THE ROLE OF COGNITIVE ASSESSMENTS IN THE WORKPLACE

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What Are Assessments and Why Are They Important?

As mentioned earlier in this guide, LD, ADHD and cognitive disorders are manifestations of an underlying abnormality in brain functioning. In this respect, they are "neurological" or brain-related disorders.

Learning disabilities or cognitive disorders cannot be diagnosed through medical tests or diagnostic procedures. There are several reasons, which are listed below, that medical evaluations including brain scans have been unable to accurately diagnose an LD and will likely never be able to do so consistently well.

- Most individuals with bona fide LD and many with other cognitive disorders will have normal brain scans (CT, MRI, SPECT, etc.) and medical tests.
- Learning and cognitive disabilities are not uniform disorders that affect each individual in the same way. There are many types of each disability.
- There are many different parts of the brain that may uniquely contribute to the development of a learning or cognitive disability.
- Even if one can identify a dysfunctional part of the brain on a scan, each dysfunctional area can have a different impact on academic and cognitive development in each individual.
- An individual's overall intelligence and other cognitive strengths can determine the nature and degree to which underlying brain impairment results in disturbed functioning.

The accurate diagnosis of an LD or cognitive disorder must be done through sampling how the brain functions and its ability to process information. Despite the fact that these conditions are known to reflect a problem in brain functioning, diagnosis can only be achieved through administering comprehensive tests of cognitive and academic abilities.

Moreover, by law, a psychologist who is qualified to practise in this area must interpret these tests. Along the way, the psychologist must consider whether certain weak test results are related to fundamental impairments in brain functioning or caused by other factors. Depending upon the focus, specialization and training of the psychologist providing the services, the process of administering and interpreting such cognitive and academic tests may be called:

- "Psychodiagnostic" assessment
- "Psychoeducational" assessment
- "Neuropsychological" assessment

Regardless of the term used, a well-conducted assessment will address the following questions:

- What is the client's level of general intelligence and is it at least in the average range?
- How well does his/her brain process information across a wide range of domains?
- What are the client's academic achievement levels (e.g., reading, spelling, writing, arithmetic)?
- Are there any substantial discrepancies between the client's tested level of intelligence and his/her academic abilities?
- Can the discrepancies be explained by identified problems in the brain's information processing abilities?
- Are there other factors that can better explain or may also be contributing to the unexpectedly poor academic achievement performance?
- Is (are) the relative weaknesses in academic ability likely to have an adverse impact on school or work?
- What can be done to overcome the impact of the LD in school or the workplace?
- What other interventions may be helpful for the individual with "learning challenges" but no LD?

Relevance of Assessments to the Workplace

When trying to overcome many issues or problems in life, a well thought out evaluation of the issue is an important place to start. When considering the possible impact of a learning or cognitive disability on an individual in the workplace, it is critical to begin with a comprehensive assessment of the employee.

With respect to the workplace, an LD assessment will provide a critical "differentiation diagnosis" to identify the source of the cognitive difficulties. Once the source of the problem is identified, the involved parties will be guided toward the most appropriate intervention strategy to manage or circumvent the problem in the workplace.
It is very important to recognize that cognitive problems — whether related to primary memory/learning impairment, or caused by reading or writing limitations, or other difficulties — can occur for a variety of reasons other than primary brain impairment. Furthermore, similar functional difficulties encountered in the workplace may result from different underlying neurological deficits; therefore, an intervention or accommodation that may work well in one instance may not work well in another. It behooves the parties to have a thorough understanding of the underlying problems and related recommendations through an accurate diagnosis.

As the following table demonstrates, most cognitive difficulties in the workplace can occur for a variety of reasons other than learning disabilities. The assessment process results in an understanding of the problem through the provision of a differential diagnosis.

### Functional Work Problem Examples

<table>
<thead>
<tr>
<th>Attention/concentration difficulties resulting in safety concerns and/or poor productivity/work pace</th>
<th>Potential Causes</th>
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</thead>
<tbody>
<tr>
<td>• ADHD</td>
<td></td>
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<tr>
<td>• Neurological impairment</td>
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<tr>
<td>• Emotional disorder (e.g., anxiety/stress, depression, trauma/abuse)</td>
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<tr>
<td>• Substance abuse disorder</td>
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<tr>
<td>Memory disturbance resulting in inability to recall procedures, information or new learning</td>
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<tr>
<td>• Neurological impairment including learning disability</td>
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<tr>
<td>• Attentional disturbance</td>
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<tr>
<td>• Sleep disorder</td>
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<td>• Medication side effects</td>
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<tr>
<td>• Emotional disorder</td>
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<tr>
<td>Reading difficulties resulting in communication breakdowns through e-mails, memos and</td>
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<tr>
<td>correspondence</td>
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<tr>
<td>• Learning disability</td>
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<td>• Illiteracy</td>
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<td>• Visual impairment</td>
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<td>• English as a Second Language</td>
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<tr>
<td>• Primary or secondary attention or memory disturbance</td>
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<tr>
<td>Difficulties in problem solving, organization, planning</td>
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<td>• Neurological impairment including learning disability</td>
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</table>

### Components of the Assessment Process

A sound psychological assessment in the context of a potential LD usually consists of several components.

**Intake Process:**
This may involve completing some preliminary questionnaires and/or screening measures.

**Clinical Interview:**
This should involve a detailed review of the client’s academic, medical, family and mental health history and current clinical status by the attending professional.

**Psychometric Tests:**
These will typically involve several hours of one-on-one testing in a quiet room and may be conducted by a specifically trained “psychometrist” or test examiner under the supervision of a qualified member of the College of Psychologists. Test areas covered should be comprehensive and include most if not all of the following test domains: Phenological Processing; Memory; Learning; Attention/Concentration; Processing Speed; Language Processing; Perceptual-Motor Processing; Visual-Spatial Processing; Executive Functions; and at least a screening test for psychological disturbances. If a vocational component is also part of the assessment, then the following additional test domains may be covered: Vocational Interests; Vocational Aptitudes; Personality/ Temperament indicators.

**Assessment Report:**
Should be comprehensive, summarizing the findings of the clinical interview, screening measures and cognitive testing. It provides an analysis, differential diagnosis and recommendations.

**Feedback Session:**
Involves a meeting with the psychologist to discuss the test results and communicate the identified diagnosis and recommendations.

### Assessment Conclusions and Recommendations

A sound diagnostic assessment that is specifically geared toward the workplace should feature the following conclusions and recommendations, where indicated:

1. **Intellectual Status:**
   A clear statement regarding the employee's intellectual level (average, above average, below average, etc.)

2. **Identified cognitive strengths/weaknesses**

3. **Academic Status:**
   A clear statement regarding the employee’s academic levels

4. **Differential diagnosis supported by the presenting evidence**

5. **Occupational facilitators/impediments include comments such as:**
   - Emphasizing learning through verbal instruction/reading
   - Emphasizing working at own pace
6. Occupational activity limitations/weaknesses include comments such as:
   • Avoiding moderate to highly distracting environment
   • Avoiding highly complex/detailed written materials
7. Recommended compensatory strategies include comments such as:
   • Utilizing procedural checklists
   • Recommended adaptive technologies include comments such as:
   • Using read and scan technology due to reading limitations
   • Using voice-activated word processors due to writing limitations

Comments on Screening Tools and Assessment Referral Criteria

In order to achieve maximum benefit from a diagnostic assessment, the employer should be encouraged to
ask specific questions to which the psychologist may respond directly at the end of the report. Most
experienced clinicians will welcome this process, as it will ensure that the assessment will be tailored to the
individual’s needs in the workplace.

Assessment Referral Criteria

The following is a method for identification of those with a potential LD, ADHD or other cognitive
impairment requiring assessment.

Identification of a significant barrier to productive work, which primarily involves:
   • Hyperactivity
   • Memory/learning difficulties
   • Problems with planning/organization/initiation
   • Problems with judgment/decision-making/safety awareness
   • Problems with time management
   • Problems with spatial orientation
   • Difficulty listening to/instructions
   • Attention/concentration difficulties
   • Problems with reading, writing or arithmetic that appear to be incompatible with the person’s general
     abilities and/or attained educational level
   • Poorly developed social skills

If the above difficulties also appear to be present in the face of significant emotional distress, then the
emotional distress should be addressed first.

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Assessing for ADHD

Estimates vary, but it is believed that up to 80 per cent of those with ADHD also have LD. In the LD
population, it is estimated that 30 to 40 per cent also have ADHD, so clearly the conditions are highly
related. One of the main links between these two diagnoses is the fact that attentional deficits can be one of
the underlying information processing difficulties that give rise to academic problems. In other words, problems
with attention can be so pronounced as to interfere with the acquisition of reading, writing or
mathematical skills.

Similar to LD, ADHD cannot be readily diagnosed through medical technologies, despite the fact that
the disorder is due to brain dysfunction; however, even though attention and concentration are clearly
cognitive skills, and can certainly be measured, they are a multifaceted set of cognitive skills in their own
right.

Furthermore, the set of attention/concentration abilities resides in the forward most part of the brain
known as the “frontal lobes.” The frontal lobes are complex and functions relating to them are extremely
difficult to measure. This difficulty lies in the fact that the frontal lobes play an integrative role,
co-ordinating and synthesizing inputs and information that are being received by other areas of the brain.

Through the attentional processes, the frontal lobes are responsible for sifting out irrelevant information,
such as distractions in the environment. The frontal lobes are also responsible for adaptation to one’s
environment. When we are involved in routine behaviours and skills, the frontal lobes are not highly
activated in general. Most cognitive/academic testing is poor at testing the frontal lobes because: (1) both
the clinical interview and testing generally occur in a quiet, distraction-free environment; and (2) testing
protocols are generally highly structured, reducing demand on the frontal lobes that would otherwise have to
create the “structure.”

There are some tests that are specifically geared toward ADHD and many of these are well validated;
however, according to some clinicians, many of these tests often seem to produce “false positives” and/or
are more effective with children than adults, perhaps in part because over the years adults learn to manage
their attentional difficulties, especially in quieter, more structured environments.

Most often, the diagnosis of ADHD is made clinically, particularly in adult populations. “Clinically”
means that the examiner considers the full history of the client, the client’s behaviours and presenting
symptoms, and observations throughout testing (perhaps with greater emphasis than test scores themselves),
and then uses subjective clinical judgments. Additionally, input may be sought from significant others,
friends and even co-workers and/or employers. Other possible explanations for the attentional and/or
hyperactivity symptoms are then considered and ruled out before arriving at a diagnosis of ADHD.