Native Canadians and Intelligence Testing

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Abstract

Research and experience has demonstrated that there are serious problems with using intelligence testing with Native clients. The norms do not hold with Natives, the tests do not have the predictive validity that is so important in the non-Native context, and there are questions about the appropriateness of the approach in general with regards to Native peoples' goals for their education systems. Several anecdotes are drawn from a vocational counsellor training program with a group of Cree and Ojibwa students, including two Native elders. The anecdotes demonstrate the validity problems and certain problems with the administration of such tests in general. It is recommended that such tests be used with local norms or not at all.

Résumé

La recherche et l'expérience pratique démontrent qu'il existe de sérieux problèmes lorsqu'on administre des épreuves d'intelligence aux autochtones. En fait, les normes publiées ne reflètent pas les populations autochtones et la validité vis-à-vis la prédiction du succès scolaire est non-existante. On rapporte plusieurs anecdotes tirées d'un cours de perfectionnement donné à un groupe de conseillers sociaux cris et ojibwas, pour démontrer l'invalidité des épreuves en termes très pratiques. Il est recommandé que ces épreuves soient utilisées avec extrême prudence, avec les normes locales, ou préférablement pas du tout.

Recently I was invited to teach a two-week course on vocational counselling at Canadore College in North Bay, Ontario. The students were 15 Native social counsellors working in schools from James Bay to southern Ontario. They ranged from 20-year-old recent college graduates to Native elders. When I arrived on site, I discovered that, although they had approved my curriculum beforehand, the students actually wanted a course on intelligence testing. To my dismay, I found out that virtually all the counsellors had children that had been tested with the Wechsler Intelligence Scale for Children—Revised (WISC-R). Many of their children had been streamed into special education programs as a result of the testing.

In a valuable review article, McShane and Plas (1984) show that Native students tend to score about 20 points lower than white norms on verbal sub-scales, and about 5 points higher than these norms on performance sub-scales.

An even more important indication of test bias involves the predictive validity of the WISC-R. The importance of the WISC-R lies in its ability (for non-Native populations) to predict future academic performance. As a result, it is very useful for making decisions about students' academic paths. For Native students however, the instrument does not have this predictive quality (Kleinfeld & Nelson, 1991). As a result, it is in practical terms invalid and of very limited utility. Mawhinney (1983) goes even

further and suggests that the tests are invalid because Native people have a completely different model of cognitive ability.

The low verbal score can be explained in part by obvious culture bias in some questions ("Who discovered America?"). However, the scores are probably also reduced by the more subtle effect of language transfer errors. Children may speak English from the cognitive point of view of their traditional language, wherein they may ask a question by stating the indicative and, at the end of the sentence, raise their tone and add the word "eh" (for example, "You go to town, eh?"). This is correct Algonkian grammar for the interrogative (Vaillancourt, 1978). This language transfer phenomenon holds even when English is the child's first language, and it may continue for several generations after the Native language is lost.

In addition to the above research findings, some Native administrative bodies have serious problems with the use of testing on their charges (Darou, 1989). They often see intelligence testing as just another tool of white domination.

My experiences teaching the group of 15 counsellors demonstrates several of the principles mentioned above. In exploring intelligence testing, I presented a question from the Otis-Lennon test (1967), thinking it was an example of a straight-forward, unbiased question because it dealt with animals and hand tools. The question was, "*Saw* is to *whine*, as *snake* is to . . ." The correct answer is "*hiss*". The student got it wrong. Then one of the elders asked the other if they had snakes where he lived in James Bay. He told her that, no, in fact that was one of the things he hoped to see while he was down south (in North Bay). Then a heated discussion followed about what sound a saw makes. Table saws, normally found in workshops, whine. In the bush, however, saws are generally chain saws or hand saws, neither of which whine. Despite my initial preconcepetions, not only was the question culture-biased, but it would be difficult to intentionally design a more biased question.

To understand the next anecdote, it is necessary to know some background about the main character. During the entire course, Zachary, one of the elders, never once removed his windbreaker and sunglasses. On one particular morning, the person funding the program was attending class. The coffee arrived and I asked the students to give me just five minutes to finish the section I was presenting. Zachary looked at me, listened respectfully, and with all due respect, stood up and got himself a cup of coffee! He had heard me well, but with typical independence and disdain for protocols, he decided that he would do it his way.

In another class, I presented Kohs Blocks. I asked for a volunteer, someone who lived in a remote area and had been a hunter (knowing full well that Zachary was the only person who filled those criteria). I did this because Berry's (1976) research shows that remote Natives tend to have

higher I.Q. scores, and that according to the late Jack Cram, bush pilots and hunters tend to score very high on Kohs Blocks (personal communication, October 1979).

The test involves showing the subject a square drawing on a small card. The subject recreates the design with four or nine red and white cubes. The subject is assigned certain points depending upon how quickly he or she completes the task. This test has the highest validity of all the WISC sub-tests. When Zachary did it, he appeared to be in no hurry, he placed the blocks by an "S" pattern instead of by rows as most people do (the "S" saving two arm movements), and at the end he would frame the blocks with his fingers for a few seconds, and sometimes adjust the blocks a little. He did the test so fast that he went off-scale on all 7 examples. The test goes off scale at an I.Q. equivalent of 180.

In discussions afterwards, Zachary explained that he believed the test was biased in his favour. He pointed out that, when he was young, his family ate or starved depending on his ability to recognize patterns. The point here is that the tests are biased both for and against Native subjects in odd and complicated ways.

DISCUSSION AND CONCLUSIONS

From the research and from the above examples, it is clear that virtually all intelligence tests lack validity with Native subjects. If counsellors insist on using intelligence tests with Natives, they should at least use local norms, and leave control of decisions based on the results in the hands of Native authorities. I would however recommend that the instruments not be used at all in this context.

One Native educator I know allows, at least for the moment, this kind of testing with his students. However, he uses only sensitized counsellors, he demands real informed consent from the parents, he invites the parents to attend the testing session, and any academic decisions made as a result are made only with the parents' approval (C. King, personal communication, October 1991).

I know of two Montagnais elders that used testing on their own daughter. They were concerned that she had "trouble learning." She was tested and they used the results to find ways to enrich her home life so as to stimulate her. They were very pleased with the results (Darou, 1982). Today, one of their sons is a well-known psychologist and one of their daughters is a school principal.

Apparently, many well-meaning but misinformed members of our profession are using intelligence testing in a completely inappropriate and even harmful manner. The clients involved may not have the power or may not believe they have the power to do anything about it. With such a power imbalance, it is all the more important that counsellors be absolutely scrupulous about the ethics of testing.

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