



Early Childhood Measurement + Evaluation Resource Centre

Psycho-Educational Assessment of Aboriginal Children and Youth: A Brief Summary of Issues, Research Findings, and Recommendations



The Early Childhood Measurement and Evaluation Resource Centre (ECMERC) is a centre housed within the Community-University Partnership for the Study of Children, Youth, and Families. For more information about ECMERC and CUP, please visit www.cup.ualberta.ca

This project was supported by the National Crime Prevention Centre, Public Safety and Emergency Preparedness Canada.

INTRODUCTION

The Early Childhood Measurement and Evaluation Resource Centre (ECMERC) at the Community-University Partnership for the Study of Children, Youth, and Families (CUP) lead this project that was aimed at addressing the central problem of how to support the provision of culturally appropriate assessment and programming for Aboriginal children and youth. These issues have been identified as critically important in the early learning community and across school districts. Through this project we reviewed the research literature surrounding psychoeducational assessment for Aboriginal children and youth. Assessment tools that were most commonly cited in the literature were reviewed and evaluated for their appropriateness with Aboriginal children and youth.

What is a psycho-educational assessment?

Psycho-educational assessments are becoming increasingly common in our school systems. These assessments are generally conducted by psychologists or school psychologists for the purpose of gathering information on a child in the areas of psychological well-being (i.e., social/emotional functioning and behaviour) and intellectual and academic functioning. A psychologist is responsible for addressing the referral question and, on the basis of this, for selecting and administering appropriate standardized tests and interpreting test results. A student's performance on selected tests is compared to normative data to allow an understanding of how a student has performed relative to same-aged children. Ultimately, the goal of the psycho-educational process is to identify areas of strength and need in a child so that appropriate intervention and access to supports or programming can be provided.

What is the process for getting a psycho-educational assessment?

Psycho-educational assessments are most often the result of a request made by either a teacher or parent who has concerns surrounding some aspect of a child's cognitive, academic, or social/emotional functioning. In general, these assessments come only after in school supports have failed to yield the desired outcomes in a student. Information gathered by means of the assessment is often central to the development of an individual program plan and intervention strategy. Furthermore, this information can also be used when determining eligibility for student supports.

What is included in a psycho-educational assessment?

Most often a psycho-educational assessment would include measures of:

- cognition (e.g., WISC-IV);
- achievement (e.g., WIAT);
- behaviour (e.g., BASC); and
- visual-motor abilities (e.g. VMI).

Controversy Surrounding the Use of Various Psycho-Educational Assessment Tools with Aboriginal Children and Youth

Employing psycho-educational assessments with aboriginal children and youth can be contentious. Bias at different stages in the process of assessment may potentially interfere with accurate results being obtained.

For various reasons, the testing process and the tools that assess identified domains of functioning may be inappropriate when applied to aboriginal students or to students of other culturally diverse backgrounds. Concerns specific to different types of tests are reviewed below.

FINDINGS FROM THE LITERATURE

The following is a summary of the results obtained from a review of the literature, which included peer-reviewed refereed journals, gray literature, and available national reports on assessment of Aboriginal children and youth. The summary is presented in terms of the most common domains of assessment including intelligence, achievement, language, adaptive and maladaptive behaviour, self-esteem, and self-concept.

Intelligence and Achievement Testing

On conventional measures of intelligence (e.g., Wechsler Intelligence Scale for Children -WISC) aboriginal children have historically shown a profile of performing better on the Performance section of the tool, compared to the Verbal section of the tool. The Performance scale measures non-verbal thinking and reasoning abilities, and is thought to be less influenced by formal schooling and a child's everyday fund of culture-specific knowledge. Conversely, the Verbal section is described as measuring verbal reasoning abilities, and is more dependent on language abilities, fund of knowledge, and schooling experiences.

Possible Explanations for Intelligence and Achievement Findings

• According to Common and Frost (1988), aboriginal parents "tend to communicate with their children while performing tasks together and this communication usually does not go beyond the questions asked by the children" (p. 26). Thus children learn primarily through modeling rather than verbal explanation resulting in a focus on performance-type, rather than verbal-type skills (Wright, Taylor, & Ruggiero, 1996). Unfortunately, this method of learning may place aboriginal students at a disadvantage as it is at odds with the highly verbal approach valued in North America on which intelligence and academic achievement are largely based.

- In terms of the testing situation, Sattler (2001) suggests that "Native Americans are more likely than Euro Americans to be hesitant to speak, to speak softly, to give short responses that lack important details, to fear making a mistake, to be nonassertive, and to be reluctant to offer self-disclosures" (p. 644).
- According to a review by Hiberg and Tharp (2000), aboriginal students are more likely to display the following characteristics: (a) a global, or holistic, style of organizing information, (b) a visual style of mentally representing information in thinking, (c) a preference for a more reflective style in processing information, and (d) a preference for a collaborative approach to task completion. All of these behavioural characteristics may result in lower scores on standardized intelligence tests, particularly on items or subtests requiring verbal responses.
- The high incidence of otitis media among aboriginal populations may also help to explain lower scores in verbal components of intelligence tests.

Questions to Ask When Selecting Achievement and Intelligence Tests

Are the tests timed? There is some suggestion that Aboriginal individuals place less focus on speed in processing information, and for this reason, children may be disadvantaged when taking speeded tests.

What level of the dominant culture-specific knowledge is required?

Were Aboriginal children included in the standardization sample?

Language Measures

Harris (1985) discusses the strong connection between culture and communication, and comments on the responsibility of speech-language pathologists to decipher whether "inadequacy" in English language skills, as measured by language assessment tools, is the result of bilingualism, biculturalism, or language pathology. Language assessment in Aboriginal students can be confounded by various culturally relevant factors such as world knowledge, interaction styles, paralinguistic conventions, normal second language acquisition, and history (Damico, 1991, 1993; Gutierrez-Clellen & Quinn, 1993). Both dynamic assessment (Ukrainetz et al., 2000) and the use of more processing dependent language measures (Campbell et al., 1997) have been offered as a means to rule out extrinsic factors such as these in order to obtain a true measure of psycholinguistic functioning.

Questions to Ask When Selecting Language Measures

What is the primary language spoken by the examinee?

Is the content of the test reflective of information that would be relevant to the culture of the examinee? For example, on a picture vocabulary test, are the pictorial stimuli culturally loaded?

Were aboriginal children included in the normative sample?

Adaptive Behaviour and Maladaptive Behaviour Tests

Adaptive behaviour is defined as "the performance of daily activities required for personal and social sufficiency" (Sparrow, Cicchetti, & Balla, 2005, p.6). This can be contrasted with maladaptive behaviour, which can interfere with the successful adaptation to one's environment. Few studies have explored the use of standardized adaptive or maladaptive behaviour tests with Aboriginal children and youth, thus making it difficult to establish how appropriate these tools would be for this population. In some of the studies conducted, differences have been found between Aboriginal and non-Aboriginal children (Powless & Elliott, 1993), with lower scores found for Aboriginal children.

Questions to Ask When Selecting Adaptive Behaviour and Maladaptive Behaviour Tests

Are the questionnaire items relevant to the living context of the assessed child? For example, if a child is living in a remote location where bus transportation is not available, questionnaire items related to the use of city transit would not be appropriate.

On measures of maladaptive behaviours, are behaviours considered maladaptive in the dominant culture also considered maladaptive in the aboriginal culture of interest?

Does the tool provide a social validity scale? For example, some adaptive behaviour measures ask respondents to rate the extent to which an item is important to the living context of the child. This information would help to address the relevance of a behaviour in a specific social context.

Were aboriginal children included in the normative sample?

Self-Esteem and Self-Concept Tests

Based on the notion that self-esteem differs as a function of what is valued in a particular culture (Hoare, 1991; Rotenberg & Cranwell, 1989), there has been a thrust towards validating particular tests with different cultural groups, and to developing different tests that extract what is considered common in self-esteem across groups. On the basis of various self-esteem measures, findings indicate that differences in scores can exist across Aboriginal and

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non-Aboriginal groups (Beiser, 1998; Holoday et al., 1996), that level of acculturation among Aboriginal groups (Lefley, 1974), the language and ethnicity of examiners (Lefley, 1975) and the environmental context of a student (Long & Hamlin, 1988) can affect scores derived from measures of self-esteem.

Findings from more qualitative measures of self-concept in Aboriginal children further substantiate concerns surrounding the use of traditional self-esteem measures with this group. Based on the differences between Aboriginal and non-Aboriginal children's self-generated responses to the question "Who am I?", Rotenberg and Cranwell (1989) concluded that, "It is probable that the attributes tapped by those measures [conventional self-esteem measures] are not equally important for the self-concept in the two races and therefore the differences in self-esteem are not representative" (p.50).

Questions to Ask When Selecting Self-Esteem and Self-Concept Tests

Are the items included reflective of self-esteem or self-concept as conceptualized within the Aboriginal culture of interest?

Does the measure provide the examinee an opportunity to generate his or her ideas about who they are and what makes them unique?

Were Aboriginal children included in the normative sample?

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