

INFLUENCE OF SOCIOCULTURAL FACTORS ON WISC-R IQ SCORES FOR MEXICAN AMERICAN CHILDREN

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ABSTRACT

This investigation consists of analyzing a series of views, articles and experiments to give us some current support of the sociocultural factors involved in the WISC-R scores of Mexican - American children. First, the current importance to understanding the Mexican - American population is given, by showing the increasing growth rate of the hispanic population in the United States. Second, an argument about the true significance of the word "Intelligence" by Hebb (1949) is analyzed and included is an explanation as to why today's IQ tests might not be measuring true intelligence. Then, some current articles that assume "genetic" or "sociocultural" factors in Mexican - American intelligence are analyzed and critiqued. And finally, a search for the best way to create a somewhat unbiased WISC - IQ test is suggested by acquiring better knowledge about the Mexican - American sociocultural factors such as: Home environment, acculturation rate, social economic background value system, the family and its verbal interaction.

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My goal for this investigation focuses on the importance of studying and understanding why Mexican - American children score lower than Anglo children on the WISC - R intelligence test. In order to

do so, several sociocultural factors should be discussed.

In 1980, hispanics represented 6.4 percent of the national population, (14,608,673). The growth rate of the hispanic population (61%), is far ahead of the growth rate for the total United States population (11%), whites (6%), and Blacks (18%). It is estimated that by the year 200, hispanics will become the largest minority population, and this percentage is expected to grow enormously in the next few years, (The Hispanic Almanac, 1984).

At the rate that the Mexican - American population is growing, research on the sociocultural, socioeconomic, and socio - environmental factors should be given great consideration. The children of today are going to be the adult workers of tomorrow, therefore intelligence testing, (if such a thing really exists), should be standardized and revised more often. Today's society is changing much faster than it was 15 years ago, when the WISC was revised.

Another issue that should be addressed is culture fairness and test bias. Kaufman (1979) states that, "Intelligence tests are clearly far from ideal", (p. 9).

Many issues of intelligence testing are still not resolved, beginning with the meaning of the word "Intelligence".

Biological intellectual capacity can be measured directly. This is what Hebb (1949) has called Intelligence A, the unknown capacity which is not measurable. The pure genotype exists only at the time of conception. From that time on, the genotype is

modified by prenatal environmental factors such as the health and nutrition of the mother and after birth by a wide variety of environmental factors. Thus, an individual's genetic potential is always expressed through behavior acquired in a social and cultural setting, the phenotype. Therefore, a person's performance on an IQ test is phenotypic behavior that results from some combination of genetic intellectual potential and learning acquired through exposure to specific social and cultural experiences. Hebb (1949) has called the actual performance on cognitive tasks Intelligence B.

We should take this information into consideration when we analyse why bilingual Mexican – American children living in the United States score lower on the verbal measures of the WISC – R than Anglo children, (Kaufman, 1979, p. 32). A child that is confronted with learning two languages will at a younger age have an obvious deficiency on the verbal sphere of the WISC – R test. Mexican – American children that have learned the English language quite well, do better on the WISC – R than children who still have a difficulty with the English language. But, Dunn (1987), reviews numerous studies which show that Mexican, Puerto Rican, and other Hispanic children score 10 to 12 points below Anglo children on IQ tests. He notes that “differences of this magnitude persists even when the tests have been translated into Spanish and questions have been altered to make them more culturally appropriate”, (p. 42 & 53).

Dunn (1987), concludes after numerous studies that “Hispanic-Anglo differences in IQ scores are due to genetic differences in intelligence”. (p. 53). Later on, his work was critiqued by several professionals, specially by Mercer (1988), who states that “sociocultural factors are important contributors to such variance”, (p. 199). Blum (1978), did not have enough research and proof to support his findings and therefore his theories about a genetic difference of intelligence in the Hispanic population has been critiqued and ignored.

In another article, Blum (1978), suggests that IQ tests have serious validity problem: They are much

better predictors of performance in school than out of school. His conclusion is credible. “IQ tests should not be considered tests of general mental ability but of the more specific ability to do well in school; and since this ability has important cultural determinants, both the tasks and schooling are culturally biased”, (p. 240). It is known that IQ tests predict school success, and also that the WISC-R was elaborated in the United States, by American researchers and based mostly on American subjects to assess validity and reliability. Therefore, couldn't it be supposed that the WISC-R measures intelligence within the American Anglo culture? If the first IQ tests had been designed in a hunting culture, “General Intelligence” might have been measured by good visual skills and maybe running speed, rather than Vocabulary and Digit Span.

Intelligence tests should therefore be adapted to a non-dominant culture, but rather to a variety of subcultures in order to obtain better reliability and validity. Mercer (1988), indicates that in general, investigators have found that enriched early experience can produce a 10 to 20 point difference typically found between minority and majority groups, (p. 204).

McGowan and Johnson (1984) found that “maternal attitudes stressing independence and achievement, and years of mother's education promoted the child's intellectual performance at three years of age, and also contributed to a mother-child interaction style though to promote cognitive competence. Performance on an achievement test and in classroom during the elementary school years was also positively influenced by maternal stimulation of the child”, (p. 205).

Another study by Gottfried (1984). Shows that such factors as home environment and early cognitive development are highly correlated, for Mexican-American children, (p. 383).

Other sociocultural factors that need to be observed in assessing a Mexican-American child? IQ are social class, acculturation rate, stability of parental relationship and also the amount of verbal interaction between child and significant others. (Loasa & Sigel, 1982), suggest that the Spanish speaking caregiver

tends to talk less to their children than english speaker, and that in the Mexican-American sample, there are fewer available resources in general, (p. 395).

When we look at the Mexican society, many differences exist in terms of economy, politics, values, customs and beliefs. The American society is individualistic, competitive and much more self centered. In Mexico, the concept of family is also very different from the concept of an American family. A study by Schumm et al. (1988), investigates the differences between Anglo and Mexican –American family members on satisfaction with family life, they found that “The hispanic family members reportes higher satisfaction in most areas of family life, with the significant difference remainig even after controls of duration of residence in state, are of residence, education, income and family size”, (p. 39). Thus, this information gives more strength to the idea that cultural differences should be much more carefully analñyzed in order to produce a reliable mind that this growing hispanic minority group, could some day well be the most important minority group in the United States.

DISCUSSION

I believehe WISC-R is culturally biased to a certain extent. This test has been developed in a dominate Anglo culture, for the standard of the american dominant society. Hispanic children should be tested in their primary language, whether English or Spanish, and testing should also be revised in order to

include items that are culturally appropriate for their natural social enviroment. Knowledge about Hispanic children, their primary cultural background and early enviromental factors as well as their socialization processes should clearly be indestood for the creation of a non biased IQ test. Mexico is a predominantly poor country were the rules of survivor are different, and were intelligence cannot be measure in the same manner that it is the first world country. In Mexico, the basic need for survivor have yet not been met, so we would suspect a child’s response to some of the questions on the WISC-R to be different. In the Comprehension subtest, we find some questions that do not seem to be culturally biased as for example:

Why is it usually better to give money to a well know charity than to a street beggar? A 12 year old Mexican child would probably answer: “It is not because we know that the well know charities in Mexico, are very corrupt and that the money goes straiht into their pockets. The street beggar, in most cases, will look extremely poor, he will be hungry and might not survive much longer if he does not get some help”. I would personally consider this answer as correct and would also give the child extra credit, because he can not only answer the question, but also analyze his answer by distinguishing between “what is” and “what should be”.

In other words, the child has learned how to think and judge his answers instead of learning what to think and just accept what he has learned.

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