disorders to anxiety and obsessive neuroses, thus showing great variability in their symptom picture. While the patients continued their weekly individual psychotherapy sessions, they also met weekly as a group to meditate and discuss meditation, and meditated for 45 minutes daily at home. Home meditation consisted of meditation through attention to breathing, body awareness meditation, and mindfulness meditation. The patient’s improvement was rated by themselves and their individual psychotherapists. Both the therapists, as well as the patients, identified similar areas of improvement on measures of anxiety and depression. Therapists reported marked improvement in the development of insight.

Carlson, Speca, Patel, and Goodey (2003) investigated the relationships between an 8-week mindfulness-based stress reduction meditation program for 49 early stage breast and 10 prostate cancer patients and quality of life, mood states, stress symptoms, lymphocyte counts, and cytokine production. Significant improvements were seen in overall quality of life, symptoms of stress, and sleep quality. T cell production of IL-4 increased and IFN-gamma decreased, whereas NK cell production of IL-10 decreased. The authors conclude that their results are consistent with a shift in immune profile from one associated with depressive symptoms to a more normal profile, although there were no significant changes in the overall number of lymphocytes or cell subsets other than those noted above.

Cancer patients were studied by Speca and colleagues (2000) and they assessed the effects of mindfulness on mood disturbance and symptoms of stress in 90 cancer outpatients (aged 27-75 years). The study is significant not only in decreased symptoms, but that the symptom relief was consistent across gender, age, type, and stage of illness.

Binge eating disorder has been experimentally tested with mindfulness (Kristeller & Hallett, 1999). These experimenters use an even shorter intervention period (6 weeks rather than the 8 weeks used by most researchers), but use eating-specific mindfulness meditation exercises as well as standard mindfulness instructions developed by Kabat-Zinn. A single-
group extended baseline design assessed all variables at 3 weeks pre- and post-intervention, and followed up at 1, 3, and 6 weeks. Binges decreased in frequency, from 4.02/week to 1.57/week, and in severity. Scores on the Binge Eating Scale (BES) and on the Beck Depression and Anxiety Inventories decreased significantly, while sense of control increased. Time using eating-related meditations predicted decreases on the BES.

Demonstrating the robust effectiveness of mindfulness-based interventions, Riebel and colleagues (2001) examined an admitted heterogeneous 136 patients on health-related quality of life, physical, and psychological symptomatology after an 8-week intervention. Health-related quality of life increased as demonstrated by improvement on all indices, including vitality, bodily pain, role limitations caused by physical health, and social functioning. Physical symptoms were reduced by 28%; psychological distress was reduced by 38%. One-year follow-up revealed maintenance of improvements.

Some of the most powerful research demonstrating, in neuroanatomical terms, the power of a simple 8-week mindfulness-based stress reduction program was conducted by Davidson, Kabat-Zinn and colleagues (2003). A randomized and controlled study on the effects on brain and immune function were applied in a work environment with healthy employees. They measured brain electrical activity before and immediately after, and then 4 months after the 8-week training program in mindfulness meditation. Twenty-five subjects were tested in the meditation group, while 16 subjects in the wait-list control group were tested at the same points in time as the meditators. At the end of training, subjects in both groups were vaccinated with an influenza vaccine. They report significant increases in left-sided anterior activation, a pattern previously associated with positive affect, in the meditators compared with the nonmeditators. They also found significant increases in antibody titers to influenza vaccine among subjects in the meditation compared with those in the wait-list control group. Meditation thus shows changes in neurobiology, affecting the immune system directly. It can lead to brain changes consistent with more effective handling of negative emotion under stress (Kabat-Zinn, 2003).

Teasdale and colleagues (2000) present one of the most interesting applications of mindfulness. They attempt to use mindfulness as a prevention strategy with recurrent depression. Experimental subjects had to have several prior episodes of depression, but not be currently depressed, in order to participate in this multisite study. In patients, with three or more episodes of depression (77% of the total sample of 145), what they term mindfulness-based cognitive therapy (MBCT) significantly reduced relapse compared to treatment as usual; in patients with only two prior episodes of depression (23% of the total sample), there was no difference in relapse rates between patients receiving MBCT and treatment as usual. More episodes of depression predicted greater effect from the MBCT program. The treatment-as-usual control group patients showed a 66% relapse rate over the total 60-week study period, whereas those who received MBCT showed a much lesser relapse rate of 37%. Adding MBCT to treatment as usual had the effect of reducing risk of relapse by almost half for those patients who had more than two prior episodes of depressive disorder.

What is interesting in this study is that very little of the intervention is designed around known aspects of depression (loss of interest in pleasurable activities, disputing depressing thoughts, increasing hope and behavioral activity level, increasing reinforcer effectiveness, etc.). Instead, the authors use psychoeducation (cognitive therapy) to encourage mindfulness practice both during group treatment interventions as well as daily (45 minutes) in between each treatment session.

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In a treatment manual subsequently published (Segal, Williams, and Teasdale, 2002), the authors present one of the most comprehensible explanations of how to lead mindfulness-based interventions. The authors emphasize that the stance of the mindfulness approach is one of welcoming and allowing. It is invitational. It encourages "opening" to the difficult and adopting an attitude of gentleness to all experience, rather than engaging in problem solving that reinforces rumination. Nonreactivity, kindly awareness, gentleness, curiosity, adventure, and a willingness to observe are noted as essential characteristics of mindfulness “...wherever your mind may be, you can always start again the next moment. The essence of mindfulness is the willingness to begin over and over and over again.” (p. 134)

The aim is not to prevent mind wandering "but to become more intimate with how one's mind behaves...If your mind wanders a hundred times, then simply bring it back a hundred times." (p. 168) Staying present and being nonreactive, or nonstriving, to what you observe is noted. Notice the change during the practice from focusing attention (gathering) in the early stage to expanding attention in the later stage.” (p. 197)

Note the similarity to Linehan's (1993) notions of primary and secondary feelings: "...people find themselves preoccupied with avoiding harm or achieving reward in unhelpful ways that add to the negativity of the unwanted object or event, or to the frustration of not having the object of desire or affection.” (p. 201)

Attachment and aversion are noted to be antithetical to mindfulness. "Note, again, that the aim of the practice is not relaxation or even happiness. Rather, it is freedom from the tendency to get drawn into automatic reactions to pleasant and unpleasant thoughts, feelings, and events." (p. 193) Linehan (see Dimidjian & Linehan, 2003) goes even further and states that “mindfulness is conceptualized as attitudes and behaviors that the therapist emits, as opposed to behaviors that the therapist teaches the client to do” (page 169).

Segal, Williams, and Teasdale (2002) specifically note the role of negative thoughts in mindfulness-based approaches. Unlike cognitive-behavior therapy, mindfulness invites us not to gather evidence for or against our thoughts, to dispute them as if they are the enemy, but rather to bring a different quality of awareness to our thoughts such that we relate to them in different and new ways.

Baer (2003) reviewed the literature on mindfulness and determined that 20 studies met her criteria for experimental soundness. She interpreted mindfulness as involving exposure, cognitive change, self-management, relaxation, and acceptance. Of the 20 studies, she noted that 9 studies used pre-post designs with no control group. Nine used treatment as usual or waiting-list control groups. A meta-analysis of the 20 studies found effect sizes that ranged from 0.15 to 1.65, which she interprets as medium-sized effects “with some effect sizes falling within the large range” (p. 135). She concluded that “mindfulness training, on average, may bring participants with mild to moderate psychological distress into or close to the normal range” (p. 137).

Mindfulness has been shown to be beneficial in nonpathological samples (pre-med and medical students) as well (Shapiro, Schwartz, & Bonner, 1998). Astin (1997) conducted a similar study over an 8-week period with 28 undergraduate students and found similar results. Mindfulness has thus been shown to be effective with “normal” populations. Results such as these have been interpreted in light of control theory or self awareness (Barbier, 1996).
How Can Working with Mindfulness Alleviate the Pain of Trauma?

Trauma involves an insult or injury to the psyche. Those who have experienced trauma can vividly describe the situation that produced the trauma, but typically prefer not to do so because it revives the memories, fears, anxieties, and feelings of disability provoked by the traumatic event. This emotional avoidance, or experiential avoidance, actually heightens anticipatory anxiety in many individuals. As the patient engages in more and more efforts to avoid the stimuli that provoke anxiety, psychological coping resources become even more taxed. The avoidance behavior itself becomes yet another cue that they are damaged, changed in fundamental ways, and less resilient in carrying on with life as they had prior to the trauma.

Emotional arousal (hypervigilance for threat cues, autonomic reactivity, “baseline” anxiety and worry even without external precipitants, and impulsivity) increases. Patients frequently pay more attention to their bodily functions (heart rate, breathing, muscular tension, tremors), causing a feedback loop of, essentially, “I’m tense so there must be new and greater threats than I originally thought.” The trauma itself is in the past, but the sequela of neuronal (neurotransmitter), anticipatory (cognitive), and somatic events live on in the present.

Mindfulness is an acceptance technology partially used to defeat the emotional avoidance that powers anticipatory anxiety and secondary emotional reactions (see below). By exposing the patient to unwanted emotions in gradual and safe ways (Foa, 1986), the emotions over time become less intrusive and intense. As confidence is built that their emotions are indeed tolerable (even predictable and “normal”), disruptions in daily wanted activities decreases and the sense of helplessness decreases as well. Mindfulness meditation thus becomes a method of desensitization. The psychotherapist assists the patient to be mindful of their bodily responses without resistance, to be aware of their thoughts without judgment (not “I don’t like this about me” but “I notice this about me”), and to decrease hypervigilant behavior (paradoxically) through focused attention to both threat cues and safety cues. Mindfulness can be considered a method of desensitization, but it also a method of acceptance, a means of shifting strategies in dealing with intense emotional arousal (response interruption), and a fear reduction technique.

The acceptance aspect of Mindfulness cannot be overestimated. It is not just “I see” but “I see and it is okay, it is what is happening in the moment. It may change as I watch it.”

Dialectical Behavior Therapy: An Introduction

Dialectical Behavior Therapy (DBT) was first developed for the treatment of Borderline Personality Disorder (Linehan, 1993). Individuals with Borderline Personality Disorder (BPD) have among the highest suicide rates, and highest parasuicidal behaviors (behaviors that are self-damaging, but not intended to terminate life). Individuals diagnosed with BPD consume extraordinary medical and mental health resources. BPD patients frequently have histories of significant trauma (childhood sexual abuse, childhood physical and emotional abuse, and histories of emotional invalidation).
The global symptomatology of the BPD patient is remarkably similar to most individuals who have experienced significant psychosocial trauma: high emotional “baseline” experience (high emotional arousal including physiological, cognitive, and neuroanatomical changes for the worse even without immediate external precipitants), slow return to emotional baseline following new and different psychosocial threats, and impulsivity of behavior or emotional/behavioral withdrawal following new threats. The study of BPD is thus the study of trauma. DBT has increasingly been identified as the treatment of choice, and the standard of practice, for those patients who are self-abusive, impulse ridden, experience lingering negative emotions absent environmental precipitants, and who are otherwise capable individuals whose psychological coping skills are not utilized during high emotional arousal.

DBT has several premises. Behavioral reactions are attempts to reduce emotional arousal. They are not attempts to be manipulative of the environment; they are attempts to reduce emotional pain. Patients “treat” their emotions in substantially different ways than they view all of their other sensorial observations. While they will question the odor of food without questioning the veracity of their olfactory mechanisms, with emotions it is quite different. Rather than question the event, process, or sensation that brought their attention to the object in the first place, individuals with traumatic experiences will question the source (“I must be different than others, because not everyone has this overwhelming sense of doom that I have.”). Lastly, the premise is accepted that with trauma-induced disorder existing psychological resources are taxed and that even high-functioning individuals will fail to employ the coping resources available during high emotional arousal. DBT thus offers a set of psychosocial skills education and application designed to ameliorate these deficits. An example is worthy of note. As a former military psychologist whose mission was to “conserve the fighting strength”, my “mission” was to return depressed, anxious, and traumatized soldiers back to the battlefield. In other words, “of course you are scared beyond your wits in this war-time situation; that is normal - go back and do your duty.” The strategy (important in military psychology since one-third of all “casualties” are psychological rather than physical) was to normalize feelings (“your sense of chaos is normal, this is a chaotic situation”), reduce feelings of inadequacy (“we are all scared”), and shift attention from emotion-focused coping (“I’m petrified”) to task-focused coping (“I’ll have a better chance of survival if I fight rather than give up.”). While we can all argue the moral merits of this approach, in the end the survival (functionality and adaptability) of the individual is in the public good.

DBT assumes that the emotional sensitivity of the individual (the threshold for arousal) is lowered. This is due to the kindling effect (Adamec, 2000; Charney et al., 1993; Henke & Sullivan, 1985; Kalynchuk et al., 2001). The kindling effect predicts that once strong emotional arousal occurs, it takes less and less stimulation from the environment to induce a similar response in the amygdala and hypocampus of the brain. In other words, while psychological experience is the genesis of emotional disorder, once the neural net pathways are activated the threshold for reactivation is lowered. It takes fewer and fewer environmental events to produce similar emotional responses. Emotional sensitivity is also due to neural network pathways that continue to fire in spite of environmental safety. Prolonged stress produces excess glucocorticoids (O’Brien, 1997; Schulkin et al., 1994). Glucocorticoids are the biological solution to acute stress. They increase attention, physical arousal, and are part of the biochemical mechanisms of the “fight or flight” response. However, under prolonged stress due to trauma these same helpful biochemicals attack the amygdala and hippocampus (Johnson et al., 1992). The amygdala is considered the “emotion center” of the brain, and the
hypocampus is considered the “emotional memory” center of the brain. Prolonged stress results in the actual shrinkage of the hypocampus. The individual is left with both impaired ability to process emotions (amygdala) and impaired ability to remember events that trigger emotions (hypocampus). The result is emotional sensitivity. DBT is designed to reduce emotional arousal through acquisition of new psychological skill sets that can place in to motion new neural net pathways firing (new neural net kindling) that predict positive rather than negative emotions. There is evidence that psychotherapy affects biochemistry and neuroanatomical functioning of the brain (Cozolino, 2002), offering a solution to the emotional sensitivity that many of our patients experience. DBT acknowledges psychological factors in working with trauma patients (abandonment, specific traumatic events, loss, attachment issues, and invalidation). The role of secondary emotional reactions (Linehan, 1993) deserves amplification. A secondary emotional reaction is an emotional reaction to a primary emotion. The primary emotion may be fear in the rape victim; fear that they may be killed, physically injured, and unable to escape the victimization over lengthy periods of time. This fear is the primary emotion. Later, the victim may experience shame that they were victimized, shame that their fear continues past the traumatic event, and guilt that they can’t just “shut off the feelings.” This is the secondary emotional reaction. It involves a judgment (an invalidation) of the primary emotion: “I should not feel the way I feel.” Validation that the primary emotion was a reasonable, normal, even predictable response to the original event is essential. Working through the secondary emotional reactions (and teaching the patient to discriminate between their primary and secondary emotional reactions) takes time and effort on both the therapist’s and patient’s part. DBT accomplishes reduction in emotional sensitivity by embracing the dialectics of life. Each behavior in which we engage involves both gains and losses. “What am I gaining by this behavior, and what am I sacrificing?” Each choice we make has both gains and losses. This is a normal aspect of life. With high emotional arousal, patients tend to get stuck on one end of the gain/loss continua, frequently attending only to short-term safety and sacrificing long-term objectives and wants. This is especially true with trauma victims, who fear new and similar emotional injuries to those they have suffered beforehand. DBT invites patients to explore the contradictions in emotional life. With Mindfulness meditation, the patient is encouraged to explore and observe their emotions, even those that hurt (exposure, desensitization, and acceptance). With Emotion Regulation skills, they are taught to change environmental precipitants that sustain emotional pain. With Distress Tolerance skills, they are taught to endure emotional pain (exposure) that cannot be changed. With Meaning-Making skills they are taught to target their endeavors toward actions that have enduring purpose to them, providing the anchor toward perseverance of efforts toward behavioral and emotional change despite obstacles. With Strategic Behavior skills they are invited to shift between emotion-focused coping and task-focused coping, and between long-term and short-term objectives.

A THERAPEUTIC ENCOUNTER WITH MINDFULNESS

Trauma patients are in acute emotional agony. One of the benefits of Mindfulness is eliminating automatic escape and avoidance strategies. Mindfulness is thus an excellent laboratory to experiment with sustaining attention to experience even when it’s painful (not

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attempting to stop the experience) and to sustain attention to experience even when it is pleasant (without attempting to prolong the experience). Mindfulness thus can assist the trauma patient to practice initiation of new experience. Observation in Mindfulness does not have a goal or objective (to increase pleasure or decrease pain).

In the therapeutic encounter below, notice that the DBT therapist does not promise the patient that they will immediately feel better by being mindful to their emotional pain. Nor does the therapist tell the patient that by being mindful in this moment they will feel relaxed or soothed. Instead, the carrot the DBT therapist holds out is that the patient will have additional freedom in their lives because they won’t always be running way from something or running to something. Escape and avoidance behaviors take a lot of psychological energy, and in fact avoidance and escape may actually define the process of traumatic agony itself.

*Patient:* I feel so tight and anxious. I feel like I’m going to explode from the inside out.

*Therapist:* That must feel horrible. Let’s practice mindfulness to this pain. Can you pay attention to the tightness, right now? Where do you feel it?

*Patient:* I feel it in my neck, in my shoulders, in my chest. Everywhere.

*Therapist:* Just focus on the muscles in your neck. Identify each and every muscle that’s hurting you there. Identify the location. Then feel the individual muscle, if you can. Feel the tightness. Can you feel the individual muscles in your neck?

*Patient:* I don’t think I can feel the individual muscles. Just all of them as a group.

*Therapist:* Focus on just one area of your neck. Feel the tension there.

*Patient:* It’s tight, like someone was pulling on each end of the muscles and making them tight.

*Therapist:* Stick with that tightness, in that one location, for just a moment. Besides tightness, what else can you feel in that one location?

*Patient:* I’m beginning to think of what I have to do after our appointment is over.

*Therapist:* Your mind is wandering. That’s okay. That’s what minds do. They wander. Just gently bring your focus of attention back to that one area of your neck. Welcome attention to the tightness.

*Patient:* Okay, I’m back on my neck.

*Therapist:* What do you feel in your neck, that one area of your neck, besides tightness?

*Patient:* It feels warm and hard. And it makes my head feel heavy, like it just wants to rest rather than be tight.

*Therapist:* Attend to the warmth and hardness.

*Patient:* Okay, I can feel the heaviness.

*Therapist:* Good, focus on the heaviness. Can you describe in any other words, what your neck feels like, especially in that one area you’re focusing on?

*Patient:* No, but my chest and stomach don’t seem as tight as before.

*Therapist:* Okay, notice that your mind wanders to other parts of your body. You notice that when you don’t run from attention to your body, some areas of your body may

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relax a little. That’s okay. Go back to your neck - pay attention to your neck. Can you describe any other sensations?

Patient: Just the heaviness, the warmth, the tightness.

Therapist: Okay, stick with that for just another half minute. (Pause)

Patient: Okay.

Therapist: That was great. You were able to pay attention and stick with it for a few minutes, even though it was uncomfortable. You didn’t explode.

Patient: But I’m still tense.

Therapist: That’s okay. In distress tolerance, you’ve learned how to soothe your body in ways that may produce relaxation. But here we are trying to do something else, something just as important. We’re learning to pay attention even to pain, to be mindful of pain and not run from it. And that, too, is important. Eventually it will result in your having more freedom, because you won’t be spending so much time running away from your experiences. You’ll be able to notice your experience, experience it just for what it is and then move on. But we have to notice what’s happening before we change what’s happening. Most of us want to change unpleasant experience immediately, before we even fully assessed what it is we are trying to change. Mindfulness is about observation, and some of the other parts of DBT are about change.

Patient: But will this mindfulness eventually help me feel less anxious?

Therapist: Maybe not. For a lot of people it does. But that isn’t its purpose. The purpose of mindfulness is to attend better, notice more, and stick with experience, rather than always trying to control our experience.

This vignette demonstrates several aspects of Mindfulness with trauma patients. First, you make no promises except that the practice will increase observational skills (in fact, in the beginning patients may experience increased suffering). Second, minds wander. An attitude of acceptance on the part of the therapist is critical. Third, trauma patients want immediate relief. Who wouldn’t? Sustaining attention to the emotion, rather than focusing on change of the emotion, is the essential ingredient of acceptance-based strategies in psychotherapy.

CONCLUSION

Mindfulness is a powerful agent in the treatment of severe trauma victims. Trauma patients frequently engage in emotional avoidance and escape behaviors that paradoxically increase their emotional suffering. This is due to vivid recollections of the traumatic event, repetitive spiraling of autonomic (somatic), cognitive, and affective (neuronal pathway kindling) domains that keep the trauma “present in the moment” rather than historical. Negative emotions linger rather than wane, keeping the patient hypervigilant for threat cues (increasing the probability of stress and disability over time). Mindfulness, as both an acceptance and exposure technique, is designed to desensitize the individual to intense emotional conflict. With Mindfulness practice, the patient is able to decrease secondary emotional reactions that increase emotional intensity, increasingly expose themselves to the

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current environmental events that may prompt new and different emotions, and thus decrease
the negative feedback loop of memories, somatic arousal, and intensity of affect that make a
past trauma a present reality for the patient.

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Chapter 18

Utilizing and Integrating Mathematics and Physics in Treatment for Recovery from Trauma and Abuse

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Abstract

The utilization of principles from mathematics and physics can support the use of new, stronger containment in the treatment of trauma and abuse by utilizing principles of the polarity approach for symmetry breaking, safety, and new forms of comfort that are required in the face of deeper, broader and more complex wounds. Furthermore, the logic and creativity utilized by mathematics and physics can serve as powerful delivery systems for utilizing the experience of beauty to transform chronic states of low-self esteem, thinking errors, hopelessness, and projections of abandonment. Rossi’s work has helped form bridges between hypnotherapy and molecular biology, chronobiology and chaos theory.

This chapter discusses the integration of principles from physics and mathematics with hypnotherapy and other therapeutic modalities. This integration can continue the deepening and broadening of these bridges, while simultaneously continue to strengthen the bonds between mind-body healing and the other major therapeutic modalities, cognitive behavioral therapy, psychodynamic therapy, and Jungian therapy that Rossi has been validating and including consistently in his work through metaphor and the implied directive.

Keywords: creativity, trust, safety, time, space, motion, position

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INTRODUCTION

In a well known hypnosis case in which Erickson treated a harpist with sweaty palms, Erickson and Rossi (1979) discussed the need to build bridges between the conscious and unconscious. Erickson commented that it was essential to appreciate the need for bridges, and to build them, when working with deep trance states that involved the presentation of new ideas and the creative reorganization of psychic structures. The building of bridges supports the treatment in the following ways; it: (A) provides support needed while in deep states of mind-body healing; (B) provides support needed to facilitate new states of consciousness and neurogenesis; and (C) facilitates comfort for the struggle between the rigid defenses of the past, and the resource networks for creative problem solving in the present and the future.

For over fifty years, physics has been struggling to unify the gravitational theory with quantum theory. The theories of relativity and special relativity, developed by Einstein (Fosling, 1997, Greene, 1999, Weinberg, 1992) dealt with the large or macro world, and the quantum theory developed by Bohr, Heisenberg, Schrödinger and others (Bohr, 1990; Feynman et al., 1964; Heisenberg, 1972) dealt with the small, or sub-atomic worlds. Many attempts to unify the two theories into one unifying theory have met with frustration because the bridges needed to connect the two theories proved hard to find.

In a similar vein, Rossi (1996, 2002) has traced the evolution of classical hypnotherapy into mind-body hypnotherapy from the perspectives of two apparently divergent approaches. One point of view, initiated by Bernheim, advocated that hypnosis was an active state, while the other, lead by Charcot of the Salpetriere School in Paris, argued that it was a passive state. This debate continued with the next generation of researchers led by Hull and Pavlov. Hull argued for the active state while Pavlov hypothesized that hypnosis was a state of partial sleep (Hull, 1933/1986; Rossi, 1996, 2002).

Erickson’s innovative approach that utilized both the active and passive approaches to facilitate change and creative problem solving provided the bridge between the active and passive state theories. (Erickson, 1958, 2006; Erickson and Rossi, 1979, 2007; Rossi, 1986, 1996, 2002). Simultaneously, Erickson shifted the emphasis of treatment from suggestions to the utilization and appreciation of the patient’s experiences and internal resources. Erickson and Rossi concluded that it was a misconception to attribute the power of hypnosis to suggestion, expressing their position in the following: “At the most, the therapist can only influence the manner of self-expression. The induction and maintenance of a trance serve to provide a special psychological state in which the patient can reassociate and reorganize his inner psychological complexities and utilize his own capacities in a manner concordant with his experiential life. Hypnosis does not change the person, nor does it alter his past experiential life. It serves to permit him to learn more about himself and to express himself more adequately.” (Erickson and Rossi, 1979, p. 8)

Erickson’s work functioned as a critical phase transition on three levels that provided a bridge toward a deeper understanding of how the healing process worked. These three levels were: (1) Erickson shifted the frame of reference from suggestions from the therapist to the resources within the patient; (2) he developed a language for communicating directly with the unconscious through the utilization of indirect suggestions, confusion, the interspersal technique, non sequiturs, and metaphor; and (3) he demonstrated that he could teach patients to trust their unconscious through a series of experiential learnings.
In terms of specifically treating trauma, Grove and Panzer (1989) recognized the need for therapists to trust ‘clean language’, and the use of symbols to facilitate safety and the activation of unconscious healing resources and processes. Levine (1997) emphasized the need to trust the instinctive or reptilian brain as the source of healing resources to address frozen temporal and positional aspects of trauma.

**PATHWAYS TO INTEGRATION AND UNIFICATION**

Efforts toward integration in various fields represent an attempt to bridge varying perspectives or dimensions into unified wholes. These attempts probe for core, fundamental principles and processes.

Pathways to integration within physics, hypnosis, and psychology have evolved along lines of parallel dimensions that can be understood by Jung’s transcendent function (Jung, 1960; Rossi, 1996) psychodynamic theory regarding splitting (Kernberg, 1976; Masterson, 1976), and cognitive behavioral therapy’s understanding of cognitive distortions (Beck, 1976; Wolpe, 1978). More importantly, however, they have been rooted in the logic and creative thinking expressed in the mathematics of Fourier, Gauss (Heisenberg, 1972), and Ricci-Curbastro (Einstein, 1960; Heinbockel, 2006).

Within physics, work with linear algebra, calculus, and tensor calculus produced theories and experimental validation of the workings of the gravitational force and the dynamics of the quantum world. The utilization of the principle of equivalence and the commutative law provided additional value (Greene, 1999; Heisenberg, 1970; Overbye, 1991). The principle of equivalence identified that gravity and acceleration motion were equivalent, and was identified by Einstein (Greene, 1999, Isaacson, 2006). The commutative law of mathematics is a basic law saying: AB = BA. These developments, along with the continued work of Einstein, Hawking, and others set the stage for the emergence of superstring theory in 1965 (Deutsch, 1997; Gell-Mann, 1994; Greene, 1999). Superstring theory showed promise of being the bridge for the unification of the forces through the identification of the messenger like particles of strings to be identical with the properties of the gravitron, the messenger particle of the gravitational force (Greene, 1999; Schwarz, 1995).

Even in the infancy of hypnosis, Braid, the researcher who identified the process of hypnosis, was able to recognize that the mind and body were united, expressing this unification by the use of the term ‘psychophysiology’ (Rossi, 2001; Tinterow, 1970). Rossi (1986, 1992, 1996, 2002) continued to elaborate and expand on Erickson’s work in a number of significant areas, expanding the integration of mind-body hypnotherapy with other therapeutic modalities by including molecular biology, chronobiology, and chaos theory. With regard to molecular biology, he reinforced the recognition of the mind body connection by identifying the hypothalamus as the relay station or bridge, directing incoming stimuli from the environment for processing by the systems of the body.

In terms of chronobiology, Rossi (1986, 1996) recognized that the work of Kleitman (1969), which identified the REM cycle and the ultradian rhythm, provided the physiological bridge that supported the integration of the active and passive approaches, validating Erickson’s naturalistic methods. By implication, this provided another metaphor for treating the psychodynamic defense of splitting.
In addition, by utilization of the implied directive, a suggestion that works through implication (Erickson and Rossi, 1979) Rossi was advocating the need to trust time, and utilize it as a resource (Gregory, 2005, 2007; Rossi, 1996, 2002).

Rossi incorporated Rossler’s work on chaos theory to provide deeper therapeutic metaphors for the containment and treatment of narcissistic defenses and trauma by the implied directive and the polarity approach (Rossi, 1996, 2002). Rossi’s discussion of the work of Rossler, Langdon, Moss, and others identified nature’s use of chaos as a necessary component of creative reorganization and problem solving. One major aspect of chaos theory that was utilized was the phenomenon of stochastic resonance, which reflected the relationship between randomness and order. A case of stochastic resonance was one where small, random appearing, changes could facilitate changes in an entire system (Moss, 1992; Rossi, 1996).

On an implicit level, however, Rossi pushed for an integration of mind-body hypnotherapy with other therapeutic modalities and other branches of science, especially in the area of molecular biology, suggesting through implication that trust on many levels needs to continue to expand. A major component of this integration was the acknowledgment, trust, and utilization of physiological resources in the healing process. Further, these physiological resources functioned as metaphors for safety and capacity (Gregory, 2005, 2007; Rossi, 1986, 1996, 2002). As Rossi continued to develop the work of Milton Erickson, one of his areas of focus became the expansion of the domain of hypnosis by the utilization of psychosocial cues to facilitate gene expression (Rossi, 2002, 2004). This expansion utilized the implied directive to ‘deepen’ the scope of the need and resources for trust, safety, and capacity. This appreciation of depth is consistent with advances in physics and mathematics throughout the past century in relation to relativity, quantum mechanics, string theory, and symmetry. This level of depth is the cornerstone for the treatment of trauma, abuse, and addiction.

As Rossi (1986, 1992, 1996, 2002, 2004) expanded the work of Milton Erickson to include the fields of molecular biology, chronobiology and chaos theory, he demonstrated by the implied directive (Erickson and Rossi, 1979; Rossi, 2002) that the processes utilized by the mind-body approach are consistent with cognitive behavioral therapy, psychodynamic therapy, and Jungian psychology. Rossi recognized that the following aspects of molecular biological processes all reflected capacities for discriminating clearly, which is a cornerstone of cognitive behavioral therapy: (1) the filtering systems of the cell membrane identify and manage the passage of information from outside the cell to inside the cell; (2) the transfer of information on a molecular level in the range of 10-4th to 10-8th cm that supports separation and transformational processes is accomplished by the capacities of molecules to recognize and receive new molecular components; (3) the flow of information in the hippocampus that activates the creb cycle facilitating neurogenesis is accomplished by molecules’ ability to discriminate accurately incoming information (Beck, 1976; Loewenstein, 1999; Rossi, 2002); and (4) the core unifying implied directive of Rossi’s work that serves as the foundation of this bridge to cognitive therapy is that therapists have the capacity to rethink the underlying processes involved in healing.

The bridge to psychodynamic therapy is made by applying the implied directive to the capacities for containment. The vast physiological resources, whether they be on the level of the hypothalamus or the hippocampus, or the molecular level, are all examples of the capacity of containment.
These resources include POMC, ATP, adenylate cyclase, serotonin, dopamine, the creb protein, and electrons that are utilized to support the transfer of information between atoms and the nucleus of the cell. These resources validate, through the implied directive, the psychodynamic axiom that containment is a cornerstone of the therapeutic healing process. (Kernberg, 1976; Kohut, 1977; Masterson, 1976; Winnicott, 1965).

The bridge to Jungian therapy was made through the utilization of the polarity approach and the transcendent function. Jung identified the transcendent function as one of the primary healing mechanisms of the unconscious that integrated opposites. Rossi applied this concept to the polarity approach whereby one side of the polarity became the symptoms of the patient, and the other side became the resources that represented the opposite type of experience for the patient (Jung, 1923; Rossi, 1996, 2002). Figure 1 represents the integration of the different areas.

Efforts toward integration within mainstream psychology have addressed this issue from a number of different perspectives. Magnavita (2008) identified that efforts toward integration have been dominated by four different approaches; technical eclecticism, theoretical integration, assimilative integration, and common factors (Norcross and Newman, 1992). James (1890) and Wilbur (2000) have suggested that the ‘soul’ may represent a unifying concept. Magnavita (2008) has suggested that the different psychological orientations have in essence operated as tribes with esoteric language systems. Further, Magnavita (2008) argues that any unifying system must be grounded in scientific evidence. He identified the need to develop a system that had a ‘three dimensional view’ and addressed the need for restructuring on a variety of levels, including the neurobiological. Wilbur (2008) argues that any unifying theory must include a spiritual component, and that such a theory already exists in the form of the integral approach.

Wolfe (2008) noted that most attempts at integration focused predominantly on the psychodynamic, cognitive, and systems approaches, while excluding the humanistic and experiential approaches. Knoblauch (2008) stressed a more open minded approach, without a particular need to formally unify, arguing that the approach of unification could interfere with spontaneous and creative expansion. Knoblauch (2008) emphasized the need to ‘keep thinking about thinking’.

Anchin (2008) suggested that principles of systems theory could be useful in the integration process, especially by drawing from cybernetics and chaos theory. The efforts in main stream psychology work toward accomplishing: (A) building a comprehensive model for healing that is comprehensive and embracing, as opposed to models that are excluding, territorial and dogmatic; (B) helping psychology to progress beyond the metaphor of the blind...
men describing the elephant; and (C) translating problems with terms created by language differences into terms and processes that are recognized to be equivalent.

**Historical Review of the Evolution of Trust in the Therapeutic Healing Process**

The need and value for trust has been explored from a variety of perspectives for over fifty years. Rogers (1961) identified the need for unconditional positive regard, expressed through acceptance and mirroring. Winnicott (1965, 1971) identified the need for ‘good enough mothering’, and the need for containment for the patient to feel safe. Kohut (1971, 1977) identified and appreciated the needs for empathy and mirroring. Klein (1932, 1975) implied that the need for containment of affect supports trust building from a safety perspective. Laing (1965, 1971) pointed out that the validation of the patient’s experience, especially with regard to communication patterns within the family, was an integral part of building trust between patient and therapist.

Masterson (1976, 1981) advocated that the formation of a therapeutic alliance was dependent on the mirroring and containment of the false self. Jung (1923, 1964) proposed that the unconscious could and should be trusted to facilitate healing through the transcendent function. This was equivalent to Masterson (1976, 1981) stressing the processes of struggling and working ‘through’. It was also equivalent to Perls’ (1973) trusting that integration would occur naturally from interaction with parts of the patient’s experience in the present tense.

The majority of these efforts focused on the building of trust between therapist and patient in the service of the patient feeling safer to open up and to feel more confident in the therapist’s ability to facilitate different types of healing. The work of Milton Erickson explicitly shifted the primary focus of trust to the intrapersonal domain by advocating trusting the unconscious and its resources (Erickson and Rossi, 1979; Rosen, 1982). See Figure 2.

As Rossi extended the work of Erickson to include the areas of molecular biology, chronobiology and chaos theory, by utilizing the implied directive, the need for trust expanded, as demonstrated in Figure 3.

In addition to the physiological resources, ‘time’ and ‘chaos’ could also be utilized and trusted, as illustrated in Figures 4 and 5.

![Figure 2. Development of Trust. (Bruce Gregory, Copyright © 2011).](image-url)
These figures indicate aspects of ‘time’ and ‘chaos’ that can be utilized as bridges to deeper trust through the processes of the learning set, ‘yes sets’ and ‘truisms’ (Erickson and Rossi, 1976; Rossi, 2002).

In addition, from the perspective of chronobiology, applying the implied directive once again, we see another facet of expanding trust, identified in Figure 6.

In addition, in accordance with the principles of the implied directive, the deepening of the need, utilization, expansion and valuing of trust is consistent with advances in astronomy, astrophysics, and molecular biology. In 1934, Hubbell made a discovery that galaxies were flying away from each other at extremely high speeds, indicating that the universe was expanding (Greene, 2004; Overbye, 1991).
This discovery was verified mathematically by Friedman and Lemaitre (Greene, 2004). In the area of molecular biology, research has shown that there is a direct correlation between the size of the hippocampus and depression.

Specifically, when a person is depressed the hippocampus is smaller, generally by 15% (Rossi, 2002; Sapolsky, 1996; Sheline et al., 1996). When one factors in the fundamental need for harmony that is expressed in musical composition, the need for expanded trust is not only consistent, but necessary.
The aspects of the expansion of trust this article is addressing from the perspective of the therapist are the trust of containing complexity and the trust for containing the depth of the need for safety. From the perspectives of both the therapist and the patient, the aspect of trust I am addressing is the trust of creativity. These expansions of trust will be discussed in the sections dealing with the integration of mathematics and physics. Figure 7 reflects a new form of comfort.

INTEGRATION OF MATHEMATICS AND PHYSICS INTO THE THERAPEUTIC HEALING PROCESS

To see how the use of trust can continue to be expanded, we now look directly at the fields of mathematics and physics.

Learning and healing take place in the context of progressions (Jung, 1960; Rossi, 1986, 1996; Squire and Kandel, 1999). These progressions are maintained and facilitated by a set of complex interactions of containers operating on multiple levels of being (Loewenstein, 1999; Rossi, 1986, 1996, 2002; Squire and Kandel, 1999). Whether it is on the cosmic or quantum level, mathematical reasoning, and processes have been utilized to address the relationships between time, space, motion, position, and energy. These relationships are expressed in the Einstein field equations, the Heisenberg equation of motion, and the Schrödinger wave equation (Greene, 1999; Isaacson, 2006; TCL, 1996).

When considering the treatment of trauma, abuse and addiction, safety is a primary issue. Safety requires depth, and ‘implies’ the need for secure, integrated containment of a variety of variables. The strongest forces of containment are the four forces of physics; the electromagnetic, the strong and weak nuclear forces, and gravity.

Application of Implied Directive with Relativity and Treatment Issues Related to Space, Time, Motion, and Position

The sciences have a hierarchy that reflects an appreciation of the relative strengths in terms of what is fundamental. Mathematics holds the position of the foundation of the sciences, with physics being in the second position. Mathematics holds this position because the precise equations it has derived describe the relationships between the variables of the other branches of science. The reasoning/thinking utilized in mathematics reflects the capacity of patients to think more clearly and more creatively. Mathematics is an appreciation of thinking, especially in relationship to the laws of nature pertaining to space. Almost all patients’ symptoms reflect an imbalance in relationship with space. A traumatized patient is frozen in space and time. An abused patient’s space has been violated, and as a result he or she feels unsafe and unprotected. A patient struggling with addiction issues finds his or her space dominated and controlled by the disease of addiction, which is a complex interaction of a series of narcissistic defenses.

When the implied directive is applied to mathematics, it becomes apparent that by exploring different principles and processes of mathematical reasoning, there is a high

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probability that the same laws which apply to metaphor, interspersal techniques and indirect associations, also apply to mathematics.

Greene, (1996) commenting on the logic employed by Einstein in the development of his field equations of relativity said: ‘Although Feynman expressed this view more than three decades ago, it applies equally well today. What he meant is that although the special and general theories of relativity require a drastic revision of previous ways of seeing the world, when one fully accepts the basic principles underlying them, the new and unfamiliar implications for space and time follow directly from careful logical reasoning” (Greene, 1999, p. 87).

There has been extensive discussion of Einstein’s struggle and reasoning in the formulation of the principles of relativity and special relativity (Einstein and Infield, 1938; Feynman, 2002; Isaacson, 2006). Set out below is the graphic which depicts the relativity equation that Einstein identified through an application of the tensor calculus previously developed by Riemann and Ricci-Curbastro (Isaacson, 2006).

$$R_{\mu\nu} - \frac{1}{2}g_{\mu\nu} R + g_{\mu\nu}\Lambda = \frac{8\pi G}{c^4} T_{\mu\nu}$$

$$G_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu}$$

The left side of the equation represents how the geometry of spacetime is warped and curved by objects. The right side of the equation describes the movement of matter in the gravitational field (Isaacson, 2006). As physicist John Wheeler has said, “Matter tells spacetime how to curve, and curved space tells matter how to move” (Overbye, 1991, p. 90).

Einstein’s Special Relativity and General Relativity theories are about motion with respect to time, space and position. Special Relativity applies to uniform motion. General Relativity was developed through Einstein’s exploration of accelerated motion. Through creative thought experiments, Einstein realized the force of gravity was equivalent to the force of acceleration motion (Greene, 1999; Isaacson, 2006). Einstein’s field equations for relativity are the mathematical expression of containment of motion on a cosmic level. Through the application of the implied directive, we have a bridge for thinking about and utilizing the polarity approach with gravity. Gravity is the deepest and broadest of the containers, along with the three others, the electromagnetic, strong and weak nuclear forces, outside of space and time themselves.

The electromagnetic force acts on particles with electric charges, helping to hold electrons in orbit around the nucleus of atoms. The strong nuclear force provides containment within the atom itself, and the weak nuclear force affects subatomic particles. The work of Heisenberg and Schrodinger provides metaphorical containment on the quantum level, through the capacities of the electromagnetic force, and the strong and weak nuclear forces.
There are two basic ways to construct these containers depending on the experiential focus of the patient. The first of these relates to the utilization of gravity in the construction of the polarity (see Figure 8). The second utilizes the electromagnetic force and will be discussed in the section on quantum mechanics (see Figure 9).

In the first instance, the patient’s experience is characterized by a sense of alienation or abandonment. Often, the consequence of this is that the wound received from a parent, sibling or other is now globally projected onto the universe itself. In addition, the patient’s experience is functioning either as a chronic or periodic attractor in terms of chaos theory (Rossi, 1996). The degree of the constancy of this experience deepens the patient’s sense of ‘oldness’ to the experience, leaving them receptive to a novel experience that can initiate the healing process. This is where the utilization of ‘gravity’ as a bridge comes in, providing that the therapist has trust in its capacity to facilitate the activation of the processes leading to gene expression which support new positions, increased safety, and increased self-esteem.

The application of the physics metaphors is first dependent on the therapist establishing a ‘yes set’ with the resources. Only when the therapist trusts that the resources as metaphors can facilitate new forms of safety and comfort on deeper levels will they be consistently useful. A creative, conversation approach, complemented by the utilization of the interspersal

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process can then appeal to the patient’s need, longing and receptivity to experiences of novelty that support breaking of old patterns and positions, and the hippocampal processes that lead to neurogenesis.

Case Example

The patient is a 27 year old, single, white, female with a history of depression. She is the adult child of an alcoholic father, is a college graduate, and a clerk in a bookstore. She has extremely low self esteem and is socially isolated. She reports being almost constantly overwhelmed by terror, which she rates as 95 on a 1-100 scale, with 100 being the highest point. The subsets of the terror include: being consistently terrified of her internal critical voice that is condemning; being terrified that the voice is right, and that she is a horrible person, an evil daughter; being terrified of the terror; and being terrified of her ‘other’ feelings, which has yet to be identified. The patient also reports periodic cutting, as a response to feelings of self-hate.

Stages of Treatment

1. A series of basic accessing questions were asked over a period of six months, in order to validate her experience, communicate no pressure, and set the stage for the seeding of polarities, whose relationships could be explored in conversational trance states. Patient experienced herself as being consistently ‘frozen’.
2. Her terror, and her relationship to it was explored from a variety of perspectives, which included the sources of the terror, sensations of the terror, location of the terror, effects of the terror, frequency of the terror, and the voice of the terror.
3. Consistent exploration stimulated images of being choked, and looking at her outstretched arms prior to cutting.
4. A number of polarities were set up to assess her readiness to proceed further, and to stimulate unconscious process. These polarities included:
   - Relationship between her terror and the resources to deal with it.
   - Relationship between the terror and her courage.
   - Relationship between her terror and her need to be held.
   - Relationship between her impulse to cut, and her need for compassion.
   - Relationship between her destructive expression of her rage, and the possibilities for expressing it in a healthy way.
5. As a space was held for the polarities, over time patient found her voice and allowed her rage to come out, and allowed the terror to be released through the shaking of her arms.
6. Integration of these experiences facilitated a lowering of the depression, a lowering of the terror to under ‘30’, and increased feelings of self esteem.
Examples of Some of the Questions Utilized

- Have you ever wondered about the kinds of support you need to deal with the terror?
- When you have received support, how have you received it?
- Do you have any particular sensations or images when you receive support?
- What is your level of motivation to deal with the terror?
- What are your worst fears when you imagine facing your terror?
- Do any particular places in your body relax when you receive support?
- Have you ever explored your rhythm for receiving support?
- Have you ever had any images or sensations related to your need for support?
- Have you ever considered what forces may support the need to be held?
- Have you ever explored your courage?
- What images or sensations do you have when you explore your courage?
- Have you wondered what kinds of attention your terror needs?
- Have you ever remembered dreams with terror and/or courage in them?
- When you think about being held, what images, sensations, or associations do you have?
- Have you ever considered how certain forces in nature contribute to the holding process?
- Have you ever wondered how gravity participates and supports in containing you?

Application of Implied Directive with Quantum Mechanics and Treatment Issues Related to Space, Time, Motion, and Position

Careful logical reasoning was utilized to develop the Schrodinger wave equation and the Heisenberg equation (Heisenberg, 1972; Schrodinger, 1989). These equations follow.

Heisenberg Equation:

\[ H(P^0, Q^0) x - W x = 0 \]

The Schrodinger equation is:

\[ \frac{\partial^2 \psi}{\partial x^2} + \frac{8\pi^2 m}{\hbar^2} (E - V) \psi = 0 \]
A major difference in these two equations compared to Einstein’s relativity equations was that the reasoning was oriented to understanding relationships and forces in the micro, atomic, quantum worlds. Einstein’s equations utilized the application of tensor calculus, while Heisenberg used matrices and vectors, and Schrodinger used operators and functions. It is important to recognize, from the perspective of treating the defense of splitting, the need for safety, and the capacity for change that Heisenberg and Schrodinger addressed the behavior of the electron from markedly different perspectives, and different processes.

Heisenberg approached the behavior of the electron from the perspective that it was a particle and used matrices to alter vectors. Schrodinger took the position that the electron was a wave and used operators and functions to perform his calculations. Careful analysis has shown that the Heisenberg equation fits inside the Schrodinger equation and that the energy values for both equations are equal (LRF, 1996). These processes emphasize and describe the roles of position, direction, and motion in relation to the behavior of the electron. These equations also represent capacities for containment, safety and comfort that are consistent with principles of symmetry. As such, application of the implied directive in these areas, complemented by the utilizations of the learning set, yes sets, pacing, and the interspersal approach can facilitate new forms of comfort.

It is at the quantum level, the world of the atom, and its constituents, that the electromagnetic, strong and weak nuclear forces operate and provide containment. This is containment at the level of ‘small’. These forces act metaphorically as Winnecott’s ‘holding environment’.

**Case Example**

The patient is a 48 year old, married male accountant, with a history of alcohol and cocaine abuse. Patient was abused verbally and physically on a regular basis throughout his childhood by his father. The physical abuse included many violent beatings. Symptoms of the abuse and trauma manifested around the age of 20, when the patient became addicted to cocaine, and resulted in a nine month stay in a residential rehabilitation treatment center. The patient became stable for about nine years, after which he had consistent alcohol abuse, which he supplemented with periodic crack cocaine binges, once or twice per year.

This was his third round of individual treatment. The patient reported a tremendous amount of self-loathing, chronic marital dissatisfaction, and an inability to deal with anger, resentment and rage in constructive, healthy ways. In terms of acting out within the treatment setting, the patient used denial, intellectualization, and avoidance as his primary defenses.

**Stages of Treatment**

1. A series of basic accessing questions were asked over a period of four months, in order to validate his experience, communicate no pressure, and set the stage for the seeding of polarities, whose relationships could be explored in conversational trance states. Patient reported being consistently overwhelmed, and spinning out of control.

2. His anxiety was recognized as a doorway to this terror about his rage toward himself and toward his father. His terror at his rage, and his relationship to it was explored from a variety of perspectives, which included the experiences that were the sources
of the terror, sensations of the terror, the frequency of the terror, the voices of the terror, and positions of his body while terrified.

3. Consistent exploration stimulated vivid images of being beaten, and verbally humiliated. Patient also became aware of being terrified of being out of control in terms of his rage, and terrified of being like his father.

4. A number of polarities were set up to assess his readiness to proceed further and deeper, and to stimulate unconscious process. These polarities included:
   a. Relationship between his terror and the resources to deal with it.
   b. Relationship between his rage and the resources to deal with it.
   c. Relationship between his terror and his need to be held.
   d. Relationship between his impulse to run and his courage.
   e. Relationship between the destructive expression of his rage and the possibilities for expressing it in a healthy way.

5. As a space was held for the polarities, over time, the patient accessed his courage and found his voice and trust of his body to express his rage through pounding and yelling.

6. Integration of these experiences facilitated a dramatic lowering of his anxiety, a significant rise in his self-esteem, more efficiency at work, and an increased ability to function as an adult in his marriage, reducing his codependent behavior.

7. Patient has been drug free for eighteen months, with only three minor alcohol slips.

Examples of Some of the Questions Utilized

- Have you ever wondered about the kinds of support you need to deal with the terror?
- Have you ever wondered about what kinds of forces provide holding and support for things in motion?
- Do you have any particular sensations when you receive support?
- Have you ever realized that electrons play a role in your receiving support?
- Have you ever wondered about the forces that support electrons, and even the atom itself?
- What is your level of motivation to deal with your terror?
- Do any particular parts of your body relax when you receive support?
- Have you ever wondered about what resources support you when you need to receive support at a level deep inside you?
- Have you ever explored your rhythms for receiving support?
- Have you ever wondered about what positions your body prefers when receiving support?
- Have you ever recognized the need to be held as a form of support?

When a therapist has developed more trust and internal ‘yes sets’ with some of nature’s fundamental laws with regard to containment, motion, position, time and space, a therapist becomes more sensitive and receptive to the verbal and nonverbal communication of patients. The concepts related to gravity, the electromagnetic, and strong and weak nuclear forces are for the therapist only to learn in terms of trust. It is not necessary or realistic that patients
develop “yes sets” for these concepts. It is sufficient that the concepts be seeded through the interspersal technique. The therapist’s increased sensitivity is the foundation for creating and facilitating experiences that can activate unconscious resources on a deeper level, thereby promoting balance and harmony which can reduce alienation and anxiety.

CONCLUSION

Core principles from mathematics and physics in relation to time, space, motion and position, can be incorporated in the further integration of Rossi’s Mind-Body approach with other therapeutic treatment modalities and the various branches of science. Deeper containers can be developed for the treatment of trauma and abuse through the utilization of the implied directive and deeper trust to integrate thought processes and principles from mathematics and physics. These containers can facilitate more safety and comfort for clients recovering from the effects of trauma and abuse.

The sequence of steps for this process can be summarized as follows: (1) the therapist recognizes a need for an expansion of trust in order to contain the complex factors surrounding the need for deeper safety in the context of treating trauma and abuse; (2) the therapist develops yes sets for trusting creativity, containing complexity, and containing depth of safety; and (3) the expanded trust is then utilized to develop polarities relating to the trauma and the abuse whose relationships can be transformed by a creative use of basic accessing questions around the parameters of time, space, motion, and position. The utilization of the perspectives of space, time, motion and position are core factors in the facilitation of safety at deeper levels.

REFERENCES


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Chapter 19

ACTIVATING SPONTANEITY TO HEAL CHILDHOOD TRAUMA

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ABSTRACT

Childhood trauma can interfere with the development of natural healing processes so that the early experience remains fragmented, and hence adult functioning is strongly influenced by the coping strategies developed in childhood. During psychodrama group therapy, the interplay between inner experience and interpersonal encounter can stimulate natural healing processes and generate a transformative experience which heals the long term effects of childhood trauma. Attention to processes which assist the protagonist to stay in the moment, without being re-traumatised, facilitates the development of spontaneity so that the protagonist’s resourcefulness is activated. When these conditions are present, the healing process typically proceeds through four phases: (i) accepting self in the original traumatic environment; (ii) activating inner resourcefulness to strengthen the sense of self; (iii) transforming traumatic expectations through social atom repair; and (iv) integrating a new sense of self in the present. These phases are illustrated with extracts from the psychodramas of two women who had experienced childhood trauma - one who lived with domestic violence and another whose childhood community was invaded during war.

Keywords: psychodrama group therapy; childhood trauma; spontaneity; transformation; traumatic expectations

INTRODUCTION

Most people are faced with unexpected and deeply painful events at some point in their lives. In the moment when a person is first confronted by the sudden and unforeseen death of a

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loved one, the breakdown of a primary relationship, an accident or a natural disaster, the person experiences psychological trauma - a fragmentation of the sense of self as the psyche first goes into shock and then scrambles to defend and protect itself against bodily-felt emotional pain. If natural healing processes are generated in response to the event, the fragmentation is temporary, and the experience is assimilated into the person’s world view (Stiles, 2006); the sense of self may be strengthened as the person recognises that they have the capacity to confront painful experience.

Healing involves individual and interpersonal processes. Inner processing of emotional pain assists the person to experience and accept the sadness, anger, fear and hurt associated with loss and trauma (Greenberg and Bolger, 2001) so that the experience is eventually incorporated into the person’s understanding of self and their environment. Interpersonal support can facilitate secure emotional expression (MacNair-Semands, Ogrodniczuk and Joyce, 2010) which plays a vital role in regulating affective experience and breaks down the sense of isolation that emotionally painful experience can produce.

When experiences are deeply traumatic, however, the person’s cognitive and affective functioning are overwhelmed, so that natural healing processes are not adequately activated. This may occur if (a) there is a prolonged threat to life and the person is powerless to influence the outcome; (b) the trauma involves deliberate acts of physical, sexual and emotional violence; (c) there are multiple traumatic events over a period of time; or (d) the traumatic event affects a whole family system or community. The traumatic experience generates terror which is fundamentally different from fear because, instead of activating the body’s natural fight or flight response, terror freezes the body’s response mechanisms. After the event, the person is confronted by irrefutable evidence that the world is not always a secure and predictable place; that the mind and body have not been able to tolerate the affective experience which has been generated, and they struggle to make meaning of their experience. Violence that is perpetrated within family or community systems further compounds the traumatic injury because it increases the individual’s sense of isolation, and reduces the possibility that they will seek interpersonal support. This is particularly pertinent to traumatic experiences in childhood, which is commonly associated with a serious breach in interpersonal trust, either because the traumatic events have been directly perpetrated by family or community members, as is often the case with childhood abuse, domestic violence and some war trauma; or because the child is more clearly dependant on primary caregivers for survival, and experiences his or her primary relationships as being unable to meet basic needs for safety and protection.

The Impact of Childhood Trauma on the Emerging Personality

Early childhood trauma is a formative experience which is incorporated into the emerging sense of self so that it has an enduring impact on adult functioning (Drapeau and Perry, 2004). While traumatic experience in adults shatters fundamental self constructs and threatens the integrity of the established sense of self (Celinski and Gow, 2005), childhood trauma is more insidious because it occurs before cognitive abilities have matured and before the sense of self has been established. Neuropsychological research has identified clear links between interpersonal relationships in early childhood and neurological development, particularly in the areas that influence emotion regulation, cognitive abilities and interpersonal functioning.
Activating Spontaneity to Heal Childhood Trauma

(Heim, 2009; Siegel, 2001); and Siegel suggests that the response of significant others during and after traumatic events is probably the most important influence on the child’s ability to make meaning of their experience. Without adequate doubling and mirroring from primary caregivers, the overwhelming affective experience of trauma remains unprocessed and the child does not have the emotional or cognitive maturity to form a coherent understanding of their inner experience or of their relationship to others and to the events that are occurring around them.

The traumatic experience remains fragmented, seemingly unreal, and the child fails to develop confidence in their assessment of their environment or their ability to respond to new situations. When biologically driven expectations of nurturing and protection are not met, traumatic expectations are internalised (Pynoos, Steinberg and Goenjian, 1996), so that the person’s relationship with their inner and outer world is guided by beliefs that certain types of interpersonal situations will always be dangerous and that protection and comforting will never be available to them. A significant impact of unprocessed childhood trauma in adult life, then, is the development of fixed or rigid responses to situations that trigger traumatic expectations.

Promoting Natural Healing Processes through Psychodrama Group Therapy

For the adult survivor of childhood trauma, group work offers an opportunity to establish positive interpersonal connections which play a major part in healing the sense of fragmentation and interpersonal dislocation which trauma creates. Moreno (1946/1980; 1959/1975; 1969/1975) emphasises the importance of strengthening interpersonal connections in order to activate a person’s natural healing processes and he developed psychodrama as a therapeutic method that combines interpersonal encounter and inner experience, for this purpose.

Psychodrama is a clinically sophisticated group therapy based on Moreno’s social and psychological theories and has been used extensively for the treatment of PTSD (Hudgins, 2002; Ragsdale, Cox, Finn, and Eisler, 1996) and trauma in general (Holmes, Karp and Watson, 1994; Kellermann and Hudgins, 2000).

A psychodramatic enactment aims to produce a ‘close-to-real’ experience of the individual’s inner and outer world to activate their natural healing processes. It is a form of exposure to the subjective reality of the client and, as with other exposure therapies (Foa and Kozac, 1986; Foa, Rauthbaum, and Hembree, 2006; Watson, Greenberg and Lietaer, 1998), psychodrama facilitates the processing of traumatic material if deep re-experiencing is accompanied by new information which redresses the trauma-based learning. The place where psychodrama differs from other exposure therapies is in its overt focus on creating a new interpersonal context in which the person re-experiences the traumatic material. The

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1 Moreno’s spontaneity theory of childhood development posits that adequate doubling and mirroring from primary care givers in infancy is necessary for healthy development. When the primary care giver doubles the infant, he or she is in tune with the infant, and is able to put words to, or act upon, the infant’s needs. In this way, the infant gradually learns to differentiate inner experiences. Mirroring supports the early phase of development of an individuated sense of self, and is operating when the care giver notices the infant and in effect ‘mirrors’ back some aspect of the infant’s functioning. Psychodramatic doubling and mirroring are specific techniques which are described in Textbox 1.
empathic response of the group, combined with the development of new role relationships as the person acknowledges and acts upon previously inhibited responses, can lead to a transformative experience which fundamentally changes the person’s sense of self in the world.

Moreno (1946/1980) proposes that the sense of self emerges from the roles a person enacts in their life and that healthy functioning is marked by spontaneity, an inner readiness to respond in the moment with purpose, flexibility and vitality. Spontaneity is enhanced when a person stays connected with their here-and-now experience, so that new roles are developed as required by new situations and the person’s sense of self expands over time. Unprocessed trauma from childhood interrupts spontaneity because the person avoids being present in the moment, particularly when strong emotions are activated, fearing that they will be unable to tolerate the emotional pain and that the self will disintegrate (Bolger, 1999). Essentially, a trauma survivor first needs to learn to stay present in the moment without being overwhelmed. They are then open to experiencing more of their inner and outer world than they could previously tolerate, so that a more developmentally mature perspective of their world is possible. When this occurs, the psychodramatic enactment of a person’s central concern can produce the conditions which generate spontaneity, activating the person’s natural resourcefulness to transform traumatic experience and integrate new role relationships into the sense of self.

**A Model of Spontaneity Development**

Clients’ experiences during psychodrama group therapy show that the interplay between inner experience and interpersonal encounter can stimulate the person’s natural healing processes and generate a transformative experience (McVea and Gow, 2006; McVea, Gow and Lowe, 2011). In this next section, a model of therapeutic change is presented that was constructed from a research project which investigated people’s experiences of healing childhood abuse, domestic violence, traumatic grief and civilian war trauma during psychodrama groups (McVea, Gow and Lowe, 2011).

Processing traumatic material, without re-traumatising the client, requires that the therapist give thoughtful attention to the development of spontaneity, so that greater cognitive, affective, and behavioural flexibility in response to self and others is gradually produced. The trauma survivor’s learned avoidance of their inner experience needs to be respected as an invaluable defence, born of intolerable circumstances.

There is a high risk of re-traumatising, if a person is exposed to traumatic material without adequate therapeutic safeguards to replace this defence (Hudgins, 2002). With this in mind, the healing process during psychodrama typically moves through four phases of progressively greater spontaneity development: (i) acknowledging the reality of the original traumatic experience and accepting self within that context; (ii) activating inner resources to strengthen the sense of self; (iii) transforming the traumatic experience through social atom repair; and (iv) integrating new role relationships into an expanded sense of self (see Figure 1). To bring this process to life, each of these phases will be illustrated through the experience.
of two psychodrama protagonists\(^2\): Jane, who was exposed to domestic violence throughout her childhood and Angela\(^3\), whose early childhood was lived in a war zone.

![Spontaneity Development in Healing Traumatic Experience](image)

**Figure 1.** Spontaneity development in healing traumatic experience. Note: Spontaneity continuum, \(\text{CI} = \) Catharsis of Integration.

**Introducing the Two Protagonists: Jane and Angela**

Comparing the therapeutic journey of these two women - Jane and Angela - reveals common themes that are shared by adults who are recovering from the effects of childhood trauma, but also highlights the individual nature of each psychodramatic enactment as it follows the process of the protagonist.

Jane is a 50 year old professional woman who was exposed to domestic violence from birth. Her father was a violent alcoholic and she witnessed him assaulting her mother and her sister, as well as being a victim of his violence herself. When she was very young, her mother died in an accident and Jane and her sister were subsequently raised by their father. Jane was forbidden to grieve or talk about her mother and there was no discussion of her mother's death; and so she created an image of her mother running down the road to get away from her (Jane), deliberately running into the path of a car and being smashed into pieces. Throughout her childhood and her adult life, she relived a terrifying fantasy image of her mother’s body parts being spread across the road. Believing that her mother would rather kill herself than live with Jane, and experiencing the ongoing violence perpetrated by her father, Jane decided that she was utterly unlovable and formed a terror of intimacy. At the age of 50, she had been successful in her chosen career, but she had not had a lasting intimate relationship. She was prone to episodes of severe depression, occasionally leading to hospitalisation, and at the time of the psychodrama group she was taking medication to manage a recent depressive episode.

\(^2\)The term ‘protagonist’ is used in psychodrama to refer to the group member who is the subject of the psychodramatic enactment; the protagonist’s issue typically reflects the central concern of the group at that time, so that the protagonist’s drama affects all members of the group.

\(^3\)Names and identifying characteristics have been changed.
Jane described herself as having ‘deadness’ inside her, being always composed and feeling nothing over major losses in her life, yet bursting into tears over minor incidents.

The second protagonist, Angela, is a 60 year old woman who was a young child when her native country was invaded during wartime and her father was imprisoned and killed. Her father’s disappearance coincided with another incident where Angela had let a family pet out of the house and it had been killed by a snake. As a child she had conflated these experiences and concluded that it was her recklessness which had killed her pet and her father. At that time, all the men in the local community were imprisoned or killed, or had moved into the countryside to avoid being captured. Consequently, the remaining adults in the community consisted solely of highly traumatised women. Angela was the youngest child and the combined energies of the women in her extended family seemed to be focussed on keeping her safe, reinforcing her belief that her natural exuberance was dangerous to herself and to the people around her. Angela noticed in her adult life that she was always very anxious when her husband was away from home; but she realised that her anxiety was triggered by an association with her father’s disappearance and death and, although the anxiety didn’t abate, she was able to tolerate the discomfort. Now, more than 50 years after the initial trauma, Angela had a young grandson and her anxiety for his well-being had become debilitating. If her daughter was five minutes late bringing him for a visit she would imagine that her grandson had been killed and this would precipitate a panic attack. She was suffering insomnia and having difficulty going away from her home for fear of what would happen in her absence, and she was beginning to believe that, in her own words, she was going mad.

The Psychodrama Enactment

In a psychodrama enactment, a group member volunteers to be a protagonist and sets out in action their subjective reality of their inner and outer world, in relation to a central concern that they want to address.

Group members are selected by the protagonist to be auxiliaries, taking up the roles of significant others or of different aspects of the protagonist’s inner reality. Key psychodramatic interventions that the director (therapist) uses to produce the enactment are (i) role reversal, whereby the protagonist and an auxiliary step out of the roles they are in and step into the role of the ‘other’, so that they can experience and respond in the moment as-if they are the other; (ii) doubling, which is the intentional use of a group member ‘in the specialised role of … the inner self’ (Blatner, 1988, p. 28) to assist the protagonist to be aware of and put words to their inner experience; and (iii) mirroring, whereby auxiliaries portray ‘the body image and unconscious of (the protagonist) at a distance’ so that the protagonist can see themself (Moreno, 1975/1959).
Activating Spontaneity to Heal Childhood Trauma

Textbox 1. The Format of Psychodrama Extracts in this Chapter

A transcript of an enactment is repetitive, as the protagonist and group members move between roles. A simple example is a brief interaction between Jane, the director and an auxiliary being Jane’s mother, which might look like this:

1. Jane: (Speaking to ‘Mum’) What about your responsibility to this little girl?
2. Director: Reverse roles with your mother. (Jane and the auxiliary reverse roles.)
3. Auxiliary as ‘Jane’: What about your responsibility to this little girl?
4. Jane as ‘Mum’: I’m flat out surviving myself.
5. Auxiliary as ‘Jane’: It’s not good enough. She’s just a little girl.
6. Jane as ‘Mum’: I’m really sorry; I wish I could look after her better.

(In this example, the auxiliary as ‘Jane’ improvised (line 5) based on her experience of being in the role).

To make the extracts in this chapter easier to read, they have been simplified to include, in most instances, only the protagonist’s dialogue, so that the example above is now written as:

1. Jane: What about your responsibility to this little girl?
2. ‘Mum’: I’m flat out surviving myself.
3. (Aux) ‘Jane’ It’s not good enough. She’s just a little girl.
4. ‘Mum’ I’m really sorry; I wish I could look after her better.

Note: In the extract, (Aux) indicates that it is the auxiliary speaking; and quotation marks indicate that the person is in the role of ‘other’ (i.e., ‘Mum’ = the protagonist being mum’; (Aux) ‘Jane’ = an auxiliary being Jane.).

Phase 1: Re-Experiencing and Accepting Self in the Context of the Original Traumatic Environment

As was noted earlier, unprocessed childhood trauma is often recalled with a sense of disbelief and unreality, so that even when an adult has an intellectual understanding of how trauma has affected them, they are unable to genuinely relate this understanding to their own experience and are more likely to be guided by beliefs that were constructed in childhood in an attempt to make sense of their fragmented reality. The first phase of recovery, then, involves the protagonist experiencing the original traumatic environment as real, so that they can begin to construct a more coherent narrative of that experience. This is done through the enactment of the social system that was operating at the time of the trauma, rather than the core traumatic event itself. If the client engages with the core trauma at the beginning of an enactment, terror will be activated and re-traumatisation will result (Hudgins, 2002). However, it can be confidently predicted that if the protagonist is warmed-up to the traumatic experience, any starting point that she and the director negotiate for the enactment will quickly re-produce the problematic interpersonal dynamic that was experienced at the time of the trauma. Therapeutic conditions need to be in place to regulate potentially overwhelming affect at this point and, if this can be achieved, the protagonist will then gain insight into the traumatic expectations and defensive processes that were developed in response to that original experience.
In Jane’s enactment (Textbox 2), we see that she begins with a clear intention to have a constructive dialogue with her ‘mother’, yet in the first moment of her enactment she begins to experience the old dynamic as if it was happening in the here-and-now and becomes lost in her own confusion. The close-to-real experience is necessary to produce the conditions which will generate the original response; but the challenge is to manage her affective experience so that she can move out of confusion enough to access new information about the event.

Textbox 2. Jane Re-Experiences and Accepts Self in the Traumatic Environment

At the beginning of her session, Jane wants to have an adult to adult conversation with her ‘mother’ who had died when she was a child, so that she can bring their relationship up to date. She sets out two chairs and asks a group member to be her ‘mother’. They sit facing each other, but Jane finds that she is unable to speak to her ‘mother’.

Jane (Speaking to the Director). This doesn’t feel real, but that’s okay because the only connection I have with my mother is as a little girl.

(The director invites Jane to bring an auxiliary to be ‘Jane as a child’ into the scene. Jane then takes up the role of the child, and speaks to her ‘adult self’.)

Child J*: (Speaking to adult ‘Jane’). She (Mum) was pathetic. She didn’t want me. She didn’t like my energy and she never had time for me.

Director: Do you want to tell your Mum?

Child J: I suppose. (The protagonist looks at ‘Mum’) Umm. Phew. Umm. It doesn’t feel real. (She shakes her head, as if to shake out her confusion) Yeah, she didn’t want me. (Shakes her head) She didn’t want me, she wanted a boy.

Jane: Okay, I can talk to her now. (Speaking to ‘Mum’) Thank you for being here to talk to me. I feel sorry for you and that’s not what I want to feel. I want to feel valued by you instead of having to look after you. What I’m distressed about as an adult, what I feel confused about (she faces the director) is that I keep wanting to be supportive of her, but I want support for me.

Child J: (Speaking to ‘Jane’): What about support for me? What about support for me? I’m a little girl and I need someone to love me.

Jane: (Speaking to ‘Mum’). I was a little girl who came into your life and I needed your love and your energy and your engagement. … And now I’m thinking of you again, that you were so sad and your life was so awful.

Jane is brought out of the action space, to watch group members as they mirror the interaction.

Jane: I have to look after her, she’s so pathetic. … I can’t listen to me; I’ve got to listen to her. I’ve got to look after her.

Note: *Child J = Jane as a child.

Doubling and mirroring are key interventions for developing emotion regulation and meaning making. A ‘double’ takes an empathic position beside the protagonist and puts words to the protagonist’s unexpressed or undifferentiated experience. This reduces isolation and assists the protagonist to recognise their experience and differentiate feelings in this moment from feelings in the past. Watching the enactment from a position outside of the action space, effectively having group members mirror the experience, enables the
protagonist to create emotional distance and observe what is happening in the enactment. Initially, the protagonist may avoid looking at the scene, or may observe it in a very detached way, to avoid the overwhelming feelings that the experience generates, and at these times a double may be necessary to ground the protagonist. When overwhelming affect is regulated, the protagonist can observe the re-enactment and be consciously affected by it, and while this is likely to produce genuine distress, the distress is now accompanied by compassion, warmth or acceptance towards the self and a bodily-felt acknowledgment of the impact of the traumatic situation.

Each time Jane begins to speak directly to her ‘mother’, she becomes conflicted and confused. Two interventions assist Jane to manage the overwhelming affect which is present in these moments. Firstly, Jane’s inner reality includes on the one hand, her sense of being a child in relationship with her mother, and on the other hand, her fantasy of being an adult having a dialogue with her mother. Setting out both aspects of her inner reality means that when she is unable to speak directly with her ‘mother’, she has a safer alternative and speaks as the ‘child’ with ‘Jane’ the adult. In this new relationship, she begins to identify her own needs and has a bodily felt experience of the internal shift between focusing on her own needs and being drawn into her mother’s orbit. This is assisted by the auxiliary who, when acting as the child, essentially becomes a double expressing Jane’s unspoken needs whenever Jane is caught up in her mother’s experience. The second intervention occurs at the end of the scene when Jane is taken out of the action space to watch the enactment being mirrored by group members. She is now able to more clearly articulate the dynamic that operated between herself and her mother.

Re-experiencing the larger system expands Jane’s perspective and creates a sense of hope. Reviewing the event later, Jane recalled being deeply connected with the distress she had felt as a child; she became aware that as a child she had learned to shut off her own feelings when they were in conflict with what she had considered to be her primary duty, in order to support her mother.

As she re-experiences this struggle to maintain her own integrity, Jane begins to feel more compassionate towards herself as a child. She begins to realise that the ‘unreal’ feeling she experiences as an adult has its origins in her experience as a child and the concern that she begins to feel for herself increases her motivation for change.

The first scene of Angela’s enactment (Textbox 3) also focuses on her relationship with her mother and begins when she expresses distress at being ‘suffocated by affection’ in her family of origin.
Textbox 3. Angela Re-Experiences and Accepts Self in the Traumatic Environment

Angela was becoming increasingly anxious in the group, knowing that she needed to do some work and thinking that she would have to confront her fear that she had caused her father’s death. However, as she watches another protagonist being comforted as a ‘baby’, she becomes very distressed and has a powerful urge to claim space for herself. She sets out a scene when she is six years old and she is encircled by adult women (her mother, sister, aunt, nanny and others) who are putting their arms around her protectively. Acting as each of these women in turn, she expresses their fears and concerns, and enacts the various ways in which she experienced them attempting to control her when she was a child. Angela becomes the ‘child’ and group members take up the roles that Angela has enacted, surrounding and holding her.

(Aux) ‘Mum’: No, no, no, you better stay inside. It’s too wet out there and it’s too dangerous. And there are snakes out in the garden.

(Aux) ‘Nanny’: I love you very, very much. You’re so skinny, you have to eat more. Come on, eat. I have to get more food inside you.

(Aux) ‘Aunt’: I want to protect you. I don’t want you to feel pain or to get into danger. Do as you’re told, listen to your mother. We want to keep you safe.

(Aux) ‘Sister’: Don’t worry, we’ll look after you.

Child A: God. I can’t stand being in here. (Group members continue to surround her and repeat their messages) No, no, no! (She becomes progressively louder, and then steps outside of the circle). Look I’m going, I want to play!

‘Mum’: (Begins crying) Oh no, don’t go, what will happen to you? What will happen? You’ll get hurt; I have these dreams where you get hurt.

Child A: (Becoming distressed, she moves to comfort ‘Mum’.)

The auxiliaries again surround the ‘child’ and repeat their controlling messages.

Child A: (Crying). I don’t want to be like this. I want to go, I want to be free, but you won’t let me.

‘Mum’: We want to look after you and keep you with us. You’re the only one I have left. I need you; I have to have you here.

Child A: But Mum, I want my own room like other girls have. I have to sleep with you and I don’t like sleeping with you.

‘Mum’: Well, I’d be all alone then.

Child A: I don’t care.

‘Mum’: (Cries loudly). Oh, that is so cruel.

Child A: Ssshhh, ssshhh, ssshhh (she puts arms around ‘Mum’ and comforts her.)

The director takes Angela out of the action space to watch the auxiliaries re-enact the interaction.

Angela: Mum’s good at doing this. She’s awful; she wants me to look after her and I comfort Mum because I can’t stand her crying. I never cry now because I hate it. (Angela cries quietly as she continues to watch the auxiliary being the ‘child’ comforting ‘Mum’). She’s giving in.

Angela returns to the enactment as the child, and an auxiliary stands outside the action space as ‘Angela’, and in the remaining interaction in this scene Angela moves between these two roles.

Child A: You know, I’m really confused.

Angela: I feel really sorry for you. (She takes the ‘child’ by the shoulders) Don’t worry about Mum, she doesn’t know any better.

(Aux) ‘Mum’: (Cries loudly)

Angela: She will get over the crying, she’s a really strong woman.

(Aux) ‘Mum’: (Cries loudly again).

Angela: I don’t know which way to go. I’m pulled because my mother was an old woman when she had me; she was old and I thought she was going to die.
As the ‘child’, Angela becomes distressed and expresses her need for autonomy, but when she relates to her ‘mother’ she becomes confused. As in Jane’s enactment, moving out of the action space assists Angela to observe the dynamic between herself as a child and her ‘mother’ and to be affected without being overwhelmed. Watching the auxiliaries mirror her experience, she becomes aware of her mother’s use of crying to manipulate her and she notices the moment when, as the ‘child’ she blocks her expression and gives up on herself. Whereas previously she had been critical of her inability to separate from her mother, Angela is now compassionate and comforting towards herself; she recognises that her tendency to restrict her own exuberance has emerged from her anxiety as a child that her mother was going to die, just as her father had.

As Jane and Angela’s examples illustrate, when a protagonist becomes more conscious of how their traumatic expectations were formed, they begin to accept their own behaviour at that time as a response to an untenable situation and develop a more positive relationship with the self. Depth of experiencing is vital for the person to achieve bodily-felt insight, rather than the intellectual understanding which both women already possessed. Insight offers hope, but it does not lead to healing unless the protagonist is able to act to intervene in the dynamic, and in spite of their hopefulness, neither Jane nor Angela feels empowered to change the old dynamic at this point in their enactments.

**Phase 2: Activating Inner Resourcefulness to Strengthen the Sense of Self**

Feeling stuck heightens the protagonist’s frustration and agitation, and when this is accompanied by a shift in the relationship with self, an underlying ‘act hunger’ is mobilised. The person begins to recognise that they feel angry and to understand that the expression of anger, which might once have been dangerous, is safe in this environment.

The active participation of the director and group members is vital to this process, because it is the capacity of the new social system, the therapeutic group, to work with the emerging strong emotion which facilitates the safe expression of anger. The participation of the director and group members reduces the sense of isolation and assists the protagonist to recognise and build confidence in their emerging response. As the protagonist acts to set a boundary between self and other, the sense of self as competent is strengthened. In Jane’s enactment (Textbox 4), the intervention of a group member from the position of a double is essential in grounding Jane in the present and mobilising her act hunger. When Jane later reflected on what had happened in this scene, she recalled that it was the auxiliary speaking out against her ‘father’ which activated her own response. Until now Jane had been somewhat mesmerised by the enactment of her parents’ conflict, but in this moment she becomes fully present, and recognises that she can now respond in a different way to events on the stage. She experiences letting go of the fantasy that her mother will eventually intervene; an idea which has contributed to her remaining passive. At the same time, she incorporates into herself, a greater sense of her own ability to act. Confronting the fearful dynamic builds the protagonist’s confidence that she can create something different, and contributes to a sense of herself as a competent person.

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4 Act hunger refers to the inner experience of incompleteness and dissatisfaction which is produced when a person is unable to act on feelings or motivations generated in the moment.
Textbox 4. Jane Confronts her Violent Father

At the end of the previous scene, Jane realised that she was focussing on her mother and unable to look after herself, and she became concerned about her father’s violence towards her mother. In this next phase, she sets out a scene where, as a child, she is hiding in the garden outside her home, while her father is physically and verbally attacking her mother inside the house. The ‘child’ is clearly traumatised, and the director asks her to set out a safe space where she can watch the scene with a group member as her double.

Now, she is watching the interaction between her ‘parents’ and the ‘child’ hiding. She is mesmerised by what is happening. As the enactment is repeated, the ‘double’ becomes increasingly frustrated and calls out to the ‘father’ to stop. At this moment, it is clear that the double is attuned to an aspect of Jane’s unexpressed response, because Jane immediately becomes interested and more alert.

(Aux) ‘Father’: (Yelling at ‘Mother’) You are such a stupid, ugly woman.
(Aux) ‘Mother’: (Screams).
(Aux) Double: No! That’s not right. That can’t happen.
(Aux) ‘Father’: I don’t care.
Director: (The director notices that Jane sits up straighter when the double calls out): If that’s true Jane, put words to it for yourself.
Jane: Yeah! That can’t happen. You guys stop that!
(Aux) ‘Mother’: Careful, he’ll hurt you!
(Aux) Jane: I’m not frightened of him!
Director: Is that right?
Jane: (Her voice becomes stronger) I’m not frightened of him. I’ve stood in front of him to stop him hurting my little sister. Yeah! (Jane moves towards her ‘father’, but is crouching, as a child).
Director: You’re an adult now; you don’t have to be a little child anymore.
Jane: Yeah! (She stands up and faces her ‘father’, looking him in the eye with her hands on her hips). Stop that!

It is significant that Jane confronts her father from the perspective of an adult, not from the perspective of the traumatised child who is hiding in the garden, because an important aspect of her early traumatic decision making is that her own vulnerability as a child is ignored, and that as a child she is responsible for the welfare of everyone else. As it is, the response Jane produces in this phase draws on her earlier experiences of protecting her sister when she is in danger, and for the moment, the terror that she had to overcome to do this is put to one side. However, this moment is more than a reconstruction of a childhood coping response, because she is no longer acting from an isolated position. Group support and the strong presence of the psychodramatic double make this a new experience for Jane.

The resourcefulness phase in Angela’s enactment has a very different theme, as she confronts the suffocating overprotection of her mother and other adult females, which threaten her emerging autonomy (Textbox 5).
Activating Spontaneity to Heal Childhood Trauma

Textbox 5. Angela Confronts her Mother’s Manipulative Behaviour

In the first scene of her enactment, Angela recognised that she was conflicted in response to her mother. In this second scene, as Angela stands on the edge of the action space with the Director and watches her ‘mother’ holding onto the ‘child’, her frustration and anger build. She confronts her ‘mother’ and maintains a strong assertive response, as the auxiliary being her ‘mother’ attempts to draw her into the old dynamic.

Angela: (Speaking tentatively to ‘Mum’) I love you, I really love you, but (her voice becomes stronger) this really makes me sick; I can’t stand having this cobweb around me.

(Aux) ‘Mum’: (Holds onto the ‘child’ and cries).

Angela: Don’t do that. You know you’re just horrid when you do this, when you cry.

(Aux) ‘Mum’: I need her (the child), she’s holding me up.

Angela: She’s not holding you up Mum, you’re bloody well holding on to her!

(Aux) ‘Mum’: I’m holding on to her, but she’s got to hold me up as well.

Angela: No she’s not; you’re standing as straight as a die. And she’s leaning into you because you want her to.

(Aux) ‘Mum’: Yes I do, because it feels so good.

Angela: (Quietly). It’s time you let go Mum, time you let go.

(Aux) ‘Mum’: I’ll fall over.

Angela: You can stand there, you’re strong.

(Aux) ‘Mum’: Look, (she pushes her hand against herself) a push like that and I’ll fall right over.

Angela: (Laughs) You’re a bloody good actress you know, Mum.

In contrast to Jane’s enactment, Angela’s protest arises spontaneously from the preceding events and without coaching from the director or auxiliaries. From a clinical viewpoint, the difference between the two protagonists is most likely explained by Angela’s ability to reverse roles with her mother in the earlier part of her enactment. This suggests that she had already formed a greater sense of separation from her mother than Jane had and was therefore more able to maintain a distinction between the two roles. As she entered more deeply into the experience of both her mother and her self, Angela was able to act on her inner response in the moment, rather than from her learned response to the old relationship pattern. The auxiliary being Angela’s ‘mother’ offered a consistent challenge to Angela’s protest which increased Angela’s active engagement in the process. She confronted these challenges with strength and humour.

An important aspect of learning for both protagonists is that strong emotional responses can be safely experienced and expressed. This will be important in the next phase, if the previously overwhelming experience of the vulnerable child is to be acknowledged.

Phase 3: Transforming the Traumatic Experience through Social Atom Repair

The processes that have been discussed thus far set the scene for healing to occur, but the damage to the sense of self that was formed in the traumatic environment, has not yet been addressed. If we recall the previous scene in Jane’s drama, she has confronted her ‘father’ and reached some resolution of her fantasy that her mother will rescue her, but the ‘terrified child’ is still hiding in the garden. If the therapeutic process is stopped at this point, the protagonist...
will have recalled and strengthened certain abilities and will probably be more resolved to address certain situations, but she will not have altered her underlying traumatic expectations.

Once the protagonist has successfully navigated these earlier processes, they are likely to have generated sufficient spontaneity to move readily into the next phase of recovery, which involves transforming the traumatic experience itself. In this third phase, the protagonist enters into the possibility of a different reality, one in which the response of significant adults meets the developmental expectation for protection, recognition or affirmation. In psychodramatic language, this is referred to as social atom repair (Clayton, 1993; Clayton and Carter, 2004) because healing occurs through an expansion of the core role relationships (social atom) through which the protagonist experiences the sense of self. With heightened spontaneity, the protagonist will create more healthy responses to the original dynamic, and although other group members play an important part in producing a close-to-real enactment, there is very little intervention from the director or other group members to shape the production of the new relationships. The differences between Jane’s and Angela’s experiences in this phase highlight the idiosyncratic quality of the transformative experience.

Jane experiences transformation as she witnesses the re-enactment of her mother’s death. She views her mother’s death, rather than her father’s violence, as her core trauma because she identifies it as the moment in which she was completely abandoned to a violent and loveless family existence.

Jane’s childhood fantasy of her mother running away, being smashed by a car and having her body parts spread across the road, had become her internalised experience of her mother’s death. From an adult perspective, she responds with spontaneous nurturing to the auxiliary who voices these fantasies, her anxiety is reduced, and she constructs a more measured (and probably more realistic) image of her mother’s death. This is an appropriately calming version of the death to present to a young child, which still acknowledges the harsh reality. Jane experiences the depth of her grief as a child and as an adult, and simultaneously experiences developmentally required support from the adult. When this is complete, she becomes more aware of the other group members who have witnessed the enactment, and this serves to confirm that people will notice and care about what is happening to her. When she reflected on this scene later, Jane recalled:

“When I witnessed ‘Mum’ being hit by the car, I felt it bodily and emotionally and I realised that Mum lived and now she’s dead. It was validation that the accident did happen like that, that my mother didn’t abandon me. The director said ‘It’s sad for a little girl’, and I thought ‘No it’s not, I’m capable’, but then I thought ‘It’s OK to be held and cry; it really did happen, I’m allowed to feel this way’. I cried and the dissociation went, the internal split went. I noticed other people in the group responding to what was happening; they were acknowledging my mother’s death, and I felt supported and cared for.” (McVea, Gow and Lowe, 2011).

The free flowing expression of previously inhibited grief is a corrective emotional experience which brings with it a sense of release and relief; but equally important is the corrective interpersonal experience as she moves freely between the roles of a competent and compassionate adult and the once traumatised child. The emotional release marks a catharsis of integration, as Jane incorporates into her sense of self, the new experience of self in relation to significant others and in the context of her mother’s death.
Jane’s mother was killed in a hit-and-run accident on a country road at night. In this scene, an area of the action space is set out ready for a re-enactment of the accident and Jane chooses auxiliaries to be her mother and the car. Another area of the action space is set out for ‘Jane- as- a- child’ to sit with her adult self, ready to witness her ‘mother’s’ death. Jane alternately takes the role of her adult self and of herself as a young child, while the group member, who had been Jane’s double in the previous scene, takes the complementary role. The accident is re-enacted and the auxiliaries very effectively capture the stillness of the night and the suddenness of the car appearing and slamming into Jane’s ‘mother’. Jane witnesses the event from the perspective of adult and child, as the ‘adult’ holds and comforts the ‘child’.

The following extract begins where Jane has been the ‘child’ and the director asks her to reverse roles and be her adult self. [Extract reproduced from McVea, C.S., Gow, K., and Lowe, R. (2011); with the permission of Taylor and Francis, London.]

Jane: (Strokes the ‘child’s’ head). I’m looking after you.
(Aux) ‘Child’: Is her body all over the road?*
Jane: No, her body’s not all over the road.
(Aux) ‘Child’: There are body parts everywhere?*
Jane: No, she just got knocked and fell to the side of the road. She didn’t even get run over.
(Aux) ‘Child’: Is that my Mummy?
Jane: Yeah. But it’s alright. It’s frightening, but I’m going to look after you.
Child J: (As the ‘child’, the protagonist puts her arm around the ‘adult’): It’s scary and my little sister, she’s only a little baby. And I suppose I’m only little too.
(Aux) ‘Jane’: (Stroking the ‘child’s’ head) You’re only tiny.
Child J: I’m only a little 6 year old. They’re pretty little. They need somebody to look after them.
(Aux) ‘Jane’: (Holds the child more closely).
Child J: (Cries. This continues for some time, as she is held and comforted by the auxiliary being ‘Jane”).
Jane: (As Jane reverses roles to become her adult self, she continues to cry). It’s sad and we can be sad together. It’s sad because I didn’t get what I wanted from her and we’re not ever going to get it from her.
Child J: I need someone to protect me, and look after me.
Jane: Yes, I’m with you. I’m with you; I’ll nurture you.

Note: * These questions asked by the auxiliary arise from comments Jane had made earlier about images she had created of her mother’s death when she was a child.

Angela’s transformation phase has a very different quality to Jane’s. She experiences emotional release as she enacts a new, reparative encounter with a responsive adult but, surprisingly, this occurs without re-encountering a traumatic event and her emotional release is an expression of previously inhibited joy (Textbox 7).

As an adult in role reversal, Angela affirms and clarifies the child’s experience. She stands up to her mother and coaches the ‘child’ to move away from her mother. As the ‘child’, she responds well to the adult’s coaching; she becomes playful and explores the action space, clearly enjoying herself. Initially, there is a possibility that this could be the enactment of an avoidance response, and that the protagonist may be simply blocking out the unpleasant experience; but as she enters into the enactment more fully, it is apparent that Angela is developing a new perspective that incorporates an awareness of the old dynamic. She uses a toy snake that is found among the props to confront her mother’s fears in a
confident and playful manner. She experiences relief and a release from the pressures of her family, affirms her ability to recognise appropriate boundaries and acknowledges her mother’s limitations.

Textbox 7. Angela RedisCOVERS Her Playful Exuberance

In the previous scene, Angela is on the edge of the action space observing the relationship between ‘mother’ and ‘child’. This next scene continues from that point. Angela begins by confronting her ‘mother’ and then consciously chooses to turn her attention fully to herself as a child. In role reversal as the child, she continues to interact with the ‘adult Angela’ rather than the other members of the family in the original scene. There is more vitality in this interaction than there has been in the session so far.

(Aux) ‘Mum’: (Cries loudly).
Child A: I don’t want to go near her, because she’ll only want me to do what she wants me to do. I don’t want to go there.
Angela: Yes! Angela, don’t let her do this to you, because it will really ruin your life when you get older; you’ll always be scared when you get older. So don’t let her do this. … I don’t know. It’s like treacle; it’s like being in treacle.
Child A: I do need her, because she’s my mother, but not in the way she’s doing it.
Angela: Yeah, well the way she’s doing it is wrong. Come, we’re going for a walk in the garden.
(Aux) ‘Mum’: No, no, there are snakes out there!
Angela: Oh, shut up! (Now speaking to the ‘child’) don’t look back at her.
(Aux) ‘Mum’: (Cries)
Angela: Look at the flowers, aren’t they good?
Child A: (Being very playful) Let’s run. (She skips around the stage, laughing. The playfulness continues for some time, with the auxiliary as ‘Angela’ joining in).
(Aux) Look at the garden. (They find a cloth snake among the props) Oh look, it’s a snake!
‘Angela’:
Child A: (Laughs). Let’s go and show it to Mum and show her it isn’t going to hurt her. (Skips over to ‘Mum’ and says playfully) Looook what weeeww found!
(Aux) ‘Mum’: (Screams)
Child A: (Laughs) Well, if you don’t stop it’s going to bite you! (She continues to play in the ‘garden”).
Angela: That was lovely in the garden wasn’t it? It was a cute snake.
‘Child A’: There are some poisonous snakes out there.
Angela: This one is only a little python. And you know it did stop Mum. It was fun.
I think I’ll put the snake back. It’s done its job and got rid of Mum. That feels better.
‘Child A’: No mother crying, no nanny trying to feed me, no aunt trying to take care of me. It feels so good. And look at the beautiful trees and the flowers.
Director: Do you want to go further out?
‘Child A’: Well, we might not go too far out, because this is the garden and it has a fence and it’s safe.
Director: And you can judge for yourself?
‘Child A’: Mmmm. Yeah, I know what’s good for me.
(Speaking to ‘Angela’) You’re very good. You got me out of there and you were my friend. You didn’t say ‘oh no, don’t do it!’
Angela: That’s what I want from my Mum, but I don’t think she’ll ever give it to me.

It is interesting to note that neither Jane nor Angela actually confronted what might have been thought to be the most traumatic aspect of their childhood experience; in Jane’s case, the vaguely acknowledged terror she experienced in response to her father’s violence, and in

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Angela’s case, the horror of her father’s death. Whether in fact they will ever need to address these experiences is a moot point.

**Phase 4: Integrating New Role Relationships into the Sense of Self**

The corrective interpersonal experience creates an alternative to the traumatic expectations that were created in childhood. Key features of the new role relationship are the capacity for each ‘person’ to be present in the moment and to be responsive to one another.

When the enactment of the new role relationship is deeply experienced as real in the moment, as it was for both Jane and Angela, the relationship becomes integrated into the person’s sense of self and can guide future interactions.

**Textbox 8. Jane and her ‘Mother’ Meet, Adult To Adult**

| Jane: | I want to call you Mum, you are my Mum. And I know you’re sorry and I know you did your best, and I want to say (she puts her hand over her heart) ‘I was needy’. There’s a lot I understand about why I was the way I was, but I’m letting you know that I was needy and my needs didn’t get met. |
| ‘Mum’: | You did miss out. I see that you didn’t get your needs met from me and you missed out big time. I’m proud of you. I can see the person that you’ve become, and yeah, I acknowledge that I was critical of you, I wasn’t fully accepting of you and I see now you’re - you’re a (pause) a competent professional woman. … I feel your love for me, and I feel your forgiveness of me and I think I’m finding it difficult to forgive myself. I had ideals to be better and more and I wanted to be a good mother to you and I wanted to love you more and appreciate you more. I think your energy was just one extra thing that I didn’t know what to do with. |
| Jane: | I’m really sad about that because I’m realizing as I listen to you now I probably laid myself down and (shakes head) that’s what I always got criticized for by my father, you know, that I was always too sort of quiet and not out there enough for him, and I was too out there for you. Goodness, I just realized now what a no-win situation I was in for myself. |
| ‘Mum’: | I love you, I love you. (She moves over to ‘Jane’ and hugs her) I love you. |
| Jane: | (As the auxiliary being ‘Mum’ moves towards Jane to hug her, Jane puts her hand up and stops her) I need to hear that love, but there’s one other thing I want to say, and that is that I haven’t had a loving partner and I’m very sad about that. And I guess I have always had the expectation that I’m not going to be loved and I put that message out. And it’s good to hear you loving me now. And I’m taking that on board that I’m worth loving. |
| (Aux) | I love you and who you’ve become. |
| ‘Mum’: | Yeah, Somebody who knew you said that you would be proud of me. |
| (Aux) | I am. I’m very proud of you. You did something that I couldn’t. |
| ‘Mum’: | That’s right, what you would have liked to have done. Thank you for spending this time with me, and thank you for letting me know that you love me. And I want to give you a hug and say goodbye. (Jane and ‘Mum’ hug for some time; Jane then stands back with her hands still on ‘Mum’s’ arms) Good-bye Mum. |

Integration is evident when a person is able to respond with spontaneity in a situation which would previously have activated traumatic expectations. Jane experienced integration
in the final scene of her enactment (Textbox 8) when she again decided to have an adult to adult encounter with her ‘mother’. Her first attempt to do this at the beginning of her session produced confusion and signs of dissociation, but now she is able to maintain her sense of self and have an open conversation with her ‘mother’.

In this scene, Jane is open to a much fuller range of her mother’s experience, while also staying connected with her own sense of purpose as the encounter unfolds. She maintains a positive connection with her ‘mother’ without colluding with her ‘mother’s’ need for a hug to resolve her distress, and is able to voice her needs and the reality of her own experience. In this scene, Jane experiences being at peace in her relationship with her mother, and feeling congruent as an adult.

The integration of Angela’s social atom repair was not apparent within the session, but was evident in events that occurred immediately after therapy. The day after the psychodrama group, her grandson became ill and was rushed to hospital. Under these circumstances, Angela would usually have been extremely anxious, but this time she felt calm, and was able to assist the family in practical ways. Associated problems with her grandson’s health arose over the following days and Angela took appropriate action, remained calm and continued to feel that everything would be okay (and it was). She realised that the anxiety she had experienced belonged to her mother and that her mother had good reason to be anxious; that her mother was ‘a little mad’ from her wartime experiences and that she, Angela, was not mad.

**CONCLUSION**

The psychodramatic process is a co-operative endeavour between the protagonist, the psychodrama director and other group members, and proceeds effectively only when a working alliance has been established between all participants. Client qualities have a major impact on therapeutic change (Lambert and Barley, 2001) and in psychodrama, as in other therapies, the healing process begins well before the therapeutic intervention, when the person recognises that they are ready to face a deeply troubling aspect of their functioning.

It is probably no coincidence that protagonists who experience deep healing of childhood trauma tend to be aged in their 40’s or older (McVea, Gow and Lowe, 2011), when they have developed a solid platform in some aspects of their functioning so that their disturbing motive turns from the need for survival to the need for greater flexibility to live their lives fully. Hudgins (2002) calls this restorative functioning and suggests that a protagonist needs to be able to access personal, interpersonal and transpersonal resources to process traumatic material therapeutically.

Antonovsky (1993) proposes that a sense of coherence is formed when the person experiences the world as comprehensible, life has meaning and the person feels adequately resourced to meet challenges that arise. For adult survivors of childhood trauma, psychodramatic exposure provides an interpersonal context that can facilitate the development of a sense of coherence. Re-experiencing the interpersonal dynamic of their original social system assists the protagonist to recognise the reality of this early experience and to reassess their own responses at that time, thereby creating a more positive relationship with the self and generating hope. A sense of mastery is developed as the protagonist accesses
inner resources to create a boundary between self and other, and this also alerts them to the possibility that strong emotional responses can be acknowledged and acted upon, without causing harm to self or others. Finally, the transformative experience of a corrective interpersonal encounter generates a new sense of self, where life enhancing relationships with self and others are possible.

REFERENCES


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Charmaine McVea


Chapter 20

Treading Carefully: Avoiding Minefields in Importing Therapy to Cambodia

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Abstract

The Holocaust in Cambodia reached our world newspapers, but we remained unaware of the magnitude of the genocide, and of the victims who died or lived, with their plight unacknowledged until relatively recently by Cambodian expatriates and citizens. Dissociation is not just an individual defence, it is a national psychopathology induced by torture, starvation, betrayal, fear and guilt. The country of Cambodia needs to heal, but this may still take a long time and while some of the perpetrators are now being brought to trial, some of the highly traumatized survivors of the genocide still need psychological assistance delivered in a culturally appropriate way. Before commencing "train the trainer" trauma counselling programs in Phnom Penh, the use of Narrative Therapy is indicated as much for the trainers as for the clients in the community. Adoption of culturally appropriate language and understanding of the history and political situations, as well as customs and folklore, is essential. Preparedness to "descend into hell" is necessary to confront the devils and ghosts, and immense compassion, understanding and forgiveness for real, or supposed, participation in the cause of the sufferings of others, is essential.

Keywords: genocide, cambodia, khmer rouge, dissociation, phnom penh, mass trauma

Introduction

This chapter is woven around narratives of my own, but particularly around the testimonies of the Cambodian people. In another chapter in a companion book, Roslyn

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Roberts has given an overview of the historical and political situation of Cambodia in the 1970s and touches on issues relating to the effects of the genocide induced by the Khmer Rouge regime on the physical, social, economic and psychological health of the nation then and today. I will not repeat that information except where it adds to the narrative herein. Sometimes, it is necessary to walk readers through the reality of a situation, or event, to admit them to a greater truth. The key learnings from the chapter are first that we need photographic and written testimonies about the genocide, then awareness and a breadth and depth of understanding and compassion second, and trauma counselling third; and underpinning them all is the adoption of a historical-socio-cultural perspective set within a narrative framework.

**Preamble**

From the mid 1990s to the mid 2000s, I undertook a range of volunteer aid work programs in Vietnam in conjunction with the AVVRG (Australian Veterans Vietnam Reconstruction Group Inc.) - a group of Vietnam Veterans and Australian citizens who entered or re-entered Vietnam following Doi Moi. While the poverty, illness and disease, lack of resources and funding, and the war torn state of the housing and buildings confronted us in Vietnam, our short holiday as tourists in Cambodia in 2000 was a different experience altogether. Like most Australians, I was vaguely aware of the genocide in Cambodia and like most people around the world heard little and did nothing. According to Todorov (1999, p. 256), "We would rather not hear the accounts of these extreme situations".

It was only there in Phnom Penh that we were confronted with the cold stark reality of the aftermath of approximately 1.6 to 2 million people having died. It was on day one of our stay in Phnom Penh with my nursing friend, Barbara Crawford, that I sensed that all was not right; by day three, my friend phoned her husband and asked him to keep phoning us to check that we were still alive.

Both of us fortunately have finely tuned senses and yet we still blithely walked into danger without even knowing what was going on; neither of us had studied our history of Cambodia nor even read up on the current state of affairs before we entered the country – in some remote and silly way, we expected that it would be something like rural Vietnam; it was not.

The people were friendly, except more closed than the rural Vietnamese whom we had come to understand so well, and we noted that there were few natural smiles and the city seemed full of amputees. It was in our hotel that I first sensed that something was not normal. It was a hotel for permanent and visiting NGO workers etcetera, but no-one spoke to each other. While you might think that this was the same ‘personal space wall’ as the English newspaper covering up the face on the London trains – “Don’t speak to me on the underground; I need my personal space”, there was nothing relaxed about the atmosphere.

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2 Đổi mới: In 1986, Vietnam opened a socialist-oriented market economy, thus permitting market reforms and greater economic prosperity for the country as a whole; from this point, Vietnam opened its doors to international trade possibilities.

3 Figures range as high as 3 million dead, although the general figure varies from about 1.5 to 2 million.
Looking back, I cannot believe how naïve we were. At that time, I was an Assistant Dean of the Arts Faculty in the university where I worked and media and journalism was one of the schools that I took a special interest in.

Thus I took the opportunity to visit a local newspaper in Phnom Penh to make links with our university and while we were there, we were told that there were moves to shut them down because they had been publishing pieces that were not popular – like the truth. On the second day, we visited the Museum of Genocide where the history of the atrocities was laid out photographically in a very stark library of death; it was basic, impactful and unforgettable. I bought several books from street vendors which I read at night about the Khmer Rouge regime.

The next day, we went to the Press Club and found a photographic display by a well known American photographer, Al Rockoff, which captured the graphic horror of the war. I spoke for some time with the photographer about his work and what he was attempting to achieve – there was no doubt that his photographic evidence, both then and now, must have been flying in the face of perpetrators of the genocide and helped to bring the reality of this mass disaster to the wider world.

The next morning, my nurse companion had gone to breakfast on her own as I had to read over my training notes; however after 15 minutes, she raced up to the room and said that the man opposite her had glared at her and moved his jacket aside deliberately to show her that he had a gun in a shoulder holster. [It was only after I had returned to my home country that I realized that my visits to all these media places must have been seen as suspicious; I had come from Vietnam and my passport was full of places where I had been, thus giving evidence of several visits to Vietnam and other Asian countries as well as other countries, and I later saw that it must have appeared as if I was following a path of media links while in the capital with some sort of undisclosed agenda.]

Around about then, we visited a hotel where baby adoptions, known more colloquially as baby sales, were being conducted; again here things were not quite right; no-one seemed to be smiling or happy when they held their new babies in their arms. I felt ill and left and kept my mouth shut; a driver told us later that day, when I commented on the Europeans with Cambodian babies in a certain hotel, that in Phnom Penh you could get a baby for $300, a wife for $100 and someone killed for $50. Later, we heard that babies were being taken from villagers who did not know they were going to be adopted to international couples and apparently expected them to come back home. Obviously, we were unable to verify the facts and were already in enough trouble.

We took one trip out to the country areas and wondered if the bus would hit a land mine and we would never see our families again; at that time, there were reports of mine explosions every day we were in Cambodia. Today the majority of those mines have been cleared, or at least this is the official position.

At the end of our visit there, we were profoundly disturbed by what we had seen and distressed that we, like many other Australians, had known or cared so little about what had happened to these people.

In the Postscript, Sister Crawford provides an update on her new experiences in Cambodia in late 2011 which proved to be a healing time for her.

Paul Slovic (2010 a, b) confronts the failure of response to genocide in his two articles: “If I look at the mass I will never act: Psychic numbing and genocide”, and “The more who die, the less we care”.

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I also assessed that there was a major dissociation underlying the society and its ways of operating and that it would not be an easy matter to assist them. My job had been to conduct some training in trauma coping with health professionals, but in fact I had learned a great deal about the split psyche in Cambodia, or at least in the capital city while I was there in-country.

**HISTORICAL NARRATIVES ABOUT THE CAMBODIAN TRAUMA**

In 1975, young followers of Pol Pot entered Phnom Penh and ordered people to leave their homes; they were given different reasons for this, and tens of thousands of people left their homes and had to carry what they took.

Within an instant I heard gunshots - BANG! BANG! BANG! from the front jeep. One soldier stood up with his gun pointed to the sky. He fired a shot because he wanted to get people's attention. The announcement was made over the megaphone, "Cambodia needs to be reconstructed. We need the citizens of Cambodia to leave their homes for a couple of days. We need the time to reestablish the new government for better prosperity. You have to Move Out NOW." BANG! BANG! A man was shot.

(Vann Nath, 1998, p. 28)

...We were evacuated from our home on April 17, a very dusty, hot, and humid day. Thousands and thousands of Cambodian people were forced out of their homes. During the evacuation, the city of Cambodia was crowded with people, automobiles, animals, and abandoned children. Sip, sip, plop, plop ... beep, beep ... Waa, Waa ... The sounds of feet, babies crying, and car engines surrounded us as we were forced out of the city. Children were crying because they were being separated from their parents. Some were crying because their parents had abandoned them...... The streets were full of thousands and thousands of frightened people running and shouting for lost ones. Many of their belongings were left behind. Elderly people were forced out of their homes with only the clothes on their bodies...... Several days passed. The city was annihilated by the new government and was emptied. Its soul was destroyed. Houses and tall buildings stood there with no spirit. It became a ghost town in the flash of a few seconds.

(Vann Nath, 1998, pp. 28-29)

Seanglim Bit (1999), a Cambodian born social psychologist, who wrote an incisive review of the Warrior Heritage in Cambodia, reminds us: “There was a time not very long ago when Cambodia was referred to as the ‘Gentle Land of Smiling People’.”

Within a few years these peaceful pictures gave way to scenes of war and destruction and death. Instead of peasants following the timeless rhythms of rice farming practiced for centuries or even the emerging urban society of Phnom Penh, the news media depicted the results of political events originating in both domestic and international conflicts. The images used to describe Cambodia now included mass suffering, refugees dependent on handouts for survival, victims from bombings and mines, corruption, etc. As the decade drew to a close, Cambodia became the land of "the killing fields." Khmer Rouge genocide, and an eruption of violence against fellow countrymen, impossible to reconcile with previous perceptions of the country.

(Seanglim Bit, 1991, pp. xiii/xiv)
It is possible that it may have been easier then to deal with such trauma, if a Cambodian victim had left the country, but on my return to Australia, in checking the referrals to a trauma clinic in Australia, I found that in the mid 1990’s, the third highest number of referrals to the torture treatment program had been from Cambodia (77 out of 507 and 33 countries) (Silove, 1994).

Also Boehnlein and Kinzie (1996) reported that in Oregon, the highest percentage of patients with post traumatic stress disorder (PTSD) (over 90%) were among Cambodian and Mien refugees. They observed that their PTSD was more chronic and treatment resistant. Jayawickreme et al. report that, in the early 1990s in Cambodia, “28.4% of the sample (n = 610) met the criteria for current PTSD, with women (34.2%) having significantly more symptoms than men (20.6%).

In that sample, 72.8% suffered from re-experiencing symptoms, 59.3% suffered from avoidance/numbing symptoms and only 37.7% had symptoms from the hyperarousal cluster”. I report material here which is contained in Jayawickreme et al.’s Chapter (in press).

In one of the first studies of its kind, Mollica et al. (1993) assessed a randomly selected sample of 993 adults who lived in the largest Cambodian displaced refugee camp on the Thailand-Cambodia border. It was found that 83% of the sample had experienced multiple traumatic events (e.g., brainwashing, lack of shelter, forced separation from family) and that more than half of the respondents had experienced the murder of a family member or friend. Almost 15% of the sample (14.7%) met the criteria for current PTSD, with 70.5% of the sample reporting having recurrent memories of past traumatic events and 70.9% experiencing nightmares. Furthermore, 82.6% of the sample indicated experiencing a depressive state called bebotchit, translated as “a deep sadness inside oneself.” Mollica et al. (1993) report that “bebotchit is not a free-floating feeling, but a reactive, depression-like state caused by experiencing specific unfortunate events such as the loss of or separation from loved ones or the failure of a business…the feeling of bebotchit is said to lie so deeply inside a person that it can be hidden from being noticed by others” (p. 583). Respondents also reported feeling srangot srangat, similar to bebotchit, but visible and more severe (38.8%), ah sangkim, which translates as hopelessness (52.9%), ett damlay (worthlessness, 37.0%), and prouychit, which is roughly translated as a worrying sadness (56.3%). A quarter of respondents also reported having a condition known as chcoot (translated as “loose mind,” or “crazy”). Furthermore, respondents in this sample indicated high levels of somatic symptoms, such as frequent headaches (74.3%), feelings of weakness (68.6%), dizziness (68.2%) and cold hands or feet (31.3%).

The linguistic terminology here is important, as it means that these symptoms have been recognized for centuries within the Cambodian culture and therefore can be utilized in individual, group, or community focused therapy.

Is there any wonder that these people would feel such effects from such a horrific experience. There appears to be no way of determining if it was worse for those who stayed or for those who left.

Experiences of Adults and Children

Vann Nath, the Cambodian artist, who has worked towards bringing into the consciousness of the world what actually happened in this largely ignored Asian holocaust of a poor people, records the following thoughts and feelings as he returned to the prison museum in Phnom Penh in his book *Return to Tuol Sleng*.

At the end of August 1979, I brought my wife to Phnom Penh and continued my work with the military. In November, the government asked me and several other survivors to help organise a Museum of Genocide on the grounds of the prison. The idea of returning to that horrifying place filled me with dread but it was my decision to return. I worked as a painter there, preparing scenes of life in S-21 to let Cambodians and visitors from other countries know what had happened.


On my first day back I tried to distance myself from my feelings so that I wouldn’t be overcome with sadness. I kept reminding myself that I was enjoying my freedom now, and that the frightening days were gone. As I entered the prison compound I had an indescribable feeling. The place was very quiet, but full of rubbish everywhere because no one was living there. Prisoner records were scattered all the way from the entrance to the office. Everything looked exactly the same as before. Nothing had changed; all four buildings were there. The electric fence made of corrugated iron sheets and barbed wire was still in place. My friends and I walked around and quietly picked up the documents, putting them into one pile. I kept looking at Building D, the building where I had been shackled and almost starved to death; the place where I had completely lost all hope in life. I could hardly believe that I was standing there now.

(Vann Nath, 1998, p. 100)

As previously mentioned, American photographer Al Rockoff (featured in the film *The Killing Fields*, both within and without the country) has displayed disturbingly graphic pictures of what happened in the Cambodian War. He also worked with Dith Pran, a survivor who escaped from Cambodia through Thailand to the USA, and who has compiled stories of survivors who were children at the time, in his book *Children of the Killing Fields*. These adults write graphically about their memories of the loss and terrors.

And What of the Fear if You Were But a Child?

The following excerpts come from stories in the book compiled by Dith Pran: *Children of Cambodia’s Killing Fields*:

…… I was sent to a remote farming area with a group of other young boys to build an irrigation system for increasing the rice production. My older sister was sent to

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7 Dith Pran (1942-2008) was a photojournalist who was a survivor of the Cambodian genocide. Fifty of his family members were killed during the Khmer Rouge Regime. His book was sold by street vendors in the city of Phnom Penh and to them I am truly grateful, as I would not have read the testimonies of the survivors, nor learned as much so quickly about the trauma that had beset the country and its people, had they not sold their wares to tourists. He and his wife conducted the Dith Pran Holocaust Awareness Project, utilizing the internet to help Cambodians find their missing relatives and friends.

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another area with a group of young girls. Two of my sisters died from starvation and disease. My mother had to escape to another, safer area, called Zone 3, with my new half-brother, since the Khmer Rouge was looking for her.

My dispersed family members lived under constant fear and hunger. We were too hungry to show any sign of hatred or revenge. Every night seemed to last forever. It was hard to fall asleep with an empty stomach. Sometimes I filled my stomach with water in order to feel full so I could sleep easier. As it turned out, I had to get up more frequently to relieve myself. I remember that the other boys and I extended a long tube from the floor to the nearest outside bush to relieve ourselves during the night.

(The Dark Years of My Life by Savuth Penn, in Pran, 1997, p. 47)

I was tied to the tree from morning to sunset. I imagined people coming home from clearing the woods. I would be embarrassed and ashamed to let them see me tied to the tree. I was afraid that these people would talk to my mother and tell her that I was stealing, without knowing the truth. At the same time, I thought they would feel sorry for me because I would die soon.

I imagined the man raising the big, long knife in the air and swinging it down toward my neck. I cried and cried. I shut my eyes and lowered my head and asked, Why would anybody be so cruel to a little child like me who is helpless and struggling to live?

…………Suddenly I heard his footsteps and dropped my last tears. I was terrified, shaking and cold. I looked down to the ground and shut my eyes. I tightened my body to control the instant pain, not knowing whether I should scream or bite my lip. When he came close, I got ready to die.

(Chanrithy Him, in Pran, 1997, p. 151)

In 1997, the fear was still there according to Bit. So how does this affect modern day Cambodia? At that time, Bit was not convinced that Cambodia had yet developed a consciousness in support of basic human rights, which he believes might encourage citizens to engage in constructive criticism on social issues. “The individual in Cambodian society is left to protect his own interests, and does so by not engaging in behavior which might challenge the entrenched prevailing view” (Bit, 1997, p. 107). He offers an interesting insight into a possible explanation for the current economic and political status quo.

The need to preserve a modicum of personal safety works to inhibit the potential creativity of individuals to reflect on cultural needs and identify new responses and innovations which might move the society forward. ….. The potential to engage in independent thinking and the analytical skills to define issues in a way which leads to creative problem-solving is similarly restricted. The “world view” which orients Cambodian intellectual life is parochial and limited to the accepted and traditional sources of authority.

(Bit, 1997, p. 107).

Bit, however, also believes in the transcendent function of the Cambodian personality. How have Cambodians lived through this period of extraordinary trauma and gone onto rebuild their lives? “What can account for the exceptional resilience shown by some survivors to literally recreate themselves into dynamic examples of achievement against all odds? What personal qualities of survivors of roughly similar horrors can account for the difference
between those who have gone on to a future filled with promise and those who are suspended in their nightmare?” (1997, p. 123)

“For some, physical survival was sometimes the luck of the draw or a matter of timing. Wandering about until happening upon a village where the local authority had a slightly more benign approach to forced labor, arriving at a checkpoint just minutes after the truck had left carrying fellow family members to their deaths in the infamous "killing fields" - the circumstances for even a chance at survival seemed to be a matter of random happenstance.” (p. 123)

A Friend Disappears

"Brother where did Meng go?"... "I don't know," said Kuhn. "But as far as I know, none of the prisoners here have ever been freed. Maybe he's been sent to paint signs outside." When we sat down to eat later there were only three of us. I was not sure what to think "Comrade, tell the painter to come down here!"

I was startled as the door flew open. "Painter, go downstairs," a guard said. Trying to collect my thoughts, I realized it must be around midnight. Why were they calling us back to work? I felt afraid and my heart began to thump erratically. Downstairs I felt even more anxious when I saw Touch and Kuhn working as if it were normal, although they gave me a mysterious look.

"Get on with your work, Nath," the room guard shouted. I quickly grabbed the photograph and began preparing the paint. About 15 minutes later, I heard the noise of chains being dragged across the floor toward me, mixed with the sound of a man shouting threats. "Walk faster, damn you!"

Glancing at the window I saw a man chained from his neck to his ankles, with bandages covering bloody wounds all over his emaciated body. I almost fell backwards. I recognized him very well: it was Meng.

Vann Nath (1998, pp. 66-67)

**FRAGMENTATION, PSYCHOPATHOLOGY AND CORE INJURY TO THE SOCIETY**

According to Bit (1991) "patterns of sudden and extreme arbitrary violence, retold in folk tales and experienced directly, especially by this generation have left an indelible mark on the Cambodian psyche. The threat of annihilation has parallels in the destiny of the nation state, the family unit and the individual” (p. 107).

Human beings have an inbuilt survival mechanism of flight or fight which takes a supreme effort to control and manage when there is threat to the person's life or well being. If one cannot take action to protect oneself, then the fear remains with no physical outlet. This well known human response is reiterated by Bit (1991, p. 107): “The emotional response of fear to the dangers present in the environment is suppressed out of the need to carry on the everyday tasks of living. Fear impairs the ability to think objectively about the future or to create more satisfactory alternatives for peaceful relationships, and to inhibit efforts to break down the barriers to creativity in problem solving.”

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Most people will do anything when confronted with being tortured or killed or having to watch this happen to those persons close to them. As one prison officer said: “What else was I to do? If I had refused I would have been killed myself?” - the interrogators and prisoners were all captives. Psychological analyses of the makeup of executioners and bystanders have been studied in psychology for some decades (see Lindner, 2001; Suedfeld, 1999). It seems we know more about the perpetrators than the victims.

A couple of times I fell down, and I got many scratches all over my body. Suddenly I saw three men who were tied up and being led by a militiaman to another small bush. From a distance I saw the militiaman force the men to kneel down on the edge of a big pit. A minute later the men were clubbed to death with a hoe. I could see this clearly in the moonlit night. I was terribly frightened and waited for the militiaman to go away.”

(OukVilla, p. 116, in Pran, 1997)

So is there any wonder that not everyone is healed or at peace in Cambodia since that time. Suedfeld (1999), in commenting on the European death camps, noted that "a mental health professional, called in to assess children liberated from Buchenwald, predicted that noone would ever be able to function in society. Given the irreversible effects of early childhood experience, they were psychologically crippled forever." These symptoms are seen in second and third generations and trauma researchers now study this as transgenerational psychopathology (see work by Lurie-Beck et al., 2011). So one reason to focus on the experiences of the Cambodians who were children during the Holocaust is because they are the adults today.

Vicheth Sen (2008) believed that the development of Cambodia itself was being held back because there has been no healing process, no justice at that stage through the tribunal, and people are still trapped in their past trauma experiences.

Because the tribunal was so long delayed and the skepticism that surrounded what he terms a hybrid court, like many other inquiries about traumatic events, the people worry that no justice will be served. Unlike natural and manmade disasters, the perpetrators of this genocide have gone unpunished and justice has not been seen to be done. The Tribunal did not open till July 2006, 30 years after the genocide commenced. Menzel (2007) believed that there could be no trust in this process nor safety for the witnesses. The people do not trust the legal system. Indeed, the proceedings did not progress till June, 2011, with the first defendant being sentenced in July with three other accused persons being on trial in November 2011.

**Psychosocial Roles**

There are a number of roles that people take on in life, and in times of severe threat to the self, the roles of Villians, Cowards and Bystanders come centre stage. Suedfeld (1999) writes that in the case of the Holocaust, and probably in most genocides since then, active participants on the one hand and those who fought against them (whether by rescuing intended victims or in other ways) were a minority compared to those who took no action one way or the other. Diffusion of responsibility may explain why some perpetrators of atrocities feel guiltless when they ascribe the responsibility for their actions to ‘orders’. It certainly does help to explain why so many thousands of European citizens stood by during the persecution,
removal, and killing of their Jewish compatriots. Research into bystander intervention was popular in psychology some decades back when social scientists tried to determine why normal people who could have stepped up to save people, and still stay relatively safe, did not. If this is the norm in society in peace time, it makes sense that, in times of mass violence that the roles of non-intervention would increase; after all, survival is mankind’s most primitive need.

Then there are the roles featuring strength; one of which is the *Lone Warrior*. Charmaine McVea\(^8\), a psychodramatist in Brisbane, speaks about the Lone Warrior as part of internal roles that a victim can take on in both the healing and the blocking process (personal communication, 02.08.08). Bit calls us to look at the Cambodian ascendant personality, akin to the Lone Warrior role:

> The circumstances of social isolation which discouraged the seeking of solace or trust from the group intensified the need for the individual to withdraw within the self to prepare covert responses for self-protection.

> During the internment in Khmer Rouge slave labor camps, the only escape from the severity of daily life was a retreat into the sanctity and privacy of one's own mind. The break from everything familiar in one's past was so abrupt and so drastic that it had the effect of reinforcing the positive role of illusion to preserve a sense of sanity. Dreams and fantasy held out the possibility that lost family members would be found, that self images derived from past experiences were the true representation of the self in the face of politically oriented propaganda, that they could still see themselves as triumphant over adversity.

>(Bit, 1991, p. 125)

There are many therapists and theorists who will dispute the claim that traumatized children are impaired for life. Jerome Kagan and other developmental psychologists have refuted the old axiom that early childhood experience is the supreme determinant of adult personality. They believe that children who survived the Holocaust provide compelling evidence for rejecting the traditional view.

Suedfeld (1999) also supports this view, claiming that youngsters who lived among mass violence, knew they could be its targets, were deprived of family support, food, shelter, adequate clothing, medical care and whose exposure to wounds and death was not via TV shows or video games nevertheless mostly grew up to be normal and productive. For the most part, they healed themselves.

**Warrior Heritage**

Seanglim Bit (1991) explains to us the importance of understanding the warrior heritage underlying the Cambodian psyche. “Survival of the psyche was not simply a matter of luck or good fortune, however. To move away from imminent death of the spirit to embrace the possibilities of ascendance was a journey to be traveled on what Cambodian wisdom calls "the curved path".” (p. 123)

\(^8\) See C. Mc Vea’s chapter on psychodrama in this text.
Such a concept leads us to the religious and spiritual bases for Cambodian living. In order to surmount life's most difficult challenges, according to Bit, a Cambodian proverb advises the people: "Do not abandon the curved path; don't travel on the straight path." Bit continues: “The curved path is not laid out like a road map, however, with specific markers and directions which a person could follow. It is a path which demands instead that the traveler summon his creativity and life force to confront the barriers which characterize the life condition, to bend according to the circumstances. More than anything else, it is a process which calls on the inner strength and determination to continue the journey” (p. 124). Bit believes that “[t]hose survivors who have not succumbed to the darkness of their despair demonstrate to the fullest the qualities needed. By examining the attributes they share and which have guided their progress, a remarkable picture of what might be called 'the ascendant personality' emerges." (Seanglim Bit, 1991, p. 124).

Another strong role is that of the Self Preserver. The stories of survivors abound with examples of the internal role of Self Preserver, that part of ourselves which helps us to surmount all obstacles (mental and physical) in order to survive.

I was starving. One night I ate very small snails and the shells. After the soldiers went to sleep I sneaked out to their fire and used a broken pan to fry the snails a little. My stomach was crawling back and forth, and I had to eat. I shared the snails with my friend. Afterwards I got into my bag and ate more. A rat came in and ate my toenail. I slept so heavy I didn't even know. My blanket protected me. Later on someone stole my blanket, and then I had nothing.

(Roeun Sam, in Pran, 1997, p. 78)

The Cambodian appreciation for a good sense of humor and the ability to make light of life's predicaments served some well. Humor which deals with the pain in life by reducing it to the ridiculous and an object for laughter reinforces the resiliency of the Cambodian spirit.

Occasionally we hear about people who take up the roles of Saints and Heroes, although these, like the other roles mentioned, are rarely consciously adopted. The literature on the holocausts from all continents afflicted in the 20th century recount stories of saints and heroes.

...but I want to tell that he was a hero. He could not say three sentences without talking about his fear, but I want to tell of his courage.

(Jurek Becker, Jacob the Liar, 19999)

And so there were, and always will be, heroes and saints; however Roman Frister in commenting on the Jewish Holocaust reminds us that a saint is not always a saint and is not always made in our image and likeness.

My father thought Witold Krol was a saint. I thought the maintenance chief was a greedy drunk. Both of us were wrong. People were not what they seemed. All you ever saw was a reflection of your own image of them. And even if you could get at the truth behind that image, there was absolutely nothing you could do with it.”

(Frister, 1999, p. 58)

9 *Jacob the Liar* is a film set in a ghetto in Poland in 1944 during the holocaust. It is based on the book by Jurek Becker.
While Tororov (1996) talks about the saints in the concentration camps, it is questionable whether talking about saints and heroes would assist in therapy for individuals or groups, but perhaps their roles (utilizing the terminology of the local language and culture) may be useful in communities to restore the faith of a people in their own people. To confront one's cowardice is perhaps too overpowering - to be faced with sainthood and sacrifice when one has been the normal coward – may seem too much like a searing burn, even though this condition generally comprises humankind when faced with torture, starvation and death. One has to pick one's metaphors and characters carefully in therapy (and preferably have others contribute their own or those of their cultural folklore and history).

During the period of primary threat, a degree of suspiciousness was needed to counter the efforts of spies and rumor mongers in restraining spontaneous actions and impulsiveness. For some, it was summarized by the phrase "never be first." By watching and evaluating the results of others' response before volunteering, undoubtedly many lives were saved. Of course, waiting and watching too long could also be interpreted as disloyalty or could immobilize a person.

(Seanglim Bit, 1991, p. 125)

**ATTENDING TO THE THERAPEUTIC RELATIONSHIP**

There should be no need to have to remind counselling professionals that the basics of all good therapy must be first established and understood before proceeding with any kind of therapy. Certainly as therapists, in the true Buddhist manner, we should be still and silent before we take action and bring compassion to our mind and heart. Trust is always the biggest issue for those who have been damaged by other people. Why should they trust you, even if you have been through it yourself in the same or a similar setting. You alone can know how to establish that trust with that particular client. Confidentiality is paramount; this is an area where the perpetrators have not been brought to justice and who may still strike out at the victim. This is a country in which the seeds of distrust permeate the whole society across generations. Why do you want to help? Is it your job, do you have a choice about doing this? Do you feel guilty that, like Thomas Merton, you were a guilty bystander? Sometimes the more practical the answer the easier it is to accept. So why did you not do anything when all those people died?

This is linked to respect between the client and the therapist. The respect for the person is paramount (see Gow, 1999). Cross cultural respect and sensitivity is likewise necessary and is conveyed differently from the ways in which we undertake this in our home countries (see Gow, 1999). Being highly skilled in one's specialisation is also essential; this is no time to attend a workshop and then try one's new skills out on an unsuspecting damaged populace.

Drama and theatre are full of death, destruction and tragedies of all kinds. They can act as healing mechanisms by which the audience can live or relive their lives by feeling what they think the actors and actresses are experiencing on the stage/screen. The audience participant, however, is free to become involved or not; they can associate into the feelings and thoughts of those on stage or remain dissociated observers and meta-comment on, or deconstruct the plot, dispassionately. In this way, watching drama can be a therapeutic mechanism for some

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people if they are self-directed healers or they are being supervised during the process. I am
referring here of course to those people who have been through traumas, the memories and
emotions of which are sufficient to be triggered by the watching of the play/story.

The following factors need to be weighed up before entering trauma counselling in
countries other than the one you live in, where there has been a genocide, war or persecution.

Safety/Trust: Will you fight the devil for him or with him? Will you slay the murderous
memories for her? Are you old enough? Have you acquired enough of life’s experience to
prepare you for this?

Shared Experience: In speaking about telling, judging and understanding, Tzvetan
Todorov (1999) says that former prisoners in the German concentration camps believe that
"no one who has not actually experienced what they themselves went through can possibly
understand it" (p. 256). Many torture and genocide survivors feel exactly that way, and will
even insist that the therapist take the side of their political viewpoint in order to be convinced
that the therapist is trustworthy.

Confidentiality. Not only do the normal rules of confidentiality apply to this type of
counselling, but something far more fundamental is at stake; and that is people’s safety and
their lives and those of their families.

Respect, Cultural Sensitivity, and a Nonjudgemental Attitude. While it should not have to
be restated that the therapist must never forget the fundamentals of showing respect for the
client and adopting a nonjudgmental attitude to all clients, it is not so easy when the client has
done wrong in the eyes of society or themselves.

Solidarity. We move to another realm when we deal with such confrontation with man’s
inhumanity to man - it calls us to the spiritual and religious world - something outside of
normal life has to be drawn on to make sense of this. Places we never go to have to be
unearthed. Moreover our pain, void, depression, and/or existential despair must be dealt with
as "Any man’s death diminishes me, because I am involved in Mankinde; and therefore never
send to know for whom the bell tolls; it tolls for thee" (John Donne, 1572-1631).

Descent into Hell and Facing One’s Own Demons. In terms of solidarity, we have to be
with the other in hell and know beyond doubt, that there is a way out, or if not, then that we
are prepared to stay with the person in their hell, till they know we will not desert them. But
being prepared to descend into hell is critical.

That means the therapist or health professional has to know themselves very well; that
means that the helping professional understands that humanity will betray humanity - to argue
the premise is to select yourself out; there is no place for esoteric discussions about heroes,
saints and the moral fibre of human beings. This is the place to talk about solidarity in
walking the lonely afflicted path of the lost soul, who may never be healed, or who may
already be in hell and perhaps think they deserve to be there.

Confronting Mankind’s Inhumanity To Men, Women and Children. You can’t fool "lost
souls"; you should never enter that chasm unless you’re prepared to face the devils within and
without, the chaos, the possibility of everything bad about humanity and yet know and
believe in the ultimate good. Silently, quietly, just being there. It takes a lot of courage. If the
person is so broken, they many never repair or recover. You cannot save them all, but you
may not desert them.

Confronting One’s Own Fears and Confronting One’s Own Cowardice. By looking at the
photos in “The Killing Fields”, David Chandler (1996) says that whether we like it or not we
may come close to what Carl Jung called our shadow selves.
Forgiveness. Spiritual systems come into play - what do they really believe underneath all this? Confession, and restitution for some of them is needed; they watched and did nothing as others were dragged away and killed or tortured; they did nothing, they were in fear of their lives - in the most primitive action of all – to save themselves. So forgiveness of self is required here. Blatner (2001) believes that the act of confession and understanding by others is cathartic, as a mix of lingering guilt and shame give rise to unworthiness in the victim.

Interrogation and untruth. Chandler quotes Freud's interrogation of his patients and tries to use this quote to understand how all these people came to confess things they did not do. Freud, in speaking of recalcitrant patients, said: "We must not believe what they say, we must always assume and tell them that they have kept something back... we must insist on this, we must repeat the pressure and represent ourselves as infallible, 'til at last we are really told something" (Chandler, 1996, p. 106). "After I beat him some more, he admitted that he had joined the CIA in 1969" (Chandler, 1996).

Vicarious Traumatization. McCann (2001) advises that therapists have a need for containment and support. The more we share traumatic details, the greater the likelihood is that we will be affected. Because of the very real danger of vicarious traumatisation, therapists should be in supervision for the whole period one deals with torture and trauma victims.

Symptoms of vicarious traumatization are similar to those experienced by individuals with PTSD, and include psychic numbing, hypervigilence, difficulty sleeping, and intrusive thoughts of the trauma, which were reported by the client. It is also called secondary PTSD or compassion fatigue (Kluft and Fine, 1993, p. 164.)

TREATMENT PROGRAMS AND POSSIBLE THERAPIES

At the time of our visit to Cambodia in 2000, a number of treatment programs were being conducted by the TPO (Transcultural Psychosocial Organisation - an Amsterdam-based organisation) in Cambodia (see Sivaraman, 2001). UNIFEM (2001), under the guidance of Sopha Hang, clinical psychologist, had also initiated a project in a Buddhist temple to help women cope with the mental trauma on the war. They combined both modern methods of psychoanalysis and counselling with Buddhist philosophy and meditation, at the Wat Phnom Andeouk.

In the wider culture, Buddhist approaches to dealing with everyday life and traumas is masked with beliefs about karma, and meditative strategies teach the follower the techniques of dissociation and compartmentalisation - a method of coping with life's blows, but not a method that is always useful for all situations and personalities.

Despite the grave need for mental health care, UNIFEM (2001) reported that in the early part of this 21st century, Cambodia did not have the financial resources to provide facilities or treatment. Since then, there are several initiatives that have been introduced through other NGOs.

In 2010, Aubrey Belford interviewed Sotheara Chhim who reports on the TPO (Transcultural Psychosocial Organization) study which determined that 35% of people had some psychiatric issue and 45% had psychosocial problems. His concern is that 5 million of the 13 million people have only 30 psychiatrists to assist in the city and just 10 outside
Phnom Penh. He reminds me of other scenes I have witnessed in other poor countries where in the poor villages, “the severely mentally ill are often found tethered and caged in hidden recesses beneath stilt houses” (Chhim, 2010).

Helen Basili (2010) updates us on mental health in Cambodia and speaks of Derrick Silove who is a sessional psychiatrist with STARTTS, and Meng Eang Thai who left Cambodia 20 years ago. Meng Eang Thai is a STARTTS counselor and joined Professor Silove on a visit to a new mental health clinic at the Siem Reap Hospital for torture and trauma survivors, and in 2010 he is adamant that counselling has been embedded in Cambodia culture for many decades, but it is a different approach to that of the Western style and believes that the way forward is to intergrate the two approaches. The Cambodian counselors need both advanced training as part of professional development and training in how to cope with the stress of the job.

The types of therapy utilized with trauma victims are many (see VIII International Symposium on Torture, 1999). In the next section, I will briefly address just one of those therapies that may be appropriate in the context of counselling within Cambodia.

**Narrative Therapy**

When working with mass trauma victims, telling their stories in metaphors or in reality may very well protect both the integrity of the self and safeguard the actual physical personae from backlash. They are used to Folk stories and a well-known story is about “The Courageous Kong” (see Bit, 1991) - a man who is courageous in the face of adversity. They are familiar with humour, as that folk story describes.

Narrative Therapy (including art therapy where indicated) is the preferred option to open any form of individual or group (and later community group) therapy, as it allows the person to tell their story (even if is cloaked in metaphors or attributed to another person) in metaphors, analogies, poetry, or reality. Narrative Therapy is linked to meaning making; that was one of its original goals. The type of reading or story that is chosen will depend very much on the mental health status of the participants and their stage of recovery at the time of the therapy. While below I recommend reading from *The Children of the Cambodian Killing Fields*, it may not be appropriate for some people or any person in the group depending on the status of the clients.

*The children of the Cambodian Killing Fields* is a book of stories; they are consistent stories about what happened to the people of Cambodia, in the Khmer Rouge regime. In certain circumstances, these stories can be used to start off the therapy and be re-introduced at a certain point in time so as to avoid abreactions and re-traumatising the participants. There are a range of cultural folklore stories and children’s stories that may well serve the need better, depending on age, gender, and other specifics of the participants. Such stories can be found in the books by George Burns11; by using someone else’s stories, it can help others get their stories out; but remember there are people who do not want to tell their stories, there are those who do not want to remember and so one must honour their conscious or unconscious decision not to do so.


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The important factor to consider, in the use of metaphors or stories, is that there must be a storyline in the narrative that contains references to very difficult times and be as close to the real trauma as possible, even though it is a metaphor or a fable; the next important point is that the individual in the story struggles and recovers and finds something new in life that makes life much more worthwhile living, even if it is slow to start. The wounded protagonist must overcome the downtrodden state of being, but must also be left with appropriate safety defences in place and realistic dreams.

Art Therapy has been used successfully with Kosovo refugees arriving in Sweden (Tucker, 1999). It can accompany narrative therapy for those who cannot speak, or who are unable to voice their experiences, but who are able to draw or paint them. Geoff Denham (2002) points out the importance of addressing ‘truth seeking’ when discussing counselling with Kosovars suffering from PTSD. The traumas Denham recounts that these people suffered were similar to that of the Cambodians: torture, regular threats to children’s lives, forced witnessing of executions and atrocities including dismembering of family members.

The program stressed the need to address the safety needs of the Kosovars, being available especially at meal times which were considered over time to be important social occasions; the dining room became a meeting place and a place for farewell and celebration functions. The modus operandi was “caring, listening, sharing” (in Albanina kujdesen, ju degjojne dhe ndajne hallet tuaga). Here again as in many situations where clients and counselors come from different cultures, the role, skill, and sensitivity of the interpreters are paramount. Denham worked with the male Kosovars in telling and documenting their stories as part of truth seeking, sometimes crying through the recounting of the traumatic events. Their stories echoed the nature of some of the Cambodian stories.

“Our 27th of April 1999 they gave us 20 minutes to get out of our houses. This was very difficult for the women and children because they can’t move as fast as the men. Then they set our homes alight. We watched them burn.” (Amir’s documented comments to G. Denham on 27th October 1999.) Documenting these histories is a key action in healing and restoring.

Documenting and truth seeking is part of the concept of narrative therapy in the wider sphere, as is the concept of dialogic trauma work which is “based upon Mikhail Bakhtin’s dialogic theory and Stevan Weine’s conceptualization of testimony as a polyphonic and dialogic narrative”. Weine (in press) advocates passionately for “narratives from survivors, family members, witnesses, patients, helpers, advocates, policymakers, and even perpetrators. We need to hear these different voices and the multiple positions that they represent. We particularly need them because what we know about trauma prevention, care, and recovery often does not work effectively enough, especially when we try to understand or address trauma in the highly complex situations of mass violence and disaster (Beristain, 2006)”.

Spiritual and religious stories and myths of old can be incorporated into therapy just as Shay (1995) has done with Achilles in Vietnam for those people who are/or were in hell. However, as indicated earlier, no therapist should go there unless they have dealt with their own pain, hell, cruelty, fears, terrors, hopelessness, helplessness and the annihilating fear of man’s inhumanity to man. If you can’t bear to hear the truth about torture, and have not dealt with your own ghosts, devils, sores, wounds, dragons, and dark gloom and shadows of fierce

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horrible attacks, and the ugly side of action taken to protect the self and for survival. Unless one has left the safe cocoon of the integrated self, one can never know what it is to "be in hell" while living, especially where that hell is other-induced.

However, it is in the story telling, it is in the documenting, that the truth as the client sees it, is expressed outside of their minds, hearts and bodies; it helps the mind to clear somewhat and enables the teller to begin to gain some sort of control (however minute) over what has happened to them. The journey to recovery is long and often painful, but the journey has begun.

As the journey continues, the necessity to make some meaning out of the experiences is paramount for recovery and adequate functioning, until hopefully the individual and communities once again tap into old and new resources and contact existing or new resilience strengths. Meaning making and having a sense of purpose (in this case perhaps a renewed or new sense of purpose) are two of the points along the recovery path, and may occur at different points in the time line.

CONCLUSION

The need for cultural appropriateness in counselling and community interventions generally has been stressed by other authors in this and the companion text. The requirement to study the history, culture and systems of a country into which we have been invited or contracted to work in counselling victims of mass trauma, such as war, natural disasters, genocide and deaths following serious epidemics, is paramount. Having the necessary skills, cultural sensitivity, openness to change approaches to suit the particular situation or culture, is mandatory. Bit (1991) warns us that western ways, particularly hierarchical ways of helping, and top-down management will not work in Cambodia, although on the other hand he acknowledges that “[h]ierarchy, oppression, and requisite conformity characterize the typical Cambodian experience” (p. 40).

Being able to manage one’s own reactions, stay focused on the task at hand, and to have back up resources in-country is very important. Firstly however, we need to be able to listen and to hear, with compassion, clarity and foresight. Then we need to apply the correct therapeutic approach and techniques to the people in need directly or those who will be working with them.

There is an image of Christ on a byzantine icon walking across a plank which extends downwards into hell’s fire; he leans forward and holds out his hand to rescue the people being tortured by the fierce lapping flames. When working with trauma clients of this background, we enter hallowed ground, even if it looks and feels like hellfire. We need to spiritually prepare ourselves for the descent.

POSTSCRIPT

The following communication was forwarded by Registered Nurse Barbara Crawford following her recent trip to Cambodia, with her husband, which she reports as a healing mission.

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Cambodia Revisited

Recently I spent some time in Cambodia: the first time since 2000 when I visited Phnom Penh with my friend Kathryn Gow. Our experience then was somewhat terrifying to say the least. Kathryn had thought counselling for people with post traumatic stress syndrome could be invaluable for those people affected by the terrifying years of the Pol Pot regime. The people we visited at one of the health clinics were not convinced that such a syndrome existed in Cambodia. Of course years later, it certainly has been proven that many Cambodian people have the disorder and have been provided with different modes of counselling.

November 2011. We arrived in Siem Reap early in the morning. I felt apprehensive as to what the next few days would hold. Being a tourist, one has a different perspective of the country than as an aid worker. The Airport is now so beautiful. Green, tropical plants everywhere and orchids everywhere. We were taken to our hotel, a beautiful French villa type building. Everyone was so friendly and spoke English fairly well.

We spent time at Angkor Thom built in the late 12th Century and in the afternoon visited the temple Angkor Wat. This temple was built at Angkor in the early 12th Century. It was so very hot and humid, but we didn’t seem to notice as we walked around and through the ruins. Even though there were a lot of people there, it still felt very peaceful and spiritual; we wandered up stairs and down into rooms. I felt very relaxed and enjoyed the time there. The next day we went to the “big lake”. Lake Tonle sap is a combined lake and river system, the largest fresh water lake in South East Asia. Due to the flooding, we had to leave our bus and were transported by oxen and cart, and then walked over planks to the waiting long boat. What an experience; as we motored in our boat up the river, we saw we were actually over the road. Some of the houses had water up to the ceiling, the people were living in the ceiling, some were doing repairs to the thatched roofing; they smiled and waved as we went by. Asian people never cease to amaze me. They just get on with things….people were out in boats taking supplies to those not able to get out. We arrived at the floating village on the edge of the lake. The size of the lake itself was enormous due to the flooding. We visited the local school and gave the children paper, pencils and toiletries that we had collected from out hotel rooms. We were amazed that the children wanted the toothbrushes. We will be collecting toothbrushes for the next visitors to take to the area.

We travelled by mini bus to Phnom Penh; I must say their English has improved greatly, but unfortunately the driving is the same - fast forward and stop. We arrived in one piece having stopped for lunch at a market place on the side of the road. The fried rice and beef was delicious and very cheap.

Phnom Penh has changed so much, new high rise buildings and Tut Tut’s everywhere. These little vehicles make getting around so easy. Our hotel was very pleasant; again French style villas; there was a small kitchen and bar beside the pool and we had our meals there. It was so tropical and restful after the busy hot streets.

The next morning we went to ‘the Killing Fields’. Again, I wasn’t sure I wanted to be a part of this; it was so hot and I felt very apprehensive. At the gate, you get head phones and a pamphlet to guide you around the numbered sites. There are also stories from survivors you can access as you walk around.

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The people have to be commended for the way they have set out the fields for the public to view. In the middle of the field, there is a tall glass shrine with shelves filled with skulls. You can walk right around the shrine. I bought flowers and an incense stick and placed them in the container. I felt very emotional and humbled to be able to pray for the souls of these people.

It is such an emotional experience; it’s horrifying but the people want us to know these horrific crimes were committed by their own people. And this is their story. For me, I appreciated the fact you could walk around in silence and weep in privacy for the suffering of these people. I felt very sad, but I also felt that I understood more about the Regime and the atrocities people suffered and witnessed.

Our next visit was to the Genocide museum. That was the place Kathryn and I had gone on our previous visit. We were so shocked and saddened by what we learned at the museum that we could not face going to ‘the Killing Fields’ at that time. This time, I didn’t spend too much time there, as we had spent a lot of time there previously. I came away thinking “I don’t feel afraid anymore.”

For me, I enjoyed my visit to Cambodia so much and am happy to have returned and faced the dark shadow I felt for myself. The temples and the souls of the fields have healed my emotional fears of the country.

I’m sure if I had probed into the living conditions, health issues and the poor of the countryside, it may have been different. But then I didn’t need to, I was on holiday, being a “tourist”. I also owe the enjoyment of the holiday to other people and Malcolm my husband who were such fun and support for whatever we wanted to do. I look forward to returning to Cambodia in the future. (Barbara Crawford)

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REFERENCES


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Narrative

RIPPLES OF A KINDNESS REMEMBERED

Paul W. Schenk

I saw her that Spring Saturday as I rode my bicycle up the hill in front of her home. She looked to be about 11, as she sat in the bright morning sun behind her homemade lemonade stand. Since I love to support young entrepreneurs, I stopped to purchase a cup. As she handed it to me, she explained the lemonade was free. I thanked her for her kindness and enjoyed the drink. A few moments later, I resumed my training ride, a smile on my face as I continued to appreciate her unexpected gift. That’s when the ripples began. Now, some three years later, I still enjoy the ongoing ripples from her simple kindness. Let me explain.

Every time I pass by her family’s home, my face breaks into another big smile as I remember her gift that Saturday. The cycling route that I rode that morning is one I use regularly throughout the year to help stay in shape, so I have enjoyed many ripples from her kindness that day.

Psychologists refer to this as an example of a state dependent memory. Some aspect of a current event triggers the remembrance of a prior event. Most anything can take on this triggering capacity. It can be a visual symbol associated with a product, the scent of a perfume, or a few musical notes from an old rock song, to name just a few. These memory fragments can work to trigger a shift in one’s emotions in a myriad of directions such as anger, frustration, sadness, joy, helplessness, fear, curiosity, or delight.

Thousands of memories stored in our brains are indexed or sorted in many ways, such as by emotional content. When a person’s mood or emotion changes, the brain tends to bring back into consciousness other memories that have that same emotion in common. Like throwing a small stone into the calm water of a pond, the feelings associated with what is happening right now create ripples that bring to mind other memories that included similar feelings. While mood changes are often triggered by something or someone else, you can intentionally initiate the same process yourself.

I was reminded of this truth on a ride earlier this summer. I had noticed at the outset that both my physical and emotional reserves were lower than I like, and the sky was threatening rain. Clearing the green light at the top of the first hill on my ride, I began
settling into the hypnotic-like experience that cycling affords. Eight miles later, as I turned on to her street, I felt my mood shift once again as it has so many times these past three years. “Lighter” is not a word typically associated with pedaling up a long hill, so I especially enjoyed the sudden lightness in my mood.

As I shifted gears to match the hilly terrain, I invited my mind to do the same, to revisit other memories that matched the pleasant shift in my mood. Maybe the flower garden I happened to be passing influenced the selection of the next ripple. This one sent me back in my own adolescence on an afternoon when the florist had come by to deliver a box to my older sister sent by her boyfriend. I sat on the stairs and watched with curiosity as she opened it. Her eyes moist with tears, she looked up at me and said gently, “Pay heed, little brother, the power of a single rose.”

I don’t think I ever told her, even years later, that I did. I would now, but she died in 2002, four years after developing a very aggressive breast cancer. A couple of years later, my brother persuaded me to ride with him in my first Pan Massachusetts Challenge, a cycling fund raiser for the Dana-Farber Cancer Institute. That’s where the next ripples led me. Every year along the roughly 190 mile route, thousands of people come out to share their support and appreciation of our fund raising efforts. Along the route last year, a woman who looked to be in her early 30’s stood alone at the side of the road with her sign that read:

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My Heart
Is Still Beating
Because Of You
Thank You!
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Making eye contact with me as I approached, she gently tapped her closed hand on her heart several times with a look of appreciation and gratitude that will stay with me for years.

I savored each of these memories as I crested the hill past where the lemonade stand had been. Instead of dreading the remaining 17 miles of hilly terrain, I was aware that both my emotional and physical fatigue had dissipated with the ripples. My spirits lifted, I turned the corner and began to wonder how many more ripples I would enjoy before this ride was over.

Now that I’ve finally written this simple tale, I plan to share it with that young entrepreneur. I’d also like to share it with the woman who stood by the side of the road last year. As is so often the case in life, I doubt either of them realize the many ripples that have come from their unexpected kindness. I never told my sister. I want to make up for that.

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1 Over 5,200 cyclists raised $35,000,000 that year for cancer research and treatment at the Dana-Farber Cancer Institute. With the 31st ride in 2010, the total now exceeds a quarter billion dollars.
Index

anxiety disorder, 104, 105, 107, 108, 109, 316, 317
APA, 4, 16, 32, 115, 137, 165, 271, 299
apathy, 209
appetite, 77
appraisals, 147, 227, 239, 242, 243, 244, 249, 254, 255, 256, 257, 266
Argentina, 298
arousal, 12, 37, 42, 43, 44, 46, 47, 50, 113, 154, 155, 156, 158, 163, 194, 195, 196, 199, 200, 285, 298, 310, 311, 314
arrhythmia, 229
Asia, 8, 100, 166, 216, 297, 375
Asian countries, 359
assertiveness, 27, 232, 289
assimilation, 29, 283, 284, 290, 292
atmosphere, 358
atoms, 323, 328
ATP, 323
atrocities, 194, 359, 365, 372, 375
atrophy, 336
attachment, 56, 62, 64, 111, 116, 189, 235, 267, 291, 312
authenticity, 60
authority, 60, 287, 363, 364
autism, 135
automobiles, 360
autonomic nervous system, 195
aversion, 309
avoidance, 23, 47, 88, 89, 90, 119, 155, 158, 159, 195, 199, 203, 210, 213, 214, 215, 216, 222, 234, 303, 304, 305, 310, 312, 313, 314, 316, 332, 340, 351, 361
avoidance behavior, 310, 313
awareness, 19, 21, 23, 25, 30, 45, 46, 50, 51, 53, 54, 55, 59, 63, 64, 84, 93, 97, 130, 155, 222, 233, 241, 268, 269, 270, 279, 291, 307, 309, 351, 358
backlash, 371
bandwidth, 306
bargaining, 211
barriers, 94, 223, 364, 367
base, 56, 76, 80, 82, 109, 286, 297
base rate, 109
basic needs, 338
basic trust, 95
Beck Depression Inventory, 146, 151, 178, 180
behavior therapy, 304, 305, 309, 316, 317
behavioral disorders, 137, 316
behavioral problems, 297
behaviors, 11, 55, 56, 63, 64, 282, 287, 289, 309, 310, 314
beneficial effect, 282, 307
benign, 199, 364
benign prostatic hyperplasia, 199
bias, 19, 20, 106, 151, 205, 216
Bilateral, 282, 294, 299
binge eating disorder, 316
biochemistry, 312
biological processes, 322
biological psychiatry, 38
births, 222
blame, 90, 91, 92, 93, 95, 103, 106, 116, 117, 135, 164, 290
blood, 5, 44, 78, 171
bloodstream, 262
body image, 17, 242, 264, 305, 342
bonds, 231, 234, 319
bone, 171, 240, 256, 258, 259, 271, 276
bone marrow transplant, 171, 258, 271, 276
borderline personality disorder, 49, 105, 110, 299, 307, 316
Bosnia, 62, 66
bowel, 263
boxing, 296
brain activity, 36, 42
brain damage, 46, 317
brain structure, 36, 43, 44, 47
brainwashing, 361
Complimentary Contributor Copy
breakdown, 11, 41, 44, 51, 184, 338
breast cancer, 262, 263, 264, 265, 267, 268, 271, 272, 273, 274, 275, 276, 380
breathing, 42, 205, 307, 310
breeding, 75, 76, 79, 81
Buddhism, 37, 63
bullying, 290
burn, 368, 372
Butcher, 177, 178, 190
calculus, 321, 328, 332
Cambodia, vi, 10, 12, 37, 50, 188, 357, 358, 359, 360, 361, 362, 363, 365, 370, 371, 373, 374, 375, 376, 377
cancer cells, 263
cancerous cells, 262, 263
candidates, 10, 240, 241, 254, 255, 256, 257, 258, 260
cardiovascular disease, 57
cardiovascular system, 49
catalyst, 262, 265, 271
category a, 123, 126
catharsis, 350
causal attribution, 243
causality, 41
CCA, 262, 263
central nervous system (CNS), 36, 41, 42, 49, 204
chaos, 17, 311, 319, 321, 322, 323, 324, 325, 329, 369
chemotherapy, 263
child abuse, 57, 104, 109
child molesters, 137, 138, 300
child rearing, 175, 188
Christianity, 70
Christians, 124
chronic distress, 58
chronic heart failure, 259
chronic illness, 90, 240, 243, 244
chronobiology, 319, 321, 322, 324, 325
CIA, 370
citizens, 116, 120, 136, 358, 360, 363, 365
civil war, 62
civilization, 82
clarity, 151, 373
classical conditioning, 22
classification, 57, 69, 103, 112, 148, 304
clinical application, 142, 315
clinical assessment, 246
clinical diagnosis, 158, 160, 183
clinical interventions, 27, 225
clinical judgment, 145
clinical symptoms, 206
clinical trials, 199
closure, 23
clubbing, 224
clusters, 106, 142, 154, 247, 295
coaches, 351
cocaine, 332
cocaine abuse, 332
cocoon, 372
cognition, 21, 244, 283, 292, 293, 294, 295
cognitive abilities, 255, 338
cognitive activity, 196, 202
cognitive function, 37, 40, 223, 233
cognitive impairment, 223, 255
cognitive processing, 40, 46, 200, 266
cognitive schema, 22, 39, 294
cognitive theory, 210, 217

cognitive therapy, 308, 317, 322
coherence, 12, 53, 55, 56, 60, 66, 221, 225, 229, 230, 231, 233, 235, 239, 244, 246, 272, 281, 286, 287, 288, 290, 294, 297, 354

collaboration, 84
college students, 63
collusion, 222, 232
color, 284, 304
colo...
compassion, 5, 12, 232, 245, 269, 270, 330, 345, 357, 358, 368, 370, 373
compensation, 103, 106, 183, 184, 185
competition, 280
compilation, 246
complex interactions, 327
complex partial seizure, 314
complexity, 10, 34, 57, 86, 96, 225, 242, 243, 247, 327, 334
compliance, 234, 305, 316
complications, 6, 222, 223, 230, 234, 239, 240, 241, 243, 247, 251, 252, 253, 254, 255, 256, 257
composites, 37
composition, 327
compounds, 338
comprehension, 63, 64, 286
compulsion, 23, 24, 25, 30, 45, 197
computer, 121, 176
conception, 41
conceptual model, 117, 243
conceptualization, 9, 16, 21, 61, 68, 139, 141, 142, 282, 372
conditioning, 116, 199, 286
confession, 370
confidentiality, 264, 369
configuration, 255
conflict, 19, 28, 43, 44, 46, 60, 194, 249, 345, 347
comformity, 373
confrontation, 89, 369
congenital heart disease, 222, 235, 236, 237
conscious awareness, 43, 45
consciousness, 37, 39, 45, 46, 93, 294, 306, 315, 320, 362, 363, 379
consensus, 201
consent, 212
constituents, 42, 332
construction, 37, 40, 41, 42, 66, 135, 137, 198, 247, 292, 329
containers, 81, 327, 328, 329, 334
control condition, 306, 307
controlled studies, 100, 282
controversies, 27, 165, 356
convention, 274
conversations, 124, 155
cooperation, 41, 58
coping strategies, 10, 57, 86, 116, 121, 130, 133, 134, 164, 211, 222, 227, 228, 235, 266, 270, 272, 337
copyright, 323, 324, 325, 326, 329
correlation(s), 107, 109, 145, 146, 184, 185, 214, 247, 252, 253, 326
corruption, 360
cortex, 42, 44, 45, 46, 47, 50, 204
counseling, 67, 98, 376
country of origin, 140, 174
covering, 358, 364
CPI, 246, 250
CPT, 200
creative process, 336
creative thinking, 321
creativity, 25, 27, 319, 327, 334, 363, 364, 367
crimes, 115, 116, 118, 375
criminal behavior, 9
criminal justice system, 120
criminal system, 120
criminals, 10
crises, 6, 29, 64, 165, 225, 229, 274, 375
critical thinking, 38
criticism, 159, 363
CSA, 9, 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 112
cues, 46, 155, 196, 310, 314, 322
cultural differences, 100, 102
culture, 361, 367, 370, 371, 373
cyanois, 224
cycling, 379, 380
daily living, 355
danger, 5, 75, 119, 187, 346, 348, 358, 370
data analysis, 106
deaths, 10, 84, 98, 241, 263, 364, 373
defects, 221, 222, 234
defence, 16, 37, 50, 117, 193, 196, 340, 357
defensiveness, 154, 249
deficiency, 224
deficit, 50, 196
degradation, 223
delusion, 16
demographic data, 144
dendritic cell, 274
denial, 16, 24, 37, 90, 116, 118, 119, 133, 134, 146, 210, 222, 232, 234, 241, 243, 258, 259, 332
Department of Defense, 299
dependent variable, 148, 211
depersonalization, 24
depreciation, 109, 254
depressive symptoms, 182, 307
depth, 4, 5, 8, 10, 57, 86, 94, 102, 111, 322, 327, 334, 350, 358
desensitization, 144, 298, 299, 300, 301, 302, 310, 312
despair, 6, 25, 40, 95, 240, 265, 367, 369
destiny, 21, 25, 364
destruction, 20, 360, 368
detachment, 155, 156
detection, 263
developed nations, 262
developmental factors, 30
developmental process, 28, 29
deviant behaviour, 120
diabetes, 227
Diagnostic and Statistical Manual of Mental Disorders, 4, 12, 16, 32, 115, 137, 160, 165, 262
diagnostic criteria, 158, 160, 264
diet, 77, 262, 269, 270
dietary habits, 180
dignity, 87
disability, 34, 143, 145, 222, 224, 240, 241, 254, 310, 314
disappointment, 90
disaster, 33, 167, 207, 208, 209, 210, 211, 213, 216, 218, 219, 297, 299, 359, 372
disclosure, 87, 90, 102, 117, 224
discomfort, 18, 19, 241, 295, 304, 342
discontinuity, 19
discordance, 224
discrimination, 30, 47, 179, 305
diseases, 254, 262, 263
disequilibrium, 63, 241, 244
disgust, 122
dislocation, 339
disposition, 62, 247, 256
dissatisfaction, 30, 104, 107, 242, 332, 347
dissociative disorders, 34, 110
dissonance, 24
distortions, 103, 107, 118, 167, 321
distribution, 212
diversity, 62
dizziness, 361
DNA, 10
doctors, 49, 223, 224, 231, 232, 234, 263

DOI, 298
domestic violence, 43, 337, 338, 340, 341
donors, 10
Dopamine, 323
dosing, 89
drawing, 194, 323
dream, 7, 24, 26, 127, 131, 197, 198, 199, 200, 202, 203, 204, 206, 241, 258
dreaming, 197, 198, 202, 203, 204, 205
drought, ix, 7, 207
drugs, 104, 108, 109, 241, 263
DSM, 38, 42
dysphoria, 181
dysthymia, 109

earthquakes, 288
East Asia, 374
eating disorders, 101, 103, 104, 105, 107, 110, 112
economic resources, 254
Ecuador, 75, 76
ego strength, 245, 247
elaboration, 23
electric charge, 328
electricity, 79
electromagnetic, 327, 328, 329, 332, 333
electromagnetism, 335
electron(s), 323, 328, 332, 333
eligibility criteria, 212
e-mail, 3, 212
emergency, 42, 46, 68, 78, 218, 297
emigration, 185
emotion, 90, 156, 198, 210, 243, 244, 283, 290, 292, 293, 308, 311, 314, 338, 345, 347, 355, 379
emotion regulation, 338, 345
emotional conflict, 314
emotional disorder, 311
emotional distress, 58, 65
emotional experience, 121, 122, 124, 133, 135, 198, 350, 375
emotional intelligence, 34
emotional problems, 236
emotional psychopathology, 150
emotional reactions, 12, 16, 18, 60, 136, 145, 303, 304, 310, 312, 314
emotional responses, 37, 117, 121, 122, 217, 311, 349, 355
emotional stability, 134, 142, 247
emotional state, 47, 121, 284, 288
emotional valence, 298
emotional well-being, 121
emotionality, 107, 198, 282
empathy, 17, 65, 116, 135, 137, 227, 324
empirical studies, 57, 65, 104, 107, 210, 211
employees, 286, 308
employment, 18, 136, 210, 255
encoding, 37, 292
endocarditis, 222
endorsements, 21, 31
energy, 39, 44, 46, 185, 229, 247, 263, 280, 313, 327, 332, 344, 353
England, 66, 218
entrepreneurs, 379
environmental conditions, 196
environmental factors, 44, 156
environmental influences, 28
environmental stimuli, 46
environmental stress, 210
epidemiologic, 218
equilibrium, 29, 40, 63, 241, 243, 245, 246, 295
equipment, 77
Ericksonian, 319
etiology, 113, 116, 117, 138
euphoria, 241
Europe, 185, 235, 236, 297
evacuation, 360
everyday life, 154, 316, 370
evil, 64, 70, 330
evolution, 34, 49, 191, 225, 232, 320, 335
exaggeration, 145, 149, 150
excitation, 42
exclusion, 104, 146, 211, 234
executive function, 42
exercise, 139, 145, 181, 217, 241, 259, 269
exile, 181
external environment, 25, 46
extinction, 47, 285, 301
extraction, 39
extracts, 337, 343
eye movement, 198, 199, 282, 298, 299, 300, 301, 302
fabrication, 146
face validity, 146
facilitators, 86, 88, 97
factor analysis, 273
fairness, 39
faith, 6, 20, 55, 56, 57, 58, 59, 63, 64, 66, 67, 69, 145, 180, 230, 231, 232, 368
false negative, 148
false positive, 148
families, 8, 99, 120, 121, 134, 137, 180, 189, 190, 222, 232, 234, 261, 263, 359, 369
family characteristics, 109
family interactions, 119, 223
family relationships, 87
family support, 366
family system, 86, 123, 338
family therapy, 301
family violence, 109
fantasy, 34, 230, 241, 341, 345, 347, 349, 350, 366
farmers, ix, 8
fat, 82
feelings, 12, 19, 30, 41, 44, 64, 86, 88, 90, 102, 106, 119, 122, 151, 155, 163, 164, 225, 226, 234, 242, 248, 256, 270, 284, 286, 289, 293, 295, 297, 303, 305, 309, 310, 311, 312, 330, 345, 347, 361, 362, 368, 379
female rat, 84
fertility, 82
financial, 119, 209, 211, 224, 370
financial resources, 370
fishing, 75, 77, 79, 80
flashbacks, 23, 24, 104, 107, 155, 197, 279
flexibility, 54, 60, 242, 245, 282, 287, 305, 340, 354
flight, 42, 43, 79, 311, 338, 364
flooding, 207, 217, 374
floods, 207, 208, 209, 210, 211, 212, 213, 216, 217
flowers, 352, 375
fluctuations, 28
fluoxetine, 302
fMRI, 300
folklore, 357, 368, 371
food, 8, 78, 80, 81, 131, 180, 311, 346, 366
force, 23, 59, 79, 89, 321, 328, 329, 365, 367

Complimentary Contributor Copy
Index

forebrain, 198
formation, 44, 235, 324
foundations, 52, 217
freedom, 20, 25, 26, 28, 31, 41, 139, 142, 180, 242,
        245, 309, 313, 314, 362
freezing, 292, 293, 296
Freud, 370
friendship, 128, 232
frontal lobe, 49
funding, 5, 108, 358
funds, 69

Galapagos Islands, 5, 79, 171
galaxies, 325
gambling, 103, 107
gangrene, 78
gender differences, 95, 121, 183, 249, 267, 298
gene expression, 34, 322, 329, 336
gene promoter, 50
General Health Questionnaire, 178, 180, 213, 218
General Relativity, 328, 336
generativity, 272
genes, 27
genital stage, 28
genocide, 10, 357, 358, 359, 360, 362, 365, 369, 373,
        376, 377
genetics, 279
Gestalt, 17, 20, 23, 336
global consequences, 145
glucocorticoid(s), 311, 317
goal setting, 234
goal-directed behavior, 57
God, 6, 54, 58, 64, 79, 126, 211, 232, 346
graph, 176, 183
gravitational force, 321
gravity, 321, 327, 328, 329, 331, 333
grounding, 347
group membership, 157, 267
group processes, 84, 86, 94, 97
group therapy, 67, 337, 339, 340, 356
group treatment, 299, 308
group work, 100, 339
grouping, 303
growth, ix, 7, 19, 23, 24, 28, 29, 53, 54, 55, 56, 57,
        58, 59, 60, 61, 63, 64, 65, 66, 68, 69, 90, 93, 95,
        98, 99, 100, 163, 227, 228, 299, 233, 234, 236,
        261, 262, 263, 265, 267, 268, 269, 270, 271, 272,
        273, 274, 275, 276
guidance, 32, 65, 85, 133, 242, 298, 370

happiness, 25, 56, 99, 309
harmony, 42, 327, 334
head injury(ies), 140, 144, 147
hearing, 11, 12, 24, 28, 34, 48, 54, 62, 65, 83, 92, 93,
        94, 95, 126, 135, 280, 297, 319, 320, 321, 322,
        323, 324, 327, 329, 337, 338, 339, 340, 341, 347,
        349, 350, 354, 359, 365, 366, 368, 372, 373
health care, 147, 149, 223
health care professionals, 149
health condition, 21, 244
health promotion, 265, 271
health psychology, 225
health services, 222, 223, 375
health status, 31, 259
heart disease, 223, 225, 375
heart rate, 310
heart transplantation, 258, 260
height, 279
helplessness, 16, 18, 20, 24, 28, 43, 95, 103, 106,
        115, 116, 119, 122, 133, 155, 158, 210, 240, 263,
        288, 293, 310, 372, 379
heterogeneity, 264
high school, 288
high-risk populations, 297
hippocampus, 44, 47, 204, 322, 326, 327
history, ix, 24, 31, 58, 104, 105, 106, 107, 108, 109,
        110, 111, 112, 137, 143, 212, 227, 243, 280, 283,
        289, 291, 330, 332, 357, 358, 359, 368, 373
Hodgkins Lymphoma, 5, 171
holocaust survivors, 10, 175, 376
homeostasis, 316
homes, 360, 372
homework, 295
homicide, 88, 137
honesty, 231
hopelessness, 115, 116, 122, 125, 133, 146, 319,
        361, 372
hormones, 263
Index

hostility(ies), 116, 179, 180
housing, 167, 358
human, 5, 20, 24, 25, 27, 28, 31, 36, 38, 39, 40, 41,
42, 53, 55, 56, 59, 61, 63, 65, 67, 70, 77, 193,
204, 227, 241, 259, 274, 297, 305, 314, 363, 364,
369
human development, 28, 67
human existence, 25, 53
human experience, 36, 38, 39, 53, 55, 65, 67
human health, 274
human rights, 363
husband, 5, 6, 89, 171, 342, 358, 373, 375
hybrid, 365
hygiene, 200
hyperactivity, 37
hyperarousal, 37, 45, 46, 159, 213, 214, 215, 361
hypermethylation, 50
hypersensitivity, 38, 42
hypertension, 199
hypnosis, 3, 34, 315, 320, 321, 322, 334, 336
hypnotherapy, 319, 320, 321, 322, 336
hypothalamus, 321, 322
hypothesis, 35, 37, 38, 39, 44, 47, 49, 120, 135, 136,
147, 158, 159, 163, 166, 186, 196, 225, 317

ic(l)con, 373
ideal(s), 9, 15, 30, 79, 353
identification, 20, 109, 188, 226, 239, 242, 243, 255,
257, 270, 288, 321
identity, 5, 6, 9, 10, 36, 39, 40, 41, 46, 64, 87, 89,
105, 110, 119, 134, 135, 136, 137, 179, 180, 188,
233, 241, 264, 267, 274, 276
IFN, 307
illusion(s), 24, 155, 366
imagery, 51, 200, 201, 283, 289, 295, 298
image(s), 16, 23, 24, 25, 37, 44, 123, 151, 155, 201,
242, 244, 279, 280, 283, 292, 293, 304, 330, 331,
333, 341, 350, 351, 360, 366, 367, 373
immediate gratification, 233
immigrants, 175, 185
immigration, 18
immune function, 308, 315
immune system, 263, 308
immunity, 225
immunosuppression, 241
immunotherapy, 263
impairments, 12, 104, 143, 303
imprisonment, 28, 202, 280
improvements, 84, 148, 305, 306, 307, 308
impulses, 47, 286
impulsiveness, 368
impulsivity, 310, 311
in transition, 234
incarceration, 118, 122, 136, 184
incidence, 38, 102, 110, 176, 181, 182, 183, 184,
185, 187, 194, 195, 200, 207, 262, 263, 264
income, 6, 8
independence, 87, 96, 159, 164, 223, 224, 230, 231,
232, 241, 245, 269, 273
independent variable, 211
individual characteristics, 11
individual differences, 140, 156, 165, 187, 254, 263
individuals, ix, 5, 10, 11, 21, 27, 29, 39, 41, 54, 58,
59, 60, 61, 66, 68, 84, 119, 139, 141, 143, 149,
156, 157, 159, 162, 164, 165, 195, 196, 197, 198,
199, 200, 210, 211, 214, 215, 216, 219, 225, 243,
246, 265, 268, 270, 281, 289, 290, 297, 302, 310,
311, 363, 367, 370
individuation, 189, 335
induction, 320
industry, 8
ineffectiveness, 244
inevitability, 23
infancy, 67, 321, 339
infants, 221, 222
infection, 241
inferiority, 30
infestations, 79
influenza vaccine, 308
information processing, 37, 51, 156, 281, 284, 301
information sharing, 233
informed consent, 85, 212, 226
infrastructure, 208
inhibition, 42, 65, 244, 305
initiation, 313
injury(ies), 11, 16, 18, 20, 32, 33, 37, 58, 68, 78, 84,
102, 112, 115, 140, 143, 144, 151, 155, 167, 194,
199, 289, 310, 312, 338
inmates, 128, 180, 187, 190
inner tension, 16
inner world, 88
insecurity, 40, 41, 51
insomnia, 107, 194, 195, 196, 199, 200, 201, 202,
203, 205, 206, 342
institutions, 65
integration, 15, 19, 20, 21, 27, 28, 30, 39, 40, 45, 46,
90, 95, 186, 187, 197, 198, 239, 241, 245, 246,
251, 252, 254, 283, 289, 291, 293, 298, 319, 321,
322, 323, 324, 327, 334, 335, 336, 350, 353, 354,
356
intelligence, 17, 46, 247
intensive care unit, 240
intentionality, 20, 21, 92, 147
interaction effects, 249
interest rates, 8
interference, 47, 145, 149
internal processes, 16, 21
internalised, 92, 339, 350
internalization, 257
international standards, 4
international trade, 358
interpersonal processes, 338
interpersonal relations, 89, 225, 246, 249, 338
interpersonal support, 338
intervention, 12, 24, 54, 68, 84, 85, 96, 136, 167,
218, 223, 240, 243, 255, 257, 271, 298, 299, 305,
intimacy, 102, 107, 111, 116, 138, 174, 341
intrinsic motivation, 56
intrusions, 45, 197
invisible hand, 224
Iraq, 44, 201
irritability, 155, 156, 263
IRT, 200
islands, 77, 78, 79, 81
isolation, 90, 95, 102, 103, 106, 110, 112, 115, 116,
118, 119, 123, 129, 133, 136, 187, 224, 338, 345,
347, 366
Israel, 68, 177, 178, 183, 185, 186, 187, 189, 190,
191
issues, 19, 24, 27, 32, 38, 66, 86, 87, 89, 93, 94, 102,
103, 105, 106, 107, 110, 111, 118, 121, 129, 135,
151, 159, 189, 224, 247, 274, 275, 287, 312, 327,
358, 363, 375

J

Japan, 202, 218
Jews, 63, 68, 177
Jordan, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 98, 99,
190, 205
journalism, 359
justification, 116
juvenile sex offender, 138

K

kidney, 257
kill, 24, 225, 292, 341
Kosovo, 62, 66, 297, 372, 377

L

lack of control, 36, 110, 240, 269
lateral eye movements, 284
Latin America, 66, 297
law enforcement, 301
laws, 63, 179, 327, 328, 333
lead, 4, 10, 11, 15, 18, 31, 37, 41, 46, 56, 59, 60, 61,
65, 83, 88, 90, 96, 106, 140, 149, 154, 173, 174,
188, 194, 195, 196, 200, 241, 245, 272, 308, 309,
320, 330, 340, 347
leadership, 60
learned helplessness, 43, 50
learning, 20, 22, 27, 31, 43, 44, 47, 59, 60, 91, 133,
143, 198, 206, 285, 286, 287, 299, 314, 325, 332,
339, 349
learning process, 44, 47
legal issues, 95
legs, 80
leisure, 223
lens, 53, 62
lesions, 47, 307
level of education, 160
liberation, 28, 142, 182, 185
LIFE, 84, 85, 94, 98, 99
life changes, 223, 256, 262, 265, 266, 267, 269, 270,
271, 273
life cycle, 29, 245
life expectancy, 223, 246
life experiences, 57, 233, 282, 287, 292
life quality, 240, 243, 247, 254, 255
life satisfaction, 225, 239, 247, 255, 256
lifestyle behaviors, 235
lifestyle changes, 123
lifetime, 109, 113, 181, 208, 223
light, 66, 78, 80, 225, 231, 307, 309, 367, 380
limbic system, 42, 44, 47
liver, 240, 256, 259, 260
liver transplant, 256, 260
liver transplantation, 260
livestock, 208
living arrangements, 212
living conditions, 375
local community, 342
locus, 44, 56, 247, 264
logical reasoning, 328, 331
loneliness, 137, 187, 211
longevity, 307, 315
longitudinal study, 167, 211
love, 5, 116, 132, 211, 245, 280, 290, 344, 346, 349,
353, 379
low education levels, 209
lung cancer, 263, 268
lung disease, 246, 255
lung transplantation, 260
Luo, 198, 204
lying, 9
lymphatic system, 262
lymphocytes, 171
lymphoma, 262, 263

M
magnitude, 141, 357
mainstream psychology, 323
major depression, 105, 107, 109, 113, 143, 182, 189, 317, 336
major depressive disorder, 104, 105, 108, 109, 181, 182
majority, 5, 6, 19, 85, 94, 107, 117, 122, 123, 133, 174, 195, 212, 221, 249, 255, 305, 324, 359
malingering, 47
maltreatment, 104, 108, 112
man, 8, 20, 24, 41, 79, 80, 209, 279, 291, 293, 296, 297, 359, 360, 363, 364, 369, 371, 372
management, 27, 83, 86, 100, 131, 143, 149, 154, 204, 222, 224, 232, 234, 241, 242, 247, 254, 256, 257, 265, 270, 299, 300, 309, 373
mangroves, 80, 81
manic, 181
manipulation, 24
man-made disasters, 297
MANOVA, 148, 161, 162
manslaughter, 119
mapping, 36, 38
marital status, 67, 160
market economy, 358
marriage, 6, 7, 333
marrow, 171, 256, 259
martial art, 288
mass, ix, 6, 21, 33, 54, 151, 218, 299, 359, 360, 366, 371, 372, 373, 377
mass trauma, ix, 6, 21, 33, 151, 218, 357, 371, 373
mathematics, 12, 319, 321, 322, 327, 328, 334
matter, 5, 91, 120, 150, 328, 335, 360, 364, 366
measurement(s), 27, 68, 206, 218, 269
media, 86, 122, 125, 212, 268, 273, 359, 360
median, 84, 142
mediation, 42, 43, 44, 47
medical care, 366
medical history, 108
medication, 108, 195, 199, 223, 341
medicine, 10, 254, 258, 304
medulla, 42
melanoma, 274
membership, 65, 267

memory formation, 206
memory performance, 23
mental activity, 29
mental disorder, 271
mental health professionals, 105, 110, 112
mental illness, 84, 137
mental image, 280
mental state(s), 7, 19, 22, 28, 29, 141, 142
messages, 135, 234, 346
meta-analysis, 61, 62, 65, 66, 107, 112, 175, 176, 178, 179, 183, 184, 185, 209, 267, 268, 273, 309
metaphor, 25, 28, 279, 319, 320, 321, 324, 328, 371
methodology, 103, 144, 226, 282, 303
MFI, 103, 106
mice, 50
military, 71, 159, 166, 193, 195, 196, 204, 205, 285, 311, 362
Millon Clinical Multiaxial Inventory, 152
mind-body, 319, 320, 321, 322
misconceptions, 222
mission, 311, 373
misuse, 104, 108
modelling, 234, 274, 286
models, 30, 35, 36, 37, 38, 62, 65, 69, 87, 96, 97, 225, 235, 239, 243, 246, 249, 275, 323
moderators, 152, 173, 174
modus operandi, 372
molecular biology, 319, 321, 322, 324, 325, 326
molecules, 322
mood change, 379
mood disorder, 104, 108
mood states, 307
moral behavior, 56
moral beliefs, 58
morale, 241, 244
morality, 58
morbidly, 167, 189, 209, 218, 240
mortality, 98, 227, 240, 255, 262
mortality rate, 262
motivation, 24, 45, 69, 70, 146, 232, 244, 288, 289, 331, 333, 345
MPI, 146, 150
multidimensional, 67, 217, 239, 244, 245, 256, 257, 269, 275
multiple personality disorder, 376
multiple regression, 144, 253
multiple regression analyses, 144
multiple regression analysis, 253
multivariate analysis, 148
multivariate statistics, 219
murder, 119, 361
muscles, 313
musculoskeletal, 104, 108
music, 131, 133
mutuality, 257

N

narcolepsy, 194
narratives, 4, 5, 6, 17, 18, 86, 88, 92, 94, 97, 140, 227, 239, 254, 256, 357, 372
national hypnosis congress, 3
National Institute of Mental Health, 109
National Institutes of Health, 261
National Survey, 217
natural disaster(s), 9, 12, 33, 193, 197, 208, 209, 210, 211, 212, 213, 216, 217, 218, 338, 373
nausea, 263
NCP, 376
needy, 353
negative attitudes, 136
negative consequences, 297
negative coping, 269
negative effects, 111, 254, 287
negative emotions, 287, 311, 312
negative experiences, 64, 225, 226, 291
negative mood, 64, 265
negative outcomes, 64
negative relation, 145, 147, 291
negativity, 31, 149, 309
neglect, 104, 105, 109, 112
negotiating, 137
neocortex, 43, 50
nervous system, 17, 34, 41, 42, 295
nervousness, 18
neural network, 311
neurobiology, 308, 356
neurogenesis, 34, 320, 322, 330
neuroimaging, 198, 285, 299
neurologist, 29
neuropsychology, 202
neuroscience, 315, 336
neuroses, 307
neurotransmitter, 310
neutral, 221, 225, 226, 227, 228, 229, 230, 232, 287, 292
New England, 203, 205
New Zealand, 51, 102, 166, 167, 188, 218, 262
next generation, 320
NGOs, 370
nightmares, 10, 104, 107, 193, 194, 197, 198, 199, 200, 201, 202, 203, 205, 206, 361
normal development, 223
normal distribution, 214
North America, 168, 236, 242, 246, 257
Norway, 189
nucleus, 323, 328
nurses, 168, 232, 234, 307
nursing, 358
nurturance, 56, 164

O

objective criteria, 306
objectivity, 247
obstacles, 221, 290, 291, 312, 367
offenders, 116, 117, 118, 119, 120, 121, 134, 135, 136, 137, 138
old age, 190
onset latency, 196
open-mindedness, 64
openness, 59, 60, 205, 245, 257, 373
openness to experience, 205
operant conditioning, 156
operations, 195, 223
opioids, 42
opportunities, 10, 18, 21, 56, 64, 92, 94, 96, 97, 164, 224, 233, 242, 257
oppression, 373
orbit, 328, 345
organ, 9, 10, 239, 240, 241, 242, 243, 246, 248, 254, 255, 257, 259
organism, 17, 35, 39, 43, 44
oscillation, 89, 96
otherness, 55
outpatient(s), 104, 105, 108, 109, 195, 204, 222, 307, 315, 317
overweight, 228
ownership, 26

P

Pacific, 75, 81, 100, 166, 202, 279
<table>
<thead>
<tr>
<th>Page</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>pain management, 83, 85, 86, 87, 90, 92, 93, 94, 97, 285</td>
<td>personal values, 121, 143, 234</td>
</tr>
<tr>
<td>pancreatic cancer, 268</td>
<td>personality characteristics, 157, 159, 257, 285</td>
</tr>
<tr>
<td>panic attack, 294, 342</td>
<td>personality constructs, 157, 239, 257</td>
</tr>
<tr>
<td>panic disorder, 306</td>
<td>personality disorder, 105, 107, 109, 110, 111</td>
</tr>
<tr>
<td>panic symptoms, 105, 110, 199</td>
<td>personality factors, 116, 157, 239, 246, 255</td>
</tr>
<tr>
<td>paradoxical sleep, 206</td>
<td>personality traits, 157, 162, 223</td>
</tr>
<tr>
<td>parallel, 205, 321</td>
<td>pessimism, 62</td>
</tr>
<tr>
<td>paralysis, 222</td>
<td>PET, 47, 204</td>
</tr>
<tr>
<td>paranoia, 173, 174</td>
<td>phantom limb pain, 285, 300, 301, 302</td>
</tr>
<tr>
<td>parasites, 79</td>
<td>pharmacotherapy, 199, 200</td>
</tr>
<tr>
<td>parental support, 135</td>
<td>phenomenology, 188</td>
</tr>
<tr>
<td>parenting, 110, 118, 123, 127, 128, 135, 136, 211, 229</td>
<td>phenotypes, 303</td>
</tr>
<tr>
<td>pathogenesis, 204</td>
<td>photographs, 307</td>
</tr>
<tr>
<td>pathology, 37, 109, 190, 283, 290, 335, 376</td>
<td>physical abuse, 105, 109, 332</td>
</tr>
<tr>
<td>pathophysiology, 202</td>
<td>physical activity, 262, 267</td>
</tr>
<tr>
<td>pathways, 42, 57, 70, 311</td>
<td>physical characteristics, 251</td>
</tr>
<tr>
<td>peace, 9, 11, 78, 354, 365, 366</td>
<td>physical education, 228</td>
</tr>
<tr>
<td>peacekeepers, 166</td>
<td>physical fitness, 269, 270</td>
</tr>
<tr>
<td>peer relationship, 234</td>
<td>physical health, 54, 57, 64, 69, 71, 209, 245, 270, 308</td>
</tr>
<tr>
<td>peer support, 85, 135, 266, 267, 271, 274, 301</td>
<td>physical therapy, 140, 144, 149</td>
</tr>
<tr>
<td>perceived control, 39, 245</td>
<td>physical well-being, 70, 259</td>
</tr>
<tr>
<td>perceived self-efficacy, 217</td>
<td>physicians, 140, 304, 307</td>
</tr>
<tr>
<td>perfectionism, 159</td>
<td>physics, 12, 319, 320, 321, 322, 327, 329, 334, 335</td>
</tr>
<tr>
<td>perfusion, 300</td>
<td>physiological arousal, 47, 197</td>
</tr>
<tr>
<td>permission, 91, 271, 351, 375</td>
<td>physiology, 42</td>
</tr>
<tr>
<td>permit, 24, 102, 320</td>
<td>pilot study, 99, 195, 233, 301</td>
</tr>
<tr>
<td>perpetrators, 136, 137, 357, 359, 365, 368, 372</td>
<td>pitch, 78, 80</td>
</tr>
<tr>
<td>perseverance, 312</td>
<td>placebo, 205, 206, 302</td>
</tr>
<tr>
<td>personal autonomy, 41</td>
<td>placenta, 78</td>
</tr>
<tr>
<td>personal communication, 366</td>
<td>plants, 303, 374</td>
</tr>
<tr>
<td>personal control, 27, 164, 234</td>
<td>plasma cells, 262</td>
</tr>
<tr>
<td>personal development, 222, 225, 227, 229, 231, 232, 233</td>
<td>plasticity, 336</td>
</tr>
<tr>
<td>personal history, 143</td>
<td>platform, 136, 354</td>
</tr>
<tr>
<td>personal qualities, 363</td>
<td>playing, 68, 230, 279, 285</td>
</tr>
<tr>
<td>personal relationship, 157, 174, 287</td>
<td>pleasure, 43, 313</td>
</tr>
<tr>
<td>personal responsibility, 144, 147, 149</td>
<td>poetry, 371</td>
</tr>
<tr>
<td>personal values, 121, 143, 234</td>
<td>polarity, 12, 319, 322, 323, 328, 329</td>
</tr>
<tr>
<td>political instability, 18</td>
<td>population, 9, 38, 47, 58, 84, 104, 105, 108, 109, 119, 121, 154, 173, 174, 179, 186, 187, 188, 193, 194, 195, 204, 205, 208, 222, 223, 225, 234, 274, 317</td>
</tr>
</tbody>
</table>
Index

positive attitudes, 66, 147, 149, 233
positive correlation, 146
positive emotions, 142, 272, 294
posttraumatic stress, 33, 37, 38, 49, 57, 61, 63, 69,
154, 160, 165, 166, 167, 168, 193, 194, 196, 197,
201, 202, 203, 204, 205, 206, 218, 297, 298, 299,
300, 315, 356
post traumatic stress disorder (PTSD ), 36, 51, 90,
165, 167, 168, 188, 192, 194, 195, 201, 202, 203,
205, 206, 298, 300, 301, 302, 361
potential benefits, 266
poverty, 6, 358
prayer, 55, 58, 210
predators, 127, 129
predictability, 231
predictor variables, 249
prefrontal cortex, 36, 40, 44, 45, 46, 47
pregnancy, 78, 223
prejudice, 217
preparation, 143, 223, 291
preparedness, 12, 32, 224, 230
prevention, 27, 84, 85, 89, 97, 99, 150, 222, 308, 372
primacy, 7, 32, 33, 151
primary caregivers, 338, 339
principles, 12, 20, 42, 96, 301, 319, 321, 323, 325,
328, 332, 334, 356
prisoners, 28, 48, 124, 182, 364, 365, 369
probability, 24, 108, 148, 253, 314, 328
probe, 159, 321
problem solving, 20, 204, 266, 309, 320, 322, 364
problem-focused coping, 210
problem-solving, 27, 198, 243, 363
professional development, 371
professionalism, 123
professionals, 10, 20, 21, 135, 136, 137, 140, 146,
147, 163, 223, 232, 265, 360, 368
prognosis, 221, 224, 263, 264, 268
project, 85, 94, 121, 175, 208, 340, 370
prolapse, 131
proliferation, 263
propaganda, 366
proposition, 98, 244
prosperity, 358, 360
prostate cancer, 262, 263, 265, 267, 274, 275, 307,
315
prosthetic materials, 223
protection, 54, 55, 57, 106, 124, 235, 338, 339, 350,
366
protective mechanisms, 111
protective role, 257
psoriasis, 307, 316
psychiatric diagnosis, 255
psychiatric disorders, 38, 105, 109, 201, 205, 260
psychiatric illness, 36, 212
psychiatric morbidity, 218, 240, 242, 243
psychiatric patients, 50
psychiatrist, 28, 371
psychiatry, 38
psychoanalysis, 190, 335, 370
psychobiology, 34
psychological distress, 65, 104, 107, 115, 116, 155,
165, 188, 190, 208, 209, 210, 211, 213, 216, 219,
239, 249, 251, 252, 253, 254, 255, 262, 264, 265,
276, 308, 309
psychological health, 175, 188, 207, 208, 282, 305,
358
psychological illnesses, 108
psychological problems, 232
psychological processes, 42, 221
psychological resources, 311
psychological stress, 141, 209, 245
psychological variables, 56
psychological well-being, 157, 185, 307
psychologist, 91, 135, 143, 164, 248, 256, 311, 360,
370
psychology, 10, 33, 38, 48, 57, 67, 69, 70, 142, 167,
218, 224, 235, 258, 259, 275, 311, 321, 322, 323,
335, 365
psychopathology, 10, 15, 17, 19, 39, 105, 109, 110,
113, 140, 143, 150, 152, 159, 189, 197, 209, 218,
219, 223, 247, 254, 256, 264, 265, 314, 357, 365
psychosis, 50
psychosocial dysfunction, 252, 253, 255
psychosocial functioning, 224, 239, 247, 249, 252,
254, 255, 256
psychosocial interventions, 62
psychosocial stress, 240
psychosocial support, 68
psychosocial transition, 271
psychosomatic, 28, 213
psychotherapy, 25, 29, 30, 66, 100, 147, 149, 150,
199, 200, 204, 265, 301, 307, 312, 314, 315, 316,
334, 335, 336, 355, 356
psychoticism, 116
public policy, 273
publishing, 98, 359
pulmonary function test, 247
punishment, 58, 118

Complimentary Contributor Copy
quantitative research, 208, 269
quantum mechanics, 322, 329
quantum theory, 320
questioning, 54, 60, 246, 311
questionnaire, 104, 106, 108, 141, 159, 160
race, 39, 81
radiation, 262, 263
radio, 78, 81, 86, 212
radiotherapy, 263
rape, 9, 19, 37, 104, 106, 108, 113, 117, 194, 204, 284, 312
rapid eye movement sleep, 204, 206, 285
ratio analysis, 181, 183, 184
reactions, 10, 16, 17, 21, 37, 40, 42, 48, 88, 90, 100, 106, 154, 167, 173, 174, 179, 209, 210, 211, 217, 227, 228, 244, 264, 288, 293, 296, 301, 309, 311, 312, 373
reactivity, 165, 196, 303, 310
reading, 133, 371
reasoning, 327, 328, 332
recall, 155, 197, 199, 202, 205, 206, 292, 349
recession, 18
recidivism, 123, 138
recognition, 16, 17, 27, 30, 61, 83, 145, 293, 321, 350
recommendations, 84, 211
reconciliation, 18, 156
reconstruction, 88, 92, 96, 100, 348
recovery process, 30, 31, 38, 41, 42, 115
recreation, 247
recruiting, 212
recurrence, 206, 262, 264, 269, 272, 317
reflective practice, 270
reforms, 358
refugee camps, 297
refugees, 62, 66, 70, 360, 361, 372, 377
regression, 18, 19, 28, 29, 31, 139, 148, 149, 184, 185, 187, 249, 251, 252
regression analysis, 185, 252
regression model, 139, 249
rehabilitation, 11, 21, 27, 28, 66, 118, 131, 140, 142, 143, 147, 149, 150, 166, 167, 332, 336
rehabilitation program, 27
reinforcement, 34, 164
rejection, 59, 91, 95, 120, 123, 241, 290
relatives, 119, 120, 137, 175, 362
relativity, 320, 322, 328, 332
relaxation, 27, 144, 291, 295, 304, 305, 306, 314
relevance, 143, 239, 246, 253, 254, 255
reliability, 142, 248
relief, 80, 92, 307, 314, 350, 352
religion, 9, 41, 53, 54, 55, 56, 57, 59, 61, 63, 64, 66, 67, 68, 69, 70, 211, 213, 214, 216, 218, 219
religiosity, 56, 61, 63, 64, 65, 67, 69, 211, 212, 216
religious beliefs, 58, 63, 66, 208, 211
religious function, 61, 68
religious traditions, 54, 56, 65, 66
religiousness, 9, 54, 56, 64, 65
REM, 196, 198, 199, 200, 202, 204, 205, 321
remediation, 285
remission, 171
remorse, 95
repair, 68, 128, 222, 337, 340, 350, 354, 369
repetitions, 37
replication, 206
repression, 16, 249
reprocessing, 198, 199, 206, 285, 292, 293, 294, 296, 298, 309, 301, 302
reproduction, 23
requirements, 15, 85, 248
resentment, 332
reserves, 379
resistance, 38, 223, 245, 290, 310
resolution, 24, 36, 245, 282, 283, 287, 297, 299, 307, 349
resources, 7, 11, 12, 15, 25, 28, 29, 31, 53, 55, 60, 62, 64, 96, 141, 142, 147, 150, 154, 164, 190,
Index

responsiveness, 155, 355
restitution, 62, 179, 369
restless legs syndrome, 194
restoration, 45, 89, 97, 335
restructuring, 21, 24, 200, 323
retaliation, 24
retribution, 119, 126, 128
retrospection, 30
rhythm, 321, 331
risk(s), 45, 54, 60, 61, 64, 68, 77, 84, 87, 90, 95, 107, 118, 123, 154, 180, 188, 194, 195, 198, 199, 204, 205, 209, 210, 212, 222, 223, 235, 239, 240, 241, 242, 243, 246, 253, 254, 257, 308, 340
risk factors, 188, 209, 210
RNA, 50
robberies, 288
role relationship, 340, 350, 353
Roman Catholics, 54
roots, 70
routines, 119, 241
RTS, 11, 30, 141, 143, 144, 145, 146, 147, 149, 150, 151
rules, 19, 369
Rwanda, 188

S

sadness, 82, 91, 92, 117, 156, 338, 361, 362, 379
Salvation Army, ix
Scandinavia, 50
scent, 379
schema, 22, 31, 37, 39, 97, 102, 103, 111
schemata, 294
schizophrenia, 33, 47, 131, 135
school, 8, 103, 107, 222, 223, 290, 299, 336, 359, 374
school failure, 290
school performance, 103, 107
science, 5, 112, 163, 303, 322, 327, 334, 335, 336
scope, 191, 306, 322
search terms, 175
Second World, 79
security, 28, 35, 39, 40, 41, 42, 45, 47, 119, 124, 125
security guard, 124
sedative, 199
sedative medication, 199
seeding, 330, 332
selective attention, 46, 196
self esteem, 64, 223, 245, 279, 319, 330
self representation, 242
self-awareness, 28, 30
self-confidence, 56, 289
self-control, 30, 34, 291
self-doubt, 19
self-empowerment, 12, 281, 285
self-expression, 320
self-identity, 116, 232
self-image, 115, 116, 123, 127, 133
self-mutilation, 103, 107
self-regulation, 34, 138, 300, 304, 316
self-reports, 121, 234
self-worth, 87, 136
semantic networks, 198
semen, 101
seminars, 3
sensations, 283, 284, 285, 287, 289, 292, 293, 295, 296, 305, 313, 330, 331, 333
senses, 279, 358
separation, 159
September 11, 205
serotonin, 323
service provider, 84, 96, 97, 297
services, 55, 57, 58, 84, 85, 89, 97, 104, 117, 135, 212, 218, 222, 223, 224, 226, 301
sex offenders, 116, 117, 119, 120, 121, 125, 126, 128, 129, 130, 131, 133, 134, 135, 136, 137, 138
sexual behavior, 138
sexual behaviour, 103, 107
sexual being, 6
sexual contact, 102
sexual experiences, 108
sexual identity, 102
sexual offences, 115, 116, 119
sexual offending, 116, 117, 120, 122, 125, 127, 133, 134, 135, 136
sexual problems, 223

Complimentary Contributor Copy
sexual violence, 112
sexuality, 101, 102, 105, 107, 110, 111, 138
shade, 8, 80, 81
shame, 8, 9, 30, 58, 75, 87, 91, 102, 110, 115, 116, 117, 118, 122, 133, 156, 189, 312, 370
shape, 27, 78, 89, 255, 350, 379
shell shock, 36
shelter, 79, 361, 366
shoot, 291
short term memory, 44
shortage, 25
showing, 23, 263, 306, 307, 369
sibling(s), 85, 90, 98, 116, 117, 171, 329
side effects, 241
signals, 202
significance level, 181
signs, 10, 25, 45, 69, 126, 181, 271, 354, 364
SIP, 247, 249, 252, 254
skin, 81, 307, 316
sleep disorders, 194, 195, 200, 204
sleep disturbance, 11, 193, 194, 195, 196, 197, 198, 199, 200, 201, 203, 204, 205, 209, 256
sleep physiology, 198
sleeping pills, 195
smoking, 262, 269
snakes, 171, 346, 352
snaps, 78
sociability, 56
social adjustment, 224
social behaviour, 102
social benefits, 69
social capital, 64, 68
social comparison, 116, 133, 134
social environment, 17, 28
social integration, 186, 224
social interactions, 87
social learning, 244, 245
social network, 63, 87, 90, 163, 241
social norms, 56
social programs, 62
social psychology, 259
social relationships, 164, 244
social resources, 166, 244, 274
social roles, 16, 241, 246
social skills, 289
social support, 56, 60, 65, 90, 98, 100, 111, 115, 117, 136, 137, 147, 149, 150, 153, 154, 155, 156, 157, 159, 161, 162, 163, 164, 166, 168, 209, 210, 212, 224, 255, 256, 266
social support network, 136, 163
social workers, 164
socialization, 54
society, 9, 10, 34, 47, 48, 115, 117, 120, 125, 126, 128, 129, 134, 135, 136, 136, 360, 363, 365, 366, 368, 369
sociocultural contexts, 266
socioeconomic status, 209
sociotropy-autonomy, 156
solidarity, 5, 369
solution, 18, 144, 145, 148, 305, 311
Southeast Asia, 376
Soviet Union, 181
spacetime, 328
special relativity, 320, 328
specialisation, 368
specialists, 232, 304
species, 43
speculation, 224
spelling, 4
spending, 196, 314, 353
spirituality, 9, 41, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65, 67, 68, 69, 70, 71, 219, 225, 232, 269
spontaneity, 337, 339, 340, 350, 353
spousal relations, 116
stability, 16, 20, 24, 63, 119, 123, 241, 255, 283, 286, 295
stabilization, 30, 283, 291, 292, 299
standard deviation, 161, 162, 214
starvation, 357, 362, 368
state dependent memory, 379
statistics, 84, 148, 185, 218, 263
stem cells, 171
stereotypes, 28, 118
stigma, 84, 87, 91, 117, 120, 122, 137
stimulation, 44, 282, 284, 291, 293, 294, 295, 311
stimulus, 34, 43, 44, 200, 280
stimulus discrimination, 34
stochastic resonance, 322
stomach, 292, 313, 363, 367
stress factors, 247, 255
stress reactions, 141, 205
stress response, 40, 245, 264
stressful events, 150, 195, 197, 200, 225
stressful life events, 105, 109, 210
stressors, 61, 69, 197, 203, 207, 210, 211, 244, 264, 265, 266, 270, 287, 290
stretching, 176
striatum, 44, 50
string theory, 322
strokes, 230, 336
structure, 17, 30, 37, 47, 54, 146, 355
structuring, 46
style, 111, 138, 153, 154, 157, 159, 224, 226, 231, 235, 371, 374
Index

399

subgroups, 175, 186, 188
subjective experience, 143
subjective well-being, 217
substance abuse, 104, 105, 107, 108, 109, 110, 116, 137, 316
SUD, 283, 292, 293
suicidal behavior, 69
suicidal ideation, 57, 90, 95, 110
suicide, 50, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 105, 110, 310
suicide rate, 310
supernatural, 62
supervision, 97, 132, 370
support services, 84
suppression, 11, 144
survival rate, 242, 256, 263
susceptibility, 95, 316
sweat, 233
symmetry, 12, 319, 322, 332
sympathetic nervous system, 195
sympathy, 227
syndrome, 49, 112, 174, 175, 188, 189, 191, 256, 285, 300, 374
synthesis, 42, 70, 173

T

T cell, 171, 307
tactics, 95, 111
taxonomy, 377
teams, 10, 239, 241, 242, 243, 257
technology(ies), 9, 171, 310, 377
teens, 175, 226, 227, 228, 230, 231, 232, 233
teeth, 81, 82, 294
telephone, 78, 108
television coverage, 273
tellers, 288
tendon, 79
tension(s), 21, 30, 44, 107, 141, 151, 245, 246, 295, 310, 313
terrorism, 63, 68, 218, 297
terrorist attack, 65, 205
testing, 245, 299
test-retest reliability, 213
Thailand, 361, 362
theatre, 79, 368
therapeutic approaches, 271
therapeutic change, 12, 140, 340, 354
therapeutic encounter, 313
therapeutic interventions, 20, 136, 141, 292
therapeutic process, 15, 28, 95, 349
therapeutic relationship, 164, 355
thoughts, 7, 17, 23, 37, 64, 65, 70, 83, 104, 107, 122, 123, 155, 163, 164, 206, 244, 249, 254, 264, 286, 295, 305, 306, 308, 309, 310, 335, 362, 364, 368, 370
threats, 63, 241, 244, 310, 311, 364, 372
time constraints, 108
time periods, 211, 216
tobacco, 101
tones, 282, 284
top-down, 373
torture, 63, 67, 70, 139, 140, 357, 361, 368, 369, 370, 371, 372, 377
traditional practices, 62
traditions, 11, 55, 56, 59, 60, 62
traits, 56, 64, 243
transcendence, 29, 32, 54, 57, 59, 69
transcripts, 100, 227, 231
transformation(s), 27, 28, 29, 30, 31, 32, 49, 50, 53, 59, 60, 65, 66, 87, 90, 93, 96, 142, 275, 315, 337, 350, 351
transmission, 175, 189, 190
transplant recipients, 239, 246, 255, 258, 259
transplantation, 239, 240, 241, 246, 248, 257, 258, 260
transportation, 286
traumatic brain injury, 50
traumatic events, ix, 4, 5, 35, 36, 37, 39, 42, 43, 48, 59, 133, 144, 193, 197, 200, 203, 210, 213, 218, 266, 269, 294, 297, 312, 338, 339, 361, 365, 372
traumatic experiences, 4, 24, 36, 57, 59, 63, 140, 150, 151, 163, 184, 197, 200, 281, 311, 338, 355
traumatic incident, 164, 288, 294, 297
traumatic neurosis, 36  
treatment methods, 151  
trial, 20, 22, 135, 202, 203, 274, 302, 317, 357, 365  
triggers, 8, 18, 88, 282, 283, 284, 290, 379  
vomiting, 77, 263  

U  
unconditional positive regard, 324  
unconditioned response, 43  
unification, 321, 323, 335  
unique features, 86  
United Kingdom (UK), 4, 119, 166, 204, 262, 275, 325, 329  
unstructured interviews, 103

V  
vaccine, 274, 308  
vacuum, 39  
validation, 166, 168, 321, 324, 350, 356  
variables, 27, 54, 55, 57, 58, 59, 144, 146, 148, 150, 154, 156, 157, 161, 164, 174, 175, 187, 214, 239, 244, 251, 252, 253, 256, 266, 273, 308, 327  
vein, 5, 320  
victimisation, 101, 106, 115, 120, 136, 137  
victimization, 21, 58, 60, 70, 137, 138, 256, 312  
Vietnam, 27, 38, 39, 49, 50, 154, 167, 195, 197, 202, 203, 204, 205, 358, 359, 372, 376  
violent behaviour, 111  
violent crime, 165  
vision(s), 20, 25, 64

W  
walking, 76, 78, 82, 88, 92, 95, 247, 369, 373  
war neurosis, 36  
Washington, 12, 32, 69, 100, 137, 165, 203, 271, 272, 275, 299, 301, 376  
watches, 279, 304, 346, 349  
water, 8, 79, 80, 81, 206, 363, 374, 379  
weakness, 133, 361  
wealth, 7  
welfare, 122, 126, 348  
well-being, 9, 41, 54, 56, 58, 59, 60, 61, 65, 66, 69, 70, 191, 206, 264, 265, 266, 270, 273, 275, 342  
white blood cells, 262  
worries, 58, 350, 351, 365, 372  
working memory, 298  
workplace, 151, 286, 300  
World Health Organization, 256  
World War I, 55, 173, 184, 202  
worry, 123, 128, 133, 145, 149, 213, 228, 236, 242, 248, 310, 346, 365

Y  
young adults, 65, 69, 180, 223, 224, 226, 227, 228, 229, 230, 231, 233  
young people, 10, 87, 137, 221

Z  
Zone 3, 363