More than numbers: Intelligence testing with the intellectually disabled
By Barbara Tylenda, Ph.D., ABPP, and Deirdre T. Brogan, Ph.D.

Intellectual disability has been recognized perhaps longer than anything else we currently study in psychiatry and psychology (Tylenda, Hooper, & Barrett, 1987). However, it was not until the development of the Binet-Simon intelligence test at the beginning of the 20th century that intellectual disability's definition took on a clear, quantifiable component. From this period until 1959, intelligence, as measured by IQ, was the sole criterion for diagnosing intellectual disability. In 1959, the American Association on Intellectual and Developmental Disabilities (AAIDD), then referred to as the American Association on Mental Deficiency (AAMD), introduced the additional criterion of adaptive behavior deficits.

Today, individually administered intelligence tests continue to play a key role in the diagnosis of intellectual disability. There are three criteria an individual must meet to be diagnosed as intellectually disabled: 1) a deficit score on an individually administered intelligence test; 2) a deficit performance in adaptive functioning; and 3) onset before age 18. However, diagnostic issues as well as actual testing administration with individuals who may be presenting with an intellectual disability may not be as easy as we might think.
problems than did their sisters without an eating disorder. The effect was large for internalizing problems.

When looking specifically at girls who later developed AN-R, the researchers found that girls with internalizing behavior problems were significantly more likely to develop AN-R. Yet externalizing problems were not a significant predictor of AN-R.

For bulimic disorders, patients who later developed a bulimic disorder showed higher scores than their healthy sisters on predisorder total problems, internalizing problems, and externalizing problems. High rates of total, internalizing, and externalizing problems were associated with a higher probability of developing a bulimic disorder.

Authors’ conclusions

The authors state that the findings regarding the specific risk factors for both anorexia nervosa and bulimic disorders “can help to identify the risk groups and contribute to better prevention strategies, and/or help to start with the treatment at an early stage of the disease.”

The study results are consistent with previous findings that have found high negative affectivity, emotional instability, and internalizing psychopathology as relevant for eating disorder pathology.

The finding that internalizing and externalizing behavior problems commonly precede onset of eating disorders “suggests that prevention programmes would benefit from the inclusion of strategies to increase positive emotions and regulate negative emotions in an adaptive manner.”

Higher rates of depression, suicidality among sexual minority youth

Results from a meta-analysis of studies involving sexual minority and heterosexual youth indicate that sexual minority youth report significantly higher rates of suicidal-ity and depression symptoms. Researchers theorize that negative experiences, such as discrimination, may influence the disparity seen between sexual minority and heterosexual youth.

With the pediatric suicide rate increasing dramatically between 2003 and 2004 after years of steady decline, authors of this analysis state that it has become increasingly important for health professionals to identify youths at high risk and to target them for interventions.

Study details

Studies considered for inclusion in the meta-analysis had to include reported rates of depression and suicidality for sexual minority and heterosexual youth, and had to involve a sample mean age of ≤18 years.

For purposes of the analysis, suicidality included study participants’ reports of suicidal ideation; suicidal plans or intent; suicide attempts; and suicide attempts that resulted in injury and/or required medical attention.

In examining depression, the researchers distinguished among studies that used single-question measures of depression and those that employed multiple-item measures, such as the Center for Epidemiologic Studies Depression Scale (CES-D).

Results

Nineteen suicidality studies were used in the analysis. The overall weighted effect size for the relationship between sexual orientation and suicidality was OR = 2.92. Looking at absolute rates across the various constructs of suicidality, the analysis found that 28% of sexual minority youth and 12% of heterosexual youth reported a history of suicidality.

Disparities in suicidality increased with increases in the severity of the suicidal ideation, intent/plans, and attempts both with and without injury. Studies that broke down results by gender found that 37% of sexual minority girls reported a history of suicidality, compared with 28% of sexual minority boys.

Looking at depression data, based on 11 studies, the researchers found that the overall weighted effect size for the relationship between sexual orientation and depression was d = .33. The strongest associations between sexual orientation and depression were seen in studies that used single-item measures of depression (such as the single question “During the past week, how often did you feel depressed?”).

Authors’ conclusions

“The robust pattern of results, particularly regarding suicidality, highlights the severity and pervasiveness of disparities between [sexual minority youth] and heterosexual youth.” The results mirror those of a growing body of research indicating that sexual minority youth are at risk for psychosocial health problems.

Findings that young people reporting bisexuality were nearly 5 times more likely to report suicidality than heterosexual youth indicate that individuals identifying as bisexual might be experiencing a particularly stressful process of identity development.

The researchers recommend that mental health professionals working with adolescents be vigilant for examining circumstances in sexual minority youths’ lives that may exacerbate depression. They add that diagnosed depression in sexual minority youth should be treated aggressively in order to mitigate the risk of suicidal behavior.

Intelligence

From page 1

straightforward as one would initially think. Thus, psychologists, who by discipline conduct such evaluations with an individual who may be presenting with an intellectual disability, must understand the unique concerns at present.

Assessment

First, it is possible that young children, particularly those of preschool age, who are referred for a first-time developmental/cognitive evaluation for clarification of a diagnosis of intellectual disability are actually manifesting either a diagnosis other than intellectual disability or one or more additional diagnoses concomitant with this diagnosis. Consequently, an evalua-
tor should be familiar with the presenting features for a range of other disorders and problems frequently diagnosed in the preschool population.

There are many disorders and problems that an evaluator should consider when a child is referred for a diagnostic evaluation to “rule-in/rule-out” intellectual disability; they are listed in the box below.

Second, determining the test to be used for a particular child or adolescent should be based on a careful review of the referral question and any known characteristics of the individual being evaluated. Important information to consider when choosing an assessment tool includes: 1) the child’s language proficiency (in English and/or other languages); 2) developmental level; 3) known physical and/or cognitive limitations; and 4) prior tests administered and their results.

All tests of cognitive ability are not alike. It is not enough to gain familiarity with one assessment measure and consistently use it in making a determination of intellectual disability. Intelligence tests may be normed on different populations, may have higher or lower levels of reliability and validity, may be based on different conceptual models of intelligence, and may access intelligence using different modalities (verbal, visual, kinesthetic, etc.). In the case of individuals with known or suspected cognitive impairments, these factors will need to be taken into account when choosing a diagnostic measure. The choice of test should be made such that an individual’s performance on a given measure is maximized.

### Diagnostic tools

The psychologist who will be regularly assessing children and adolescents for diagnostic clarification of intellectual disability should be familiar with a variety of intelligence assessment tools. Many of these assessment instruments are not part of the typical graduate assessment course experience, and therefore competency in administration and interpretation will require additional training and practice. An extensive examination of intelligence tests useful in assessing for intellectual disability in individuals across the age range (and who may present with various forms of concomitant challenge) can be found in Tylenda, Beckett, and Barrett (2007).

More often than not, the intelligence test chosen will be from among the “gold standard” tests normed for that child’s particular age group. However, in some cases, it will entail using multiple standardized measures of intelligence normed for that child’s particular age group, an older version of a “gold standard” test, or a combination of these two scenarios (i.e., Stanford-Binet-V and Leiter International Performance Scale).

In some extreme cases (such as for older children who present with severe or profound intellectual disability), it will entail using a “gold standard” test normed for a younger age group (i.e., Bayley Scales of Infant Development or McCarthy Scales of Children’s Abilities). In the latter case, the child’s actual performance and associated total raw score will need to be cross-matched to the mean IQ on that particular test to ascertain an approximate developmental age.

The actual exercise of conducting a formal cognitive evaluation on a toddler, child, or adolescent who presents with intellectual disability can be a challenging task. Indeed, consistently, it is a more difficult task compared to carrying out the same procedure with same-age typical peers. However, in these authors’ professional experience, it is never an impossible task — no child is untestable. Even when the task is the evaluation of a child with severe or profound intellectual disability, some cognitive scores can be ascertained. One does not have to rely solely on informal and functional assessment procedures.

### Skilled examiner needed

The determination of intellectual disability is rarely a simple matter. The actual skill of test administration to a child is one that requires advanced training and supervised practice. A competent examiner will employ careful observation, a thorough review of preliminary data, and the artistry that comes with experience in order to obtain the most accurate measure of intelligence for each and every child. This generally requires a great deal of skill and preparation on the part of the examiner.

An examiner also has to be vigilant about specific deficits that may reduce the likelihood of obtaining an individual’s optimal performance. These difficulties include problems with attention and focus, regulation of mood, fatigue, motivation, anxiety, rapport, and communication ability. Moreover, the examiner must possess flexibility, creativity, patience, attentiveness, and above all a tremendous affinity for children.

Whether formal evaluation reveals that an individual is intellectually disabled, is manifesting dual diagnoses, or is presenting with another disability altogether, psychologists need to exercise great care in writing a formal report. Because the diagnosis of intellectual disability has significant effects on the child’s or adolescent’s life, the psychologist must be careful and accurate in reporting test findings. Further, the psychologist must be thorough in presenting all required data consistent with the definitional criteria for making a diagnosis of intellectual disability.

### Psychological test report

At a minimum, the psychological test report should include the documentation

---

**Disorders to consider**

1. Developmental delay
2. The “umbrella of neurological impairment” that includes: a) autism; b) high-functioning autism; c) Asperger’s disorder; d) pervasive developmental disorder, not otherwise specified; e) Rett’s syndrome; f) childhood disintegrative disorder; g) neurological inefficiency/nonverbal learning disability; and h) attention-deficit disorder
3. Developmental language disorder
4. Hearing impairment
5. Visual impairment
6. Cerebral palsy
7. Motor coordination disorder
8. Regulatory disorder
9. Attachment disorder
10. Elective mutism
11. Psychosocial deprivation
12. Other psychiatric conditions
13. Behavioral disorders
14. Dyadic problem between caretaker and child
15. Challenging temperament and/or inconsistency of temperament between caretaker and child

---

**Even when the task is the evaluation of a child with severe or profound intellectual disability, some cognitive scores can be ascertained.**
of significantly low performance on a nationally standardized measure of intelligence and below-average levels of adaptive behavior in a variety of settings. A thorough, professional assessment also should include multiple sources of test information; comprehensive behavioral observations in school, home, and/or other settings; input from caregivers; developmental, medical, and social histories; and other reliable sources of evidence.

However, even if the psychologist provides all this information, a weak or less than adequate report can still result. Indeed, we have seen our share of poor-report writing. While the majority of psychologists provide the "required" information, many psychologists report each test instrument’s scores and data as separate and disparate entities, without ever integrating the information into a cohesive, meaningful whole.

A strong psychological test report should first review and interpret test scores clearly. Next, an examiner should integrate test data into a cohesive fashion, which in turn can provide the foundation for a seamless clinical case formulation. In other words, the psychologist should "paint a portrait" of the child or adolescent that can be visualized (i.e., comprehended) by all who read the report.

The psychologist is challenged not only to describe the child or adolescent’s precise levels of performance but also to explain why the child or adolescent obtained a particular profile, and what the child or adolescent will need to assist further positive progression and development. Recommendations contained in the report should be clear and thorough. They should be driven by what the child or adolescent needs, rather than any institution’s budgetary restrictions.

Finally, the report should be written respectfully in all aspects, as this document will become part of the child’s or adolescent’s formal record, will follow the child or adolescent for many years to come, and may be the foundation for subsequent evaluations, recommendations, and treatment services with this individual. A good report is, therefore, as much an art as it is a quantifiable science.

Military
From page 1

notification to departure), deployment (departure period), reunion (period of preparation just prior to return), and post-deployment or reunification (period after return), have been identified.

During the predeployment phase or "mobilization," the service members begin to prepare to leave for war. The impending family separation may raise concerns about finances, employment, childcare, and emotional support. If both parents are deployed, the deployed parent is a single parent, or additional caregiving support is needed, children and adolescents may be relocated with other relatives or guardians, perhaps changing schools and communities. In addition to this effect on daily life, emotions experienced by children and adolescents can include denial, emotional withdrawal, and/or anxiety about whether they will ever see their parent again.

During the deployment phase, service members become geographically separated from their families. The nondeployed spouse may now function as a single parent burdened with household, childcare, and financial responsibilities that once were shared. Teens are frequently expected to take on additional responsibilities in the home, while at the same time there may be less parental support and monitoring available. In addition to stress resulting from changes in family structure and routines, families may experience loss, grief, and fear for the service member’s safety.

Joy and relief felt during the reunion phase may fade to mixed emotions when the military parent returns home. Families report that the postdeployment phase is often the most difficult and emotionally complex. In the service member’s absence, the family developed new structures and routines. The service member’s return, although joyful, may upset the established family dynamics, leading to yet another renegotiation of roles and responsibilities. Spouses may find themselves competing over “who had it worse” during the deployment, and teens may be resentful when responsibilities are taken away from them.

Additionally, the service member may appear “changed” by his or her experience during deployment, and spouses and children may have trouble reconnecting with him/her. If there are physical disabilities, posttraumatic stress, or traumatic brain injury, families face additional challenges. During the postdeployment phase, it is common for family members to feel confusion, resentment, anger, and disappointment.

The service member’s return, although joyful, may upset the established family dynamics, leading to yet another renegotiation of roles and responsibilities.

References:

