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TESTING AND THE PUERTO RICAN CHILD: A PRACTICAL
GUIDEBOOK FOR PSYCHOLOGISTS AND TEACHERS

A Dissertation Presented

By

Carmen M. Rodriguez-Fernandez

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

September 1981

Education

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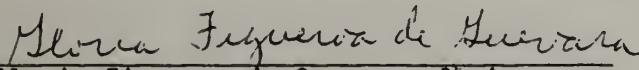
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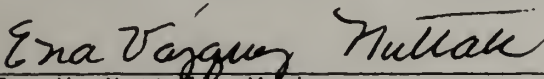
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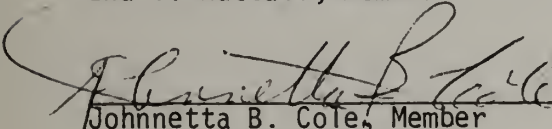
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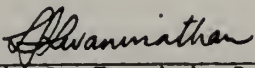
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ABSTRACT

Testing and the Puerto Rican Child: A Practical
Guidebook for Psychologists and Teachers

September 1981

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Directed by: Professor Gloria Figueroa de Guevara

This dissertation consists of two major parts. The first part set down the theoretical foundation for the creation of a guidebook for psychologists and teachers. An extensive and comprehensive review of the literature was completed. It covered the history of testing practices in the United States as it pertains to Hispanic as well as other minority children, an overview of the important legal and legislative responses to the problems of testing, placing and educating Puerto Rican children, and a discussion of the cultural factors which often interfere with the accurate measurement and diagnosis of the learning difficulties of the children.

The second part consists of a guidebook with specific guidelines that will enable teachers, psychologists and test administrators in general to become more aware of the particular problems encountered when testing Puerto Rican children and to interpret test results within the context of the cultural diversities of Hispanic children. The guidebook is unique in that it provides readily accessible informa-

tion in a single, multiple-referenced source not previously available. It also provides a critique of those tests most widely used in the assessment of Puerto Rican children. Where the author has found commonly used tests to be discriminatory and absolutely irrelevant to the population being tested, the guidebook also suggests alternative testing procedures.

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CHAPTER I
INTRODUCTION AND OVERVIEW

The Problem

Diagnostic, classificatory, and prescriptive interventions are a daily routine in our educational institutions. The number of tests administered shows that they are considered necessary to the functioning of educational programs by teachers, school administrators, and society in general. However, the most common result of the testing of Puerto Rican children has been discrimination in the form of misclassification and misplacement. It is therefore imperative that we develop methods of testing which avoid discriminatory practices.

Because tests are a crucial tool in the development and implementation of prescriptive measures, the Puerto Rican child's whole educational experience and future success in life are directly linked to such measures of ability. But in all too many instances, the child's potential is artificially reduced because his psycho-educational assessments do not reflect his true abilities. For example, as a result of discriminatory testing, a disproportionate number of Puerto Rican children are labeled mentally retarded. In a study of the epidemiology of mental retardation in Riverside, California, Jane Mercer found that the public schools were the primary

labelers of mental retardates within the system, and that ". . . the public schools were the pivotal screening and referral agency in the community."¹ She also found that many agencies refer to the school for assessment and labeling, with such assessment and labeling occurring mainly during the elementary years. Teachers are considered the primary source of referral, and her most shocking finding was that Spanish-speaking children, as well as children of low socioeconomic status, were "overlabeled" as mental retardates.²

In 1969, a class action suit was brought against the California State Board of Education on behalf of Mexican-American children who had been labeled retarded. The matter of Diana v. State Board of Education, C.A. No. C-70-37-R F0 concerned itself with those minority children who had been placed in classes for the mentally retarded. It was shown that by the very nature of their placement, such children were deprived of a complete educational program and only minimal basic skill training was offered. Placement in such classes was shown to be determined solely on the basis of tests which were culturally and linguistically biased. The Consent Decree provided for the re-testing of the students in their native language. It also required an evaluation of individuals' adaptive behavior at home and in the community, and ordered the standardization of tests on Spanish-surnamed children.³

Court cases, research, and informal observations have all too often shown that the core of the problem in testing practices lies in the utilization of and dependence upon tests which are culturally

and linguistically biased. The majority of the tests used by our school systems have been designed and constructed by white, middle-class professionals, and such tests have been standardized on white, middle-class children. In those instances where a sample of minority children was included in the standardization procedure, the sample was often insignificant.⁴ Compounding this flaw in the tests themselves is the inability on the part of many administrators, psychologists, teachers, and others in the profession to realize the damage done to the children. In many instances, Puerto Rican children are administered tests which do not take into consideration their cultural and socio-economic background and cannot be adjusted to compensate for inadequate command of the English language. This is so despite the fact that the courts, in the landmark decision in Lau v. Nichols, now guarantees Spanish-speaking children the right to an education in their own language.

Fortunately there is, at present, a movement towards non-discriminatory testing practices. However, the development of such practices has proved difficult; many attempts have failed. Because of regional differences in language, cultural factors, and conflicting theories of bilingualism, all of which confuse both test makers and test administrators, the mere translation of tests from English into Spanish does not result in a test which measures the abilities of Puerto Rican and other Hispanic children accurately. Translations do not eliminate cultural differences. Indeed, even a newly-created test in Spanish is unavoidably discriminatory against one group or

another. Chicano students differ from Puerto Rican children, and a test which reflects urban life may be incomprehensible to children from rural areas.

In an attempt to create culturally fair tests, non-verbal and "culture-free" tests have been developed. However, it is highly likely that the non-verbal tests tap different skills and functions, and therefore cannot be considered comparable measures of ability.

Criterion referenced tests are now in vogue, and seem to have found favor among certain test critics. Because they determine whether or not specific material has been learned, they avoid a comparison of scores among individual students.

Outstanding among the new tests being designed is the System of Multicultural Pluralistic Assessment developed by Jane Mercer in 1979.⁶ This test provides an estimate of the child's learning potential within the context of multi-cultural assessment, and attempts to insure that cultural and racial differences do not penalize the child.

However, in spite of the creation of such tests as SOMPA, classificatory and prescriptive interventions continue to isolate and stigmatize the Puerto Rican child. Most producers of non-discriminatory tests for Spanish-speaking children warn potential users of the limitations of their instruments in assessing real levels of ability, and suggest that these tests be used together with other means of assessment. The inadequacy of these tests, and the difficulty of creating them, points up the scale and seriousness of the problems Puerto Rican children face in obtaining a proper education.

In April of 1977, there were 11.3 million persons of Spanish origin living in the United States.⁷ The Hispanic population is a young one, with approximately forty-two percent of its members under the age of eighteen.⁸ While the non-Hispanic population has a mean age of thirty, the Hispanic population has a mean of twenty-two years.⁹ Recent studies by the Bureau of the Census have concluded that Hispanics of school age comprise the largest proportion of the population and that Hispanics are the fastest growing minority in the United States.¹⁰ This trend can be observed in many school districts where the dominant school population is on the decline while minority enrollment is ever-increasing.

Significant growth in Puerto Rican enrollment in our schools began in the early 1950s and was concentrated in the New York City area. The experiences of these newly-arrived New Yorkers were characteristic of the educational experiences of the majority of Puerto Rican children in this country who, with their parents, were seeking better educational, health and employment conditions. Although time of arrival and location may have varied, all of these children still faced the common problem of learning to adjust to an alien and, often, hostile environment.

During the 1940s, many educators expressed their concern about the problems encountered by newly arrived Puerto Rican children, problems directly related to poverty, unemployment of parents, and inferior living conditions.¹¹ Language disability was singled out as one of the biggest hurdles and acculturation was thought to be the most appropriate remedy.

According to Miller,

The public schools of New York City in the past few years have once again been facing the perennial challenge of our democratic educational process, the acculturation of a group of newcomers to our society. This time it is the pupils of Puerto Rican origin.¹¹

To Miller, acculturation meant "the adaptation of people of different ethnic and cultural backgrounds to American ways."¹² He, as well as others, saw the differences in language and color as the primary obstacles to acculturation. Which of the two was the most influential factor he never determined.

Various methods were tried in an attempt to help Puerto Rican children to achieve acculturation. Students were placed in "reception", "orientation", or "vestibule" classes.¹³ These classes consisted of Puerto Rican children who remained with one teacher until they had learned enough English to adjust to the dominant environment of the school. In the orientation classes, the emphasis was on turning the students into "good citizens", and on acquainting such students with the educational and vocational opportunities available to them. For the majority of such children, the learning of basic skills and mainstream attitudes was considered more important, and "factual understanding" was considered less important.¹⁴ There was a genuine interest in adjusting the curriculum for bilingual children, and an attempt was made to have the culture of the children integrated into the curriculum. In recognition of the importance such issues play in the ability of newcomers to become integrated, an effort was also made to assist parents in dealing with the everyday

problems of housing and employment.¹⁵

However, twenty to thirty years after the first large-scale influx of Puerto Rican children to the mainland, we are faced with the same problem of educating another generation of similar children. If anything, our problem has grown along with the increase in population. For instance, in 1968 the United Bronx Parents conducted a survey which found that blacks and Puerto Ricans usually attended the worst schools in the Bronx. These were the schools in which reading and math scores were consistently below the norm on the Metropolitan Achievement Test. The survey also documented that the schools attended by these children were among the oldest in the city, schools in which overcrowding and the necessity for double sessions were commonplace. Because teachers with seniority tended to be placed outside of the ghetto, children in such schools were more often than not taught by the least experienced teachers. Furthermore, the survey showed that the vocational high schools in the Bronx were consistently situated in slum areas, and only one academic high school was to be found in that section.¹⁶

The educational experience of the Puerto Rican child in such an environment is quite commonly characterized by failure, excessively high drop-out rates, depressed intelligence and achievement test scores, and evidence of a one-to-four-year retardation in math ability.¹⁷ According to Elam, records of boys in such schools are replete with such comments as:

. . . does not get along well with others, resents control, temper outbursts, requires much attention, fights and kicks others, evades responsibility, shy, withdrawn, does not participate, rarely attends to work, restless, nervous, indifferent, unmotivated.¹⁸

Girls were characterized as being "unusually shy, withdrawn, in need of encouragement, unassertive, passive, lacking in energy, and lethargic."¹⁹ And according to the Coleman Report, "Puerto Ricans in the United States fare behind both urban whites and blacks in verbal ability, reading comprehension and mathematics."²⁰ But it is Margolis who has summarized the experience of the Puerto Rican child when he concludes that "relatively speaking, the longer a Puerto Rican child attends public school, the less he learns."²¹

It is also Margolis who further points out that the insistence on teaching English as the language of instruction has served to create children who are illiterate in both Spanish and English.²² He also finds that the attitude prevalent among teachers is that failure is the fault of the children, and that one "cannot be expected to work miracles on children who are disadvantaged."²³

This attitude of classroom teachers, which is hidden in rhetoric applied to the children as "disadvantaged", "culturally deprived", "economically deprived", etc., has been found to be a major deterrent to the childrens' success. As Horatio Lewis, the Assistant Dean and Director of Latino Affairs at the University of Indiana has written,

The main problem lies in the attitude of the teacher, who is for the most part, Anglo, about the business of inculcating "middle class" values in every human being; the implications seem to mean: If you are not white in color, then at least you should be white in mind.²⁴

And according to Moffat,

The teacher is the keystone for the success of any learning activity. A capable teacher can overcome many shortcomings in programs and instruction materials, but no program design or materials can compensate for inadequate teaching.²⁵

Unfortunately, Moffat, in his capacity as Superintendent of Management Services for the Board of Education of the City of Chicago, also believed that anybody was qualified to teach in a bilingual program merely by giving evidence of sufficient fluency in two languages. In fact, he saw the bilingual programs as a solution to the ever-increasing problem of unemployment among regular teachers. According to Moffat, "bilingual education is one of the few areas in education experiencing a shortage while we have a surplus of certified teachers in most other areas."²⁶

Aggravating the educational problems facing the Puerto Rican child is the fact that even though educational opportunities exist, there is a marked inferiority of opportunities and an inequality in services, with discrimination the common denominator. Discrimination, to a large degree, results from the initial testing practices and processes utilized by the school systems in determining the educational programs of Puerto Rican children. With the widely held notion that intelligence and achievement tests do indeed measure the intellectual capacity of the Hispanic child, comes the repeated pattern of failure by these children.

Oscar Buros, the editor of the Mental Measurements Yearbook published in 1977, has expressed his feeling that in fifty years of testing, nothing much has been accomplished. He has pointed out that

tests are constructed in much the same way despite fifty years of practice and study of such instruments. Indeed, Buros claims that procedures still include the mistakes originally made.²⁷ He believes that the "statistical methods of item validation confuse differentiation with measurement and exaggerate differences among individuals and between grades."²⁸ He also states that methods used in constructing tests, measuring repeatability, assessing validity, and interpreting tests results must be drastically changed if the goals of testing were to be met. In his opinion, tests are more accurate for purposes of differentiating than for measuring.²⁹

More than forty-six years ago, Sanchez warned us about the use of mental tests for the bilingual child. He felt that the "abuses and errors of mental tests are a result of the quest for a short cut to critical and exhaustive study of the ability of school children."³⁰ He also warned that proper use of these measurement instruments were "circumvented by attitudes and emotions" which should have no place in educational programs. According to him,

. . . the frequent prostitution of democratic ideals are the result of expediency, politics, vested interests, ignorance, class and 'race' prejudice, and these lead to indifference and inefficiency. It is a sad commentary on the intelligence and justice of a society, that makes claim to those very progressive ideals.³¹

Puerto Rican children continue to be subjected to the discriminatory practices of our educational institutions, and continue to suffer under the belief that the Anglo way is the right way and the only way. The idea that everyone should be molded to fit this style is still a major theme of our educational system. Of course,

the problem of educating all our minority children is a persistent one. Cohen suggests that some of the causes for the persistence of the problem are these:

- (a) the elimination of poverty and the rise of non-whites threatens too many power groups;
- (b) most educators do not believe that slum children are bright enough to learn to read well; and
- (c) most attempts at compensatory education for socially disadvantaged retarded achievers consists of changes in quantity rather than quality.³²

Rather than viewing poverty as the obstruction to education, Cohen says, we should realize that "education is the focal point of America's domestic poverty problem."³³

It is imperative that we develop a methodology for testing our Hispanic children in a non-discriminatory manner. Such a methodology must be radically different from those utilized previously. For this reason, it is the intention of this author to create a resource book which will guide test administrators in this task. Such a guide must address the major areas of testing in which discrimination may occur, and must provide guidance in the identification and remediation of such tendencies.

I propose to create specific guidelines that will enable teachers and test administrators to become more aware of the particular needs of Puerto Rican children, and to adjust test results to the cultural peculiarities of Hispanic children. Knowledge of the child's language, culture and possible class differences will help test administrators and teachers to understand the child's idiosyncracies. Such an understanding will help to democratize testing.

Purposes of the Study

To develop a guidebook for psychologists and teachers I propose to:

- I. Critically examine what I found to be the major areas of influence in the test performance of Puerto Rican children.
- II. Critically explore and illustrate sub-factors within those areas of influence.
- III. Provide a critique of the tests most widely used with this particular group of children.
- IV. Raise questions and offer alternatives, where feasible, to current testing practices as they pertain to Puerto Rican children.

Significance of the Study

Recent court decisions highlight the discriminatory effects of many testing practices. Furthermore, these court decisions have influenced legislative guidelines for the provision of equal educational opportunities, a fact which underlines the educational significance of this study.

The guidebook I have written as part of this study is unique in that it provides teachers and test administrators with readily accessible information about the specific needs of Puerto Rican children. It provides a single source, multiple-referenced guide

not previously available. It also provides a critique of those tests most often used in the assessment of Puerto Rican children. And, where this author has found commonly used tests to be discriminatory and absolutely irrelevant to the population being tested, the guidebook suggests alternative testing procedures.

Definition of Terms

Culture: For the purposes of this study, I have adopted Edward Taylor's definition of culture:

. . . that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society.³⁴

Within the context of this study, I have identified only the most prevalent traits of Puerto Rican culture, because it is not possible to ascribe to all individuals all aspects of the culture.

Anglo Culture: For the purpose of this study, Anglo culture refers to the dominant culture, that of the white, middle-class, and the dominant political, economical and sociological forces within the U.S.

Minority Culture: For the purpose of this study, this term relates to the culture of the Puerto Ricans living in the mainland United States, characterized by being excluded to a large extent from the mainstream political, economical and sociological forces within the country.

Minority Group Children: For the purpose of this study, this term refers to all bilingual-bicultural children. These children are often victims of language, culture, and race discrimination.

Puerto Rican Children: For the purposes of this study, this term refers to those children who were born in Puerto Rico or whose parents or grandparents are of Puerto Rican origin.

Bilingual Children: For the purposes of this study, this term refers to those children who are Spanish dominant and who may or may not have an adequate command of the English language.

Bicultural Children: For the purposes of this study, this term describes those children who are Spanish-surnamed, and who may or may not demonstrate familiarity with both the Anglo and Puerto Rican cultures.

Assessment Practices: For the purposes of this study, this term refers to the processes and testing procedures utilized by the schools for the evaluation and placement of minority children in specific educational programs.

Non-Discriminatory Assessment: For the purposes of this study, this term refers to the evaluation and placement of minority children within a multicultural, democratic, and pluralistic framework.

Ability Test: These tests are also known as aptitude tests and intelligence tests. An ability test attempts to measure the combination of native and acquired abilities needed for school work.

Theoretically, the items on an ability test are based on research into the human learning process, while items on an achievement test are closely related to specific classroom teaching and learning. In practice, there is often little difference between the two tests.³⁵

Achievement Test: "A test that attempts to measure the extent to which a person has mastered certain specific skills taught in the classroom. Achievement tests are frequently administered in "batteries", or groups of from four to ten separate tests covering different aspects of the curriculum. . . . Achievement tests do not have to be commercially published. Applied loosely, the term "achievement" can be used to describe any test a teacher gives to find out how well students have learned a particular subject."³⁶

Criterion-Referenced Test: "An achievement test that ideally covers small units of content. Its content is closely related to what has been taught in the classroom. Since most criterion-referenced tests are developed according to local specifications, they are rarely standardized on a national norms group."³⁷

Culture-Fair Test: "A test limited in content to that which is common to all cultures. Regardless of the culture in which a child has been brought up, a culture-fair test should measure 'fairly' his capacity for 'knowing'."³⁸

Culture-Free Test: "There is no such thing as a culture-free test. Such a test could measure only 'inherited' abilities. While this may not seem impossible in theory, in practice, a test cannot be made culturally sterile. The language structure used in the test and the background knowledge required to answer questions would both be culturally determined. Even so-called 'performance tests,' which do not use language, cannot eliminate cultural bias though they may reduce it. Furthermore, even as an infant a person has absorbed to some extent the culture in which he is brought up and this will

influence his responses to test items as well as to the conditions under which the test is taken."³⁹

Diagnostic Test: This term refers to an achievement test used to "diagnose " or analyze. Such tests are designed to locate an individual's specific strengths and weaknesses and are most useful when the causes for such strengths and weaknesses can be identified.

Standardized Test: "A test prepared by specialists, administered according to uniform directions, scored in conformance with definite rules, and interpreted in terms of certain normative information. Reliability and validity data are usually provided. Such tests are commercially published and for general use."⁴⁰

Reliability: This term is used to describe the extent to which a test is consistent in measuring whatever it purports to measure; the dependability of a test; its relative freedom from errors of measurement.⁴¹

Validity: This term refers to the extent to which a specific test does what it purports to do. For example, a specific reading test would not be a valid measure of achievement in writing.

Assumptions of the Study

1. That educators and test administrators have a genuine interest in providing the least discriminatory assessment services to Puerto Rican children.
2. That educators and test administrators believe and abide by the respect of cultural diversity among children.
3. That educators and administrators are committed to the concept of

equal educational opportunities for all children regardless of ethnic or racial origin.

Delimitations of the Study

This study and the guidebook will reflect only those factors which are of the utmost importance in assessing the abilities and performance of Puerto Rican children. The emphasis will be on the provision of practical and useful information for the processing of testing Puerto Rican children in the least discriminatory manner. Extensive as the work may be, certain questions will remain unanswered. Specifically, the answer to the question of 'what is the Puerto Rican culture?' will remain open to conflicting opinion; it is not possible to establish rigid criteria for the identification of the culture for all Puerto Ricans. Although many of the issues covered in this study are applicable to Puerto Rican children in general, this guidebook will specifically deal with issues that pertain to Puerto Rican children living in the continental United States.

Methodology for the Development of a Guidebook

The guidebook was developed from information gleaned from the extensive review of the literature, and my personal experiences as a school psychologist working mainly with Puerto Rican children.

It is expected that the guidebook will serve to fulfill a need of educators for a concise and practical resource to be utilized in the testing of Puerto Rican children in the least restrictive manner possible.

The guidebook is organized in the following fashion:

1. an introduction and overview of the problem of testing Puerto Rican children,
2. the highlighting of specific testing problems and misconceptions about Puerto Rican children;
3. recommendations for overcoming obstacles to a fair and valid assessment;
4. suggestions for further readings.

Organization of the Study

This dissertation will consist of two major parts. The first part will set down the theoretical foundation for the project. It will include the statement of the problem and a comprehensive review of the literature. The review of the literature will be guided by the selection of issues critical to the topics under scrutiny, their relevance to the population served, and their significance to the area of testing in general.

The second part will consist of the development of a guidebook for psychologists and teachers. In this guidebook I propose to:

- 1) critically examine what I found to be the major areas of influence in the test performance of Puerto Rican children;
- 2) critically explore and illustrate sub-factors within those areas of influence;
- 3) provide a critique of the tests most widely used with this particular group of children,
- 4) raise questions and where possible, offer alternatives to current testing practices as they pertain to Puerto Rican children.

The major topics for discussion in the guidebook will be:

1) the examiners and how their prejudice or unfamiliarity with the child's language and culture can affect their interpretation of the child's test scores; 2) the cultural, linguistic and socioeconomic differences that can affect or hinder the test performance of Puerto Rican children; 3) cultural differences, the experience of being a Puerto Rican in a foreign country, and the manifestation of these cultural differences. Due to the devastating effects they have in the testing situation, the problems caused by linguistic differences warrant inclusion in any such discussion. Furthermore, socioeconomic differences and their apparent effects on test performance will also be discussed.

The tests most frequently used with Puerto Rican children will be examined in terms of validity, reliability, advantages and disadvantages, and whether they are not recommended for use with this particular population. Concepts, materials, and critical cases drawn from personal experience in testing Puerto Rican children will be used in examining these tests, and in the development of this guidebook. The topics presented will be further supplemented with material drawn from the existing literature on testing Puerto Rican children.

FOOTNOTES

¹Jane R. Mercer and June F. Lewis, "System of Multicultural Pluralistic Assessment: Technical Manual" New York: The Psychological Corporation, 1978, p. 1.

²Ibid.

³Diana v. California State Board of Education, C.A. No. C-70-37-R.F.D. (Consent Decree).

⁴Ann Turnbull and H. Rutherford Turnbull, Free Appropriate Public Education: Law and Implementation. Denver, Colorado: Love Publishing Company, 1978, pp. 215-216.

⁵Lau v. Nichols, 414 U.S. 563 (1974).

⁶Jane Mercer and June F. Lewis, op. cit.

⁷Edward Fernandez. "Persons of Spanish Origin in the United States" Social Education, Vol. 43, February 1979, p. 104.

⁸Ibid.

⁹Ibid.

¹⁰Bureau of the Census, 1980 Census Report.

¹¹Jennie Montag, "Guidance and Curriculum for Puerto Rican Students," High Points, No. 33, January 1951.

¹²Henry Miller, "New York City's Puerto Rican Pupils: A Problem of Acculturation," School and Society, No. 76, August 1952, p. 129.

¹³Ibid.

¹⁴Ibid. Also discussed by Emlilio L. Guerra, "The Orientation of Puerto Rican Students in New York City," Modern Language Journal, No. 32, October 1948, pp. 415-420; Mary Finocchiaro, "Puerto Rican Newcomers in Our Schools," Journal of Educational Sociology, No. 28,

December 1954, pp. 157-166; and Irving Lorge, Frank Mayans, Jr. "Vestibule and Regular Classes for Puerto Rican Migrant Pupils," Teachers College Record, No. 55, February 1954, pp. 231-237.

¹⁵Emilio L. Guerra, op. cit.

¹⁶Edna C. Hickey, "Adjusting the Curriculum for Bilingual Children," National Elementary Principal, No. 36, September 1956, pp. 53-57.

¹⁷Hector I. Vazquez, "Puerto Rican Americans," The National Elementary Principal, No. 50 (2), 1970, pp. 65-70.

¹⁸Ibid.

¹⁹Sophie L. Elam, "Poverty and Acculturation in a Migrant Puerto Rican Family," The Record, Vol. 70, No. 7, 1969, p. 623.

²⁰Ibid.

²¹James S. Coleman, Equality of Educational Opportunity Survey, 1966. ("The Coleman Report")

²²Richard Margolis, "The Losers: A Report of Puerto Ricans in the Public Schools," ASPIRA, Inc., New York: Office of Education, Bureau of Research, 1968, ERIC Document No. ED 023779, pp. 2 and 7.

²³Ibid.

²⁴Ibid.

²⁵Horatio D. Lewis, "To Train or Not to Train Teachers for Spanish Speaking Communities," Viewpoints, Vol. 49, No. 4, 1973, p. 16.

²⁶James G. Moffat, "Bilingual Teacher Training: What Is Really Needed?" Educational Horizons, Vol. 55, No. 4, Summer 1977, p. 207.

²⁷Ibid., p. 208.

²⁸Oscar K. Buros, "Fifty Years in Testing: Some Reminiscences, Criticism and Suggestions," Educational Research, Vol. 6, No. 7, July/August 1977, p. 19.

²⁹Ibid., p. 12.

³⁰Ibid.

³¹George I. Sanchez, "Bilingualism and Mental Measures: A Word of Caution," Journal of Applied Psychology, No. 18, December 1934, p. 767.

³²Ibid., pp. 769-770.

³³S. Alan Cohen, "Socially Disadvantaged Americans, Slow Learners," ERIC Document ED 021003, pp. 2 and 13.

³⁴Edward B. Taylor, as cited in Sidney Mintz, "Puerto Rico: An Essay on the Definition of a National Culture: Status of Puerto Rico: Selected Background Studies, United Puerto Rico Commission on the Status of Puerto Rico, 1966, p. 342.

³⁵"A Glossary of Measurement Terms Used Most Frequently in Discussing Tests and the Results of Tests" in Testing. . . Grouping. . . the New Segregation in Southern Schools? Roger Mills and Miriam Bryan, 1976, pp. 4-9.

³⁶Ibid.

³⁷Ibid.

³⁸Ibid.

³⁹Ibid.

⁴⁰Ibid.

⁴¹Ibid.

CHAPTER I I

REVIEW OF THE LITERATURE

Introduction

This Review of the Literature represents a thorough exploration of the problems involved in testing Puerto Rican children. It is divided into several sections, beginning with an attempt to define bilingualism, which is followed by a discussion of the tests themselves, and also of the attitudes of test administrators and test takers. In addition, this section includes an overview of the important legal and legislative responses to the problems of testing, placing, and educating Puerto Rican children. The Review then concludes with a discussion of the cultural factors which often interfere with the accurate measurement and diagnosis of the learning difficulties of Puerto Rican children.

Throughout this Review, it is important to remember that most bilingual programs are considered to be transitional, and that we must question the efficacy of such programs; that because it is difficult to prescribe one remedy which serves all bilingual children well, the range of remedies which this study provides for the particular needs of Puerto Rican children is necessary and practical; and that even though the need for a change in the manner in which we classify our children has been recognized by courts and legislative bodies, changes take time. We still require further clarification of guidelines and

remedies; in fact, we need to re-think the issue of bilingualism itself.

The Education of Bilingual Children

Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today, it is a principal instrument in awakening the child to cultural values, in preparing him to adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity where the state has undertaken to provide it, is a right which must be made available to all on equal terms.¹

A basic assumption of the public education system is that it is the "great equalizer", the mechanism in the social machinery which ensures equal opportunity for all. It is also assumed that such an educational system will create equal economic opportunity by providing equal educational opportunities. Unfortunately, the promise of equal opportunity has not been fulfilled for countless Puerto Rican children. The causes of this failure are complex and have been related to such diverse factors as the students' psychology, culture, language, poverty and racial/ethnic identity.

Bilingualism within a Bicultural Setting.

Any discussion of the bilingual Puerto Rican child must take into account not only all the factors listed before but also the importance of bilingualism and the problem of defining it. Because of the primary role of language as a medium of instruction, and because

of the important relationship between verbal functioning and measured intelligence, bilingualism becomes an issue in any discussion of the relevance of test scores to a child's real capacity to learn. The interpretation of poor test results as an indication of a bilingual child's inferior ability to learn is all too common. Recent evidence demonstrates that, in fact, bilingual children tend to be more intelligent than their monolingual counterparts.²

To be considered bilingual, a person must have the ability to use two different languages. But a bilingual person may be bilingual in degrees, varying from minimal competency to complete mastery of more than one language. However, identifying and evaluating the degree of bilingualism in a person's spoken and written use of language is still difficult.

Methods of evaluating the degree of dominance of one language over another, and considerations of the factors which contribute to a determination of such dominance, have concerned researchers in the field. Many things can affect the relative status or strength of an individual's two languages, among which Weinrich has identified age and order of acquisition, usefulness and amount of opportunity for communication, degree of emotional involvement, social function, and literacy and cultural value.³

Pride has pointed out that it is very important to distinguish between bilingualism and biculturalism.⁴ Because they may occur together or separately, such a distinction is often difficult to make; but it is crucial to any attempt to evaluate an individual's ability to function within our educational institutions. For instance, it must

be remembered that biculturalism does not necessarily mean a significant separation of linguistic systems within the individual.

Diglossia, a term originally introduced by Ferguson, refers to those situations in which two or more languages are used differentially within a single geographic region.⁵ As pointed out by Fishman, societies in which widespread bilingualism exists will tend to move toward diglossia, and in almost all diglossic societies, there will be some individuals who for economic, political, geographic or other reasons will form a link between the two speech communities. These individuals will have to be bilingual.⁶

Fishman also discusses the implications of diglossia as an important contextual factor in consideration of the so-called "advantages" and "disadvantages" of bilingualism. He has concluded that

. . . many of the purported 'disadvantages' of bilingualism have been falsely generalized to the phenomenon at large rather than related to the absence or presence of social patterns that reach substantially beyond bilingualism.⁷

Bilingualism itself affects much more than the languages involved. Psychologists, sociologists, and educators have explored such issues as the effects of bilingualism on intellectual functioning, on personality development, and sense of identity. Its effects on one's perception and social interaction with others have also been given considerable attention, but without any resolution of the problem under discussion.

The Effects of Bilingualism on Educational Achievement.

Any discussion of the bilingual child warrants an exploration of all the effects of bilingualism on his educational achievements or lack

of them. In addition, the bilingual child's educational environment must be closely scrutinized. For instance, the emphasis in most so-called bilingual/bicultural educational programs is on remediation; their success is determined by their ability to acculturate the Puerto Rican child into the mainstream. The attitude underlying them is that to become "Americanized" is to become a better citizen.⁸ Despite the abundance of studies dealing with bilingualism and its effects on learning, our bilingual children are still considered to have a "problem" which needs remediation.

Gonzalez and Ortiz found that this philosophy was detrimental to the Spanish-speaking child. According to them,

this view of education translates into a curriculum which ascribes positive value to dominant culture and language while assigning inferior status and value to minority cultures and languages.⁹

Thus, our Puerto Rican children are made to feel that they must shed not only their cultural identity but their language as well. The schools provide only token support and nourishment of cultural identity. In all instances, the blame for "inadequacy" is laid on the child and on his "inferior" culture and language.

Cordasco describes the problem of educating Puerto Rican children as that of their encountering an alien environment which rejects both their language and culture:

. . . The child's educational problems begin with a rejection of his language, reaffirmed in the rejection of his culture and heritage of which his language is an extension and it often results in his effective exclusion from the process of education.¹⁰

Rodriguez found that the educational plight of the Puerto Rican children resulted from the "assimilation ideology" imposed on them by the schools. She noted that those students who are not easily assimilated into the American mainstream are the ones who will be more successful. Those who cannot be readily assimilated either become our "drop-outs" or our "unteachables."

Previous immigrant groups faced the ordeal of a standard "English only" policy of instruction completely devoid of any attempt to recognize and respect the child's cultural and linguistic differences.¹¹ This attitude is still common today although in some instances the theme has been changed to one of "English first." Lewis, too, has pointed out that the attitude of many teachers is still one of ". . . if you are not white in color, then at least you should be white in mind."¹²

The Attitudes of Educators and Misconceptions about Puerto Rican Children.

Although the rhetoric has softened, for too many years Puerto Rican children were considered "culturally deprived" and "culturally disadvantaged." These terms stigmatize children who must also contend with the conditions of poverty, malnutrition, and poor general health, which often compound their inability to adjust to and learn in an alien environment. As early as 1947, such problems were recognized and special programs were being designed to counteract these negative influences. Guerra,¹³ Long,¹⁴ and others have described how such attempts culminated in the development of special classes for Puerto Rican children. Such labels as "orientation" and "vestibule" described classes where the specific intention that the students should learn

sufficient English to be integrated into the regular classes.

Equal Educational Opportunities for Puerto Rican Children.

Inequality: The Evidence. In 1954, the famous "Puerto Rican Study" was conducted in New York City. Morrison describes it as a study of the education and adjustment of Puerto Ricans in New York,¹⁵ and Santiago sees it as being "monumentally important to the history of the Puerto Rican in the United States." According to Santiago, "It was the first systematic study undertaken to document the continental experience of the Puerto Rican."¹⁶

Unfortunately, only "lip service" was paid to that study.¹⁷ A brief look at the status and progress of the Puerto Rican population in New York City shows no improvement in the lot of school-aged children. According to the U.S. Bureau of the Census, only 13% of the Puerto Ricans 25 years and older in 1960 had completed either high school or a more advanced level of education.¹⁸ In other words, 87% had dropped out without graduation from high school.

In 1961, a study of a Manhattan neighborhood showed that fewer than 10% of Puerto Ricans in the third grade were reading at their grade level or above. In comparison, 19% of the Blacks in the same schools and 55% of the others, mostly Anglos, were reading at grade level. By the eighth grade the degree of "reading retardation" was even more severe among Puerto Ricans, with almost two-thirds of them more than three years behind their peers.¹⁹

Although it is more difficult to confirm percentages in the areas of school completion and dropouts, a special study conducted by

the New York City Board of Education in June of 1963 indicated an almost complete failure of the public school system of New York to prepare Puerto Rican youth for post-secondary education. Of the nearly 21,000 academic diplomas granted in 1963, only 331 were received by Puerto Ricans. Of the 1,626 Puerto Ricans who succeeded in graduating from high school, only 20% qualified for academic diplomas. The "other" category (non-Puerto Ricans) showed 59% of the graduates receiving academic diplomas. However, there is no data indicating what percentage of those receiving academic diplomas were actually admitted to college.²⁰

In the area of English language proficiency, Puerto Rican students fare equally poorly. The Board of Education's data indicate that in 1964, there were almost 89,000 students (or 8.3% of the total school population) in the C through F categories on the Scale for Rating Pupil Ability to Speak English. The vast majority of these students were Puerto Ricans.²¹ The scale rates students in categories from those who speak no English, to those demonstrating an ability to speak English, to native English-speakers.

More recent statistics are equally dismal. Data submitted on behalf of plaintiffs in ASPIRA v. Board of Education of the City of New York, 423 F. Supp. 647 (S.D. N.Y. 1976) included a special census taken in 1972 in Community School District #4. District #4 is the "Barrio" of New York's borough of Manhattan, and is that area of East Harlem which houses the greatest concentration of Spanish-speaking pupils. The results of the census showed that the total school population was 17,469 and the total Spanish-speaking population was

11,217, 65% of the total school population.²² In the eighteen elementary schools, pupils ranged from 8.3% to 32.2% at or above grade level in reading. Fifteen of the eighteen schools had less than 20% of their pupil population reading on or above grade level.²³ All of the schools in the District reported an average of two-to-two-and-a-half years retardation in math scores.²³

The report on educational attainment by race issued by the Bureau of the Census shows that this trend is common throughout the United States.²⁵ The percentage of persons 25 years or older who had graduated from high school in 1976 breaks down as follows:

White	68.1
Black	43.8
Hispanic	39.3

The percentages of persons in this same age group graduating from high school as of 1979 are as follows:

White	70
Black	49
Hispanic	42

Percentages of those completing increasingly higher levels of education show equally shocking disparities:

Completing Four or More Years of College
(1979)

White	17
Black	8
Hispanic	7

Segregation. Perhaps even more shocking than the previous statistics are those that indicate that the number and percentage of Hispanic-Americans attending segregated schools is increasing. In fact, the children from areas with a heavy Hispanic concentration are more likely to attend predominantly minority schools than are Black students.²⁶ Documentation supplied by the Massachusetts State Advisory Committee to the U.S. Commission on Civil Rights,²⁷ by Vazquez,²⁸ and by a host of others confirms this trend. However, the extent of Hispanic student segregation remained unknown until 1977 when the National Institute of Education (NIE) published a volume on the subject studying data from the years 1970 through 1974.²⁹ Such data are of limited value, though, because the analysis was on the district-wide level, and often obscured patterns of segregation and ethnic/racial isolation within a particular district.³⁰

Current efforts to expand the pool of statistics on Hispanic segregation focus on those students in large and middle-size school districts of 3,000 or more with more than 5% Hispanic population.³¹ But this, in turn, effectively bypasses the smaller and/or rural school districts most often attended by Hispanic migrant children. Furthermore, migrant Hispanic students remain uncounted because such studies do not seek to identify students by their parents' occupation as migrant agricultural workers.³²

As a result, almost no information is available on the extent of segregation of Hispanic migrant farmworkers in our schools.³³ The only statistics currently available are those compiled from the (often

inaccurate) record system of the Title I Migrant Education Program. However, these statistics are not compiled with any racial/ethnic or Limited English Speaking Ability classification.³⁴

The failure to quantify the level of Hispanic segregation impedes school desegregation efforts, and encourages classroom failure which often results from segregation. In addition, desegregation has been hindered by the inconsistency with which Hispanics have been identified in general³⁵ and, in particular, as a minority group protected by the Brown decision.³⁶

In spite of the 1973 Keyes decision which recognized that protection,³⁷ judicial decisions continue to be erratic. It remains unclear which factors determine how Hispanics should be treated for purposes of desegregation.³⁸ Decisions in New York and Boston recognized the Hispanic community, predominantly Puerto Rican, as a minority group for desegregation purposes.³⁹ On the other hand, the federal court in Wilmington, Delaware did not.⁴⁰ Cubans, in Miami, have been treated as part of the White category in that city's desegregation plan.

The vulnerability of Hispanics to differing interpretations of their protection under Brown⁴¹ was reiterated in the efforts to desegregate the Milwaukee, Wisconsin school system:

The issue of legal definition as an identifiable minority emerged in Milwaukee, as it has in other cities. In some desegregation cases, judges have ruled that Hispanic children are an identifiable minority and must be included in any remedy planned by a district. (See Cisneros v. Corpus Christi, Keyes; U.S. v. Texas). In other cases, as in Milwaukee, the ruling itself did not do this and Hispanic intervention in the court case was denied. The school authorities tried to maintain flexibility and even tried at one point to categorize Hispanic children in bilingual programs as "minority" and those not in

programs as "white." This was obviously not acceptable to the Hispanic parent group. The court maintained Hispanics were "non-Black," providing flexibility to meet their needs through different quotas. On the other hand, the State defined them as "minority" by legislative action in Chapter 220.⁴²

The rights of language minority students go beyond racial/ethnic desegregation and beyond the right of equal physical access within a school system, to the suitability of the educational program in meeting the needs of the pupil. The Lau decision stated that:

. . . there is not equality of treatment merely by providing students with the same facilities, text books, teachers, and curriculum. . . students who do not understand English are effectively foreclosed from any meaningful education.⁴³

The resulting "Lau Guidelines" suggested bilingual education as one educational alternative to solve the failure of the public school system to provide Limited English Speakers (LES) with equal educational opportunity. The Hispanic community has come to perceive such relief as paramount in its quest to equalize educational opportunity.

Bilingual Education: A Solution

School districts are failing to deliver adequate bilingual instruction to all but a fraction of the eligible student population. In 1976, the U.S. Commissioner of Education estimated that only one-ninth of limited English-speaking students were participating in a bilingual program.⁴⁴

Failure to actualize the promise of Lau may be traced to the problems of variations in student eligibility requirements, uncertain program criteria, and confused enforcement efforts.

Proposed federal regulations for bilingual education, which

have been the subject of intense public debate for the past several months, were withdrawn by the new Administration in February of 1981. Secretary of Education T. H. Bell cited cost factors and an intrusion into local educational decision-making as the principal reasons for the decision. Thus, the "Lau Guidelines" under which the Office for Civil Rights has operated for the past six years will continue to be the federal standards for compliance with Title VI of the Civil Rights Act of 1964 (U.S.C. 2000, Sect. 601).

The critical issue is not the withdrawal of the proposed regulations as such, but rather, the interpretation of Bell's announcement of their withdrawal by local school officials who have been hostile to bilingual education from the beginning. Many reports by the media left the impression that school districts would now be free to ignore the needs of limited English speaking children. The Center for Law and Education, Incorporated has reported that already in several states, children have been removed from bilingual programs and bilingual teachers have been laid off, perhaps in the belief that the new Administration will "look the other way" where the rights of language minorities are concerned.⁴⁵

Although bilingual education has existed since the 1840's⁴⁶ it was not until the influx of Cuban refugees in 1963 that bilingual programs became firmly established.⁴⁷ Earlier, many Chicanos, Puerto Ricans, Native Americans, and Asians suffered under the intransigent monolingualism of most American schools; their economic, social, and political powerlessness effectively precluded bilingual programs. But the Cubans were largely from the middle and upper-middle classes. They

brought with them a strong literary tradition and were not reticent in demanding adequate services from social and political institutions. In addition, the Cubans were politically aware of the workings of institutions and were able to "negotiate" to the benefit of their children.

Because many of the early Cuban refugees were professionals, they were able to provide for the services of Cuban teachers and other educational personnel. In cases where certification or other credentials were lacking, the Cuban Refugee Act offered financial assistance on a scale not then (or since) available to other Spanish-speaking groups.

Politically, American institutions responded to the educational needs of Cubans as if they were the needs of transient refugees. The Chicanos and Puerto Ricans, in contrast, presented the potential for causing unwanted and more permanent change. As so-called victims of a Communist state, the Cubans were welcomed in a manner which was intended to demonstrate that the United States would go to great lengths to harbor political exiles who shared our political ideologies.⁴⁸ Lastly, the "curse of racism" was not an issue, since the majority of the early refugees from Cuba were of European stock and white.

The net effect of these factors was the creation in the Dade County (Miami) Public Schools of a bilingual education program that clearly indicated the viability of the concept. By 1968, a new provision, Title VII, was added to the Elementary and Secondary Education Act of 1965 as the vehicle for federal participation in promoting this "new" concept of schooling.

Initially, the corresponding appropriation measure was rejected by Congress. However, in the following session, Congress appropriated 7.5 million dollars and the federal role in bilingual education became a reality.⁴⁹

Vann views the Bilingual Education Act as a means of breaking the cycle of poverty which is so frequently linked to linguistic handicaps in the mainstream language.⁵⁰ Although Anderson claimed that the Act not only helped to develop greater English-language proficiency in school children, but simultaneously recognized the value of utilizing the native tongue for instructional purposes,⁵¹ it must be remembered that such programs were viewed as transitional only. According to Gaader, et al. "teaching one of the languages simply as a bridge to the other. . . is not bilingual schooling." Gaader defines bilingual schooling as "the use of two languages as media of instruction in any part or all of the school curriculum except study of the languages themselves."⁵²

Bilingual Education: A Viable Alternative?

Any discussion of bilingual education must be tied to the continuing debate about the pros and cons of such transitional programs. Even today, although many of these transitional bilingual/bicultural programs, attempt to do more than provide English-language instruction, the focus remains on the need for remediation. English as a second language is a predominant theme.

For those who advocate bilingual education in its true form, the ultimate goal is the establishment of programs which do, in fact,

provide for mastery of both languages equally, rather than mastery of one at the expense of the other. In such a program, both languages can be utilized for instructional purposes.

According to UNESCO, as cited by Gaader, "psychologically, socially and educationally the best medium for teaching a child is through his native tongue."⁵³ Zirkel suggests that:

The deficiencies that Puerto Rican children show in verbal ability and academic achievement might not exist if initial instruction and testing were in Spanish. . . the children's native language.⁵⁴

And according to Gezi, there have been many significant achievements resulting from the implementation of bilingual instruction. Among others, he lists success in school brought about by the child's utilization of his native tongue in the learning of subject matter; a sense of pride in language and cultural development; intercultural understanding, and other positive experiences.⁵⁵

Troikey, on the other hand, in his work at the Center for Applied Linguistics (Washington, D.C.), has reacted more negatively to a review of the first decade of bilingual education. He criticized bilingual teacher certification standards and noted that student teachers often had little preparation in the language. In many cases, bilingual programs employ teachers with only minimal competency in the child's native language.⁵⁶

Such lax certification requirements are often directly linked to the high unemployment rate of regular teachers who have sought employment under alternate certification. This notion is best represented by the words of the Deputy Superintendent of Management Services for

the City of Chicago Board of Education. According to Mr. Moffat, "Bilingual education is one of the few areas in education experiencing a shortage while we have a surplus of certified teachers in most other areas."⁵⁷ Unfortunately, such job-seekers may not have the qualifications required for the teaching of linguistically and culturally different children.

Troiike further criticizes the materials being developed as "lacking in any organized design or research base."⁵⁸ Based on the notion that "what is good for the goose is good for the gander", materials from the regular curriculum are merely translated into Spanish. Even more disconcerting is the use of materials for one group of Hispanics that have been created for another, overlooking distinct cultural and regional differences that influence the language. And, all too often, materials are expected to be equally appropriate for inner-city and migrant farm worker children.

Troiike further points out that the lack of participation by linguists in the planning of bilingual education is detrimental. The fact is that in some instances, materials and designs are based on commercially successful marketing campaigns rather than on carefully researched and analyzed data. For these and other reasons, based on a 1977 evaluative study, Troiike described bilingual programs as being in "shambles" and lacking uniformity in standards and criteria for evaluation. Even the most ardent supporters of bilingual education must realize that Troiike is not far from the truth.

Although bilingual education is a viable alternative, much must be done to improve the quality of programs if such programs are

expected to succeed in educating our Puerto Rican children. Furthermore, as has been pointed out by Roeming, "the specific problem to be rectified now under the banner of bilingualism is a social and economic one."⁵⁹ Hernandez has gone even further, stating that "The schools must be reoriented to favor Hispanic children in their struggle with a racist and oppressive social order instead of being on the side of the forces keeping Hispanics in a segregated situation."⁶⁰

Not all educators would agree. Bethell thinks that the United States government is "afflicted with a death wish" in wanting to maintain bilingual programs."⁶¹ A statement such as that unfortunately is representative of all those who fail to remember that as a nation, we do not exist in a monolingual world, and that speaking a second language ought to be considered an asset, not a handicap. As has been stated before by advocates of bilingual education, it is a paradox to erase a child's native language in the elementary school and to introduce that same language as a foreign language in the secondary school. How such an incongruity can be justified is beyond comprehension. In the modern world, it is not sensible to maintain the notion that only the rich and well-educated should be allowed to learn many languages.

A report presented by a committee from the Executive Council of Teachers of Spanish and Portuguese summed up this argument:

. . . we will no longer accept the embarrassing anomaly of a language policy for American education which on the one hand seeks to encourage and develop competence in Spanish among those for whom it is a second language and, on the other hand, by open discouragement, neglect, and condescension, destroy it for those who speak it as a mother tongue.⁶²

Gaader believes that we have a national policy which seeks "to ignore, or at worst, stamp out, the native competence while at the same time undertaking the miracle of creating something like it in our monolinguals."⁶³

Bearing in mind the fact that we do not live in a monolingual world, nor an English-dominant one, we must recognize that foreign relations require the ability to speak and understand various languages and cultures. The goals of bilingual education ought to be congruent with the best interests of the citizens of the country and the nation. As summarized by Roeming, "language learning in a tongue other than English has now the possibility of being converted into a mark of individual superiority."⁶⁴

Despite the evidence supporting the viability of bilingual education, the fact is that "American educators have not yet discovered ways to teach the children of poverty how to succeed in middle-class, affluent society, even when those children speak English exclusively."⁶⁵ Until we resolve that dilemma, our programs of bilingual education will offer to Spanish-speaking children little more than an opportunity to fail and "to struggle with the disadvantages of poverty in two languages rather than one."⁶⁶

Theories of Bilingualism.

In addition to the controversy which surrounds the pros and cons of bilingual education, a similar turmoil exists when one tries to define bilingualism. Sociolinguists lean toward the belief that bilingualism must be studied from a situational context rather than from

a psychological one. Fishman, for example, views a bilingual community not in terms of language proficiency but rather language variance. In addition, he considers who is using the varieties and when such varieties are used.⁶⁷ After conducting a 1969 study of bilingualism in the "Barrio", he concluded that:

. . . bilingualism is a mark of great communal sophistication and subtlety, of interpersonal stability and cultural sensitivity, rather than the badges of backwardness and disorganization that it has so mistakenly been taken to be.⁶⁸

Such an approach to the study of bilingualism is also favored by Geneva Gay who believes that sociolinguistic descriptors are better than statistics and quantitative analysis for the conducting of research in ethnically pluralistic classrooms.⁶⁹

While the sociolinguist is concerned with the varieties of language and the situational context, the psycholinguist views bilingualism from a different perspective. According to Haker, the psycholinguist is primarily concerned with "the learning and use of language by the individual."⁷⁰ According to him, the child learns speech and acquires meaning through parental reinforcement. Thus, the child learns what the parents know. Such a view is one of language acquisition as being a behaviorally influenced function.

The psycholinguist is largely concerned with such variables as attitude and motivation and how they are acquired. Such is the case with Lambert's social psychology theory of language learning which proposes that "the learner's ethnocentric tendencies and his attitudes toward the other group are believed to determine his success in learning the new language."⁷¹

McLaughlin conducted a review of the literature dealing with this very issue in the hope that it would ". . . serve to demythologize a number of beliefs about bilingualism and second language learning in children."⁷² In his work, he set forth a few of the major propositions related to bilingualism and second language learning. These included: 1) the question of a critical period for language learning; 2) simultaneous language learning; and 3) the effects of bilingualism on children. As it pertains to the notion of a critical period in language learning, McLaughlin found that there is no neurological evidence to support such a theory. According to him, there is no proof that learning a language is easier for children than for adults. Rather, McLaughlin sees any difference in facility as being a case of greater exposure to the second language.⁷³

McLaughlin also found no evidence to support the idea that the acquisition of the second language might be qualitatively different from the learning of the first. According to him, it is likely that the language acquisition process might be characterized by the same basic features and developmental sequences in both bilingual and monolingual children.⁷⁴

In addition, he found that "there is no evidence that bilingualism affects intelligence in the broader sense of basic, universal cognitive structures."⁷⁵ He reported that the studies in this area lacked adequate control of variables. Apparently, it is not bilingualism itself which is a problem, but rather the environment and attitudes to which the child is exposed, that cause failure to achieve.

In terms of the cognitive development of bilingual children, McLaughlin reported that there appeared to be some evidence supporting the superiority of bilinguals, but such studies raised rather than answered questions. According to him, "undocumented assertions and anecdotal evidence abound in this field, yet very few apodictic statements are justified in the light of present knowledge."⁷⁶

This search of the literature revealed, however, that there are others, such as Cummins, who believe that the cognitive and academic development of bilingual children are explicable in terms of the interaction among socio-cultural, linguistic, and school-program factors. Cummins points out that after ten years of bilingual education, there is still no consensus as to which approach is best--English as a Second Language, transitional bilingual education, or a maintenance approach.⁷⁷

All of these theories share a common failure to tell us which approach will afford greater success in the teaching of bilingual children. None tells us how we may enhance the learning conditions for such children. Margolis has accurately characterized the frustration of Puerto Rican students:

. . . their imperfect grasp of English which often seals both their lips and their minds, their confusion about who they are (what race? what culture?), a confusion compounded by the common ravages of white prejudice. . . Puerto Rican children have nowhere to go but out. . . out of the schools and into a world for which they are unprepared.⁷⁸

Educational, Racial, and Political Considerations.

The literature is inconclusive as to whether or not bilingualism and bilingual education favorably influence the cognitive make-up of the child. Many studies have been conducted around this issue and all results are subject to scrutiny.

Darcy, in a review of approximately 110 studies related to the effects of bilingualism upon the measurement of intelligence, found that those who believed bilingualism was an asset were in the minority. According to her, there is a dominant trend which considers bilinguals as individuals suffering a language handicap as measured by verbal tests of intelligence.⁷⁹

Goebes found that pre-adolescent girls in bilingual school settings demonstrated more heterocultural peer-group organization, a better self-image, and a greater acceptance of an alien culture as compared to those girls in a monocultural setting.⁸⁰

Skoczylas reported that children in kindergarten receiving bilingual instruction were able to achieve an equal growth in cognitive development as compared to a control group receiving monolingual instruction.⁸¹

Trevino found that bilingually instructed first to third graders showed marked improvement when tested with the California Achievement Test.⁸² Similarly, Balinsky's study demonstrated that first and second-graders instructed in Spanish scored significantly higher in those areas of the Metropolitan Achievement Test which required minimal language skills.⁸³

Taking into consideration all of the above studies, it is my conclusion that no theory of instruction, bilingual or otherwise, can be considered effective without due attention being paid to the different cultural values and linguistic differences of the children. In other words, bilingual education without bicultural education will not achieve the goals for which it strives.

In the final analysis, what we have is a policy on the part of the educational institutions of our nation which seeks to "Americanize" all children; that is, to train children to be proper "Anglos." While attempting this conversion, these institutions seek to eliminate the linguistic and cultural differences which are natural assets of many children. It is important to consider the political and racial overtones of this practice, since there is no evidence to suggest that any pedagogical aims are served by it. Schools apparently fail to realize that even citizenship requirements do not mandate a specific knowledge of English.⁸⁴

Krug has expressed the idea that the movement of bilingual education must be defined by the following central issue:

If the United States is a country with a dominant mainstream American-English culture, tolerant and hospitable to ethnic and minority cultures, then bilingual education ought to be, as stated in federal and state laws, transitional and supplementary. On the other hand, if the United States is perceived as a multicultural society where bilingualism and multilingualism are to be encouraged, then the degree of command of English by the Spanish-speaking children is irrelevant, and the bilingual or multilingual education of American children becomes a main objective.⁸⁵

According to him, such an issue must be resolved, and our national policy will have to be reconciled with the Lau guidelines which are intended to describe transitional rather than maintenance type bilingual programs.

The school must not be an obstacle but rather a facilitator in seeing that students take full advantage of their bilingual-bicultural background. As described by Harold Howe II, the U.S. Commissioner of Education in the late 1960's, the argument for wider cultural exposure for the purpose of improving our international relations is not nearly so important as our need to improve our domestic relations.

. . . This argument, that wider cultural exposure will help our international relations, stresses both national purposes and international amity. Perhaps the most important reason for bicultural programs, however, is not international, but domestic--our relations with each other here at home. The entire history of discrimination is based on the prejudice that because someone else is different, he is somehow worse. If we could teach all of our children--black, white, brown, yellow and all the American shades in between--that diversity is not to be feared or suspected, but enjoyed and valued, we could be well on the way toward achieving the equality we have always proclaimed as a national characteristic. And we would be further along the way toward ridding ourselves of the baggage of distrust and hatred which has recently turned American against American in our cities.⁸⁶

The need for a uniform policy of language instruction has been advocated by some organizations. Such a policy statement reflecting the educational aspirations and visions of the nation-wide Puerto Rican community was expressed by the New York Centro de Estudios Puertorriquenos.⁸⁷ On the way towards establishing such a uniform language policy, or at least a more adequate one than we have now, it is on the issue of cultural differences that we must focus. The following section will deal with the effects of such differences on the

achievement and failure rates of our Puerto Rican children; as manifested on their test performance.

The Testing of Puerto Rican Children

In this portion of the Review of the Literature, I have scrutinized those practices and procedures utilized by educators to assess certain specific attributes and/or deficiencies of bilingual children. As educators, we test the gamut of abilities and/or deficiencies and seek data concerning visual, motor, cognitive and perceptual abilities or disabilities.

Testing Instruments

Very specific instruments have been developed for such assessments and the market offers tests which claim to identify every conceivable form of learning disorder. Unfortunately, tests are often inappropriate for minority children, particularly children of non-English speaking backgrounds. Such diverse groups as the National Education Association, the daily newspaper writers, the many civil rights organizations, the federal court justices, and school psychologists have all pointed to the failure of the test publishing industry to consider fully the cultural and linguistic differences of minority children when constructing, publishing, and marketing tests.

Publishers of tests have responded to such critics by translating existing tests into the Spanish language, by adjusting norms for ethnic sub-groups, and by attempting to construct culture-free tests. Unfortunately, each of these attempts to alleviate discriminatory items and test practices has, in turn, resulted in necessarily renewed

protests by advocates for minority children.

While many continue to decry the use of tests as the sole means of assessing a child's ability or disability, tests are still crucial in determining a child's educational future and later economic and social success. Test publishers and those who utilize commercial tests have been negligent in giving due consideration to the problems associated with the testing of bilingual children. Most unfortunate is the continued denial of test-makers that it is the assessment instruments, and not the test-takers, which are at fault. The notion of validity demands that we ask of a test, "validity for whom?"

The beginning of the testing movement can be traced to the late 1800's and the early 1900's. During that period, the main focus was on the development of tests which provided a measure of intelligence. Among the pioneers in the field were Sir Frances Galton, an English biologist who believed that tests of sensory discrimination could serve as a means of measuring a person's intelligence. He was one of the first to apply statistical procedures to an analysis of data as obtained from such tests. James McKeen Cattell, an American Psychologist, believed in the importance of individual differences and is credited with the spread of the test movement in the United States.⁸⁸

Also among the pioneers was Alfred Binet who developed in 1905 the first of his famous intelligence scales. These scales were revised in 1916 by Lewis Terman of Stanford University, resulting in the Stanford-Binet scale which, for the first time, made practical the use of the term "intelligence quotient."⁸⁹

In 1917, with the advent of the first World War, there arose a need to assess groups of individuals. Because already existing tests were designed for individual administration, Army psychologists sought to develop a test which could be administered on a group basis. Such psychologists as Terman, Yerkes, and others tested more than one and a half million subjects with the new assessment tools which became known as the 'Army tests.'⁹⁰ At a later date, these tests were further revised for utilization with civilians.

Although the pace was less intense, other forms of tests were being developed during this period. Personality tests such as the Thematic Apperception Test and the Rorschach tests which were projective in nature, were developed in direct correlation with the psychoanalytical postulates which characterized this era.⁹¹

Both these projective tests and the intelligence tests were intended to measure an individual's performance. It was assumed that such tests would offer data which described both the positive and negative attributes of the test subjects. While not stated, these tests also served an underlying function of discriminating and differentiating among subjects. For example, one Army test sought to isolate those subjects who were "superior" and thus more qualified to become Army commanders for the troops in 1917.⁹² Of course, such a judgment of superiority was based solely on the test creator's notion of the meaning of superiority and was, therefore, discriminatory.

These tests, with minor revisions, are still used today to judge and place children in programs which may very well determine the child's

potential for success or failure in later life. And yet, according to Leon Kamin, former chairman of the Department of Psychology at Princeton University, the testing movement has been one of the most racist instruments of oppression in the history of our nation. For example, Terman's revision of intelligence tests was instrumental in determining feeble-mindedness and resulted in arbitrary sterilization of those deemed "unfit".⁹³

According to Kamin, such individuals as Terman, Yerkes, and their cohorts were involved in the assessment of immigrants, and the assessments made by them were then distorted to proclaim the superiority of Nordic types. Such assessments were also responsible for the characterization of Polish, Italian and Jewish immigrants as inferior. Actual immigration laws were established based on such characterizations.

Another well-known psychologist of that era, Carl Brigham, formulated the theory that intelligence was decreased with the introduction of "Black blood" and he advocated sterilization of those deemed "defective."⁹⁴ It is interesting to note that this same man was later to head the College Entrance Examination Board.⁹⁵

The belief that intelligence is inherited, and that certain races are inherently more intelligent than others, is all too prevalent even today. The rhetoric of the sixties and seventies which referred to minority students as "culturally deprived" is yet one more indication of just how widespread such beliefs are.

In the school setting, tests serve two major functions-- diagnosis and prognosis. We, as educators, are interested in finding out all we can about a child--his likes and dislikes, his abilities and

disabilities. Once we have made our diagnosis, we can create a prognosis. Based largely on test results, this may forever mark a child as incompetent or less competent than the norm. Children labelled as such are excluded from certain courses deemed too difficult or otherwise inappropriate for them, which has an obvious influence over their post-school lives. This is tragic if their prospects have been limited by inaccurate diagnosis.

The common denominator among all these procedures is a dependency on testing. Our basic philosophy about testing and classification has remained largely unchanged, with the only novelty being the introduction of newer methods of scoring and analyzing. Buros has pointed this out in his review of the fifty-odd years of the testing movement.⁹⁶

A test is "any standardized instrument designed to elicit a fixed response from the subject," with the goal being to find a means of easily scoring such responses. From such scores, it is assumed that data can be collected and interpreted with a certain degree of accuracy. Diagnostic and prognostic interventions resulting from such interpretations have been shown to lead to mislabelling, misclassification, and tracking systems that allow for little or no mobility from one track to another. In Hobson v. Hansen 348 F. Supp. 866,975 (D.D.C. 1972), tracking was held to be illegal because it allowed no significant movement from a lower track to a higher one.

There is no question that schools, faced with a highly technological, complex society, find themselves in need of establishing a means of providing the education required for functioning in such a

society. Because of the cost involved in the provision of such services, greater efficiency in teaching has become an issue. It was hoped that labels and tracks would lead to greater efficiency because, by referring to them, teachers would "know" exactly what was appropriate for their students. However, as countless studies have indicated, scholastic ability for many children has steadily decreased despite such clear labels and resultant determinations of appropriate programming.

Even greater pressure to be efficient is now being exerted on our teachers and school administrators. With the advent of the concept of accountability, new tests have been added to the plethora of tests to be administered. Administrative and educational decisions are often made based on the results of these newer tests.

Most of the tests administered today for collection of data on student behavior within specified class structures can be categorized as standardized or non-standardized. Such tests purport to measure educational potential and/or achievement, and it is the standardized tests which are the target for serious criticism by civil rights advocates.

Standardized tests claim to have been normed on a given population whereas non-standardized tests are usually those designed by the classroom teacher for diagnostic purposes. A major difference is that standardized tests seek to compare children in one classroom or school with children across the nation, a practice which by its very intent, leads to discrimination against individual differences. In this study, I have concerned myself with the harmful effects of such a

practice as it pertains to Puerto Rican children.

According to the Dictionary of Psychology, a standardized test is one which

. . . has been subjected to thorough empirical tryout and analysis and which provides time limits, instructions, scoring standards, reliability and validity coefficients, and norms.⁹⁷

In such a test, the child's performance is compared to that of the standardized sample, regardless of whether or not the child belongs to that group or socio-economic class. In other words, such a practice is often an attempt to compare apples with oranges, based on the assumption that they are both fruits. Unfortunately, the basic differences in attitudes and methods of expression differ greatly from child to child, let alone from migrant farmworker child to urban child, or "anglo" child to "Latino" child.

In the category of standardized tests, we find the infamous intelligence tests, the aptitude tests, and the achievement tests. We also find that such tests often complete a battery of assessment devices which are used to measure the special needs of specific students encountering learning difficulties.

The attempt by the testing industry to make such tests fairer has been, for the most part, unsuccessful. The attempt to establish regional or ethnic norms, or to "compensate" minority children for their "deprived backgrounds", has not made the use of such tests any more appropriate. Such a practice leads to lower expectations for minorities which, in turn, lowers the child's aspiration to succeed. It represents a shortsightedness that is harmful to all children in the

long run. Ethnic norms, no matter what the basis for such alterations in norming procedures, do not respond to the complex reasons of why minority children tend to score lower than Anglos on IQ tests. Rather, they make the assumption that such children are less competent in general, which leads to invidious comparisons between different racial and ethnic groups. The tendency is to assume that lower scores are ultimately indicative of lower potential, and thereby contribute to the self-fulfilling prophecy of lower expectations/lower levels of abilities for minorities. Such a practice also serves to reinforce the genetic inferiority argument that was advanced by Jensen, among others.⁹⁸

Following the logic behind different norms for different ethnic groups, we might expect test publishers also to find reasonable the establishment of different norms based on sex differences. If one considers that an almost infinite set of differing norm tables would be required to account for all such differences, we can easily see how impractical such a practice is.

Perhaps most dangerous of all is the resulting factor of homogeneous grouping with all ethnically alike persons being constrained within their own ethnic groups. The Dissemination and Assessment Center for Bilingual Education of Austin, Texas discusses this very issue in their publication I.Q. Tests and Minority Children. In summarizing the major points of controversy in such a practice, they pose the question: ". . . one must wonder what publishers would propose to do with a set of male/female twins who had a Mexican father and a Hungarian mother?"⁹⁹

The attempt to translate standardized IQ tests into Spanish has also been disastrous, and has created more problems than it has solved. Regional differences within a language make it almost impossible to use a single translation. For example, the word "toston" refers to a half dollar for a Chicano child, while for the Puerto Rican child it connotes the squashed and fried banana platter so often eaten.

Monolingual translations are also inappropriate because the language used by non-English speaking children is often a combination of two or more languages, as in the case of "pocho", "Tex-Mex" or "NewYorRican."

Additionally, we must consider the fact that just because a child speaks Spanish it does not necessarily mean that the child can read in that language. One finds many case histories of Spanish speaking children being tested in Spanish, but all instruction received by such a child has been in English.

The direct translation of a word or phrase often results in the use of a word which is not used with any great frequency or potency by the child. For example, the DACBE publication points out that the word "pet" is a common word in the English language, while its Spanish equivalent, "animal domestico" is hardly ever heard or used by the Spanish speaking child.¹⁰⁰ Even more distressing to the child is the connotation attached to certain non-vulgar phrases in English which, when translated into Spanish, reflect rather earthy and often vulgar expressions. As pointed out in the DACBE publication, translation of the descriptive phrase "large egg" results in the Spanish "huevon", satisfying grammatical considerations but creating a rather rude image

better left to imagination.¹⁰¹

Lyman has pointed out that a big problem is the ability to define "intelligence" accurately. In too many instances, intelligence, which is often considered to be static, is used to assess achievement and vice versa. "Achievement" by its very definition makes such a procedure invalid.¹⁰²

According to Lyman, an aptitude test is designed to predict the future level of performance and the achievement test is one designed to measure what the subject has learned, and evaluates "present levels of knowledge, skills and competence."¹⁰³ He points out that such tests are, in reality, measures of maximum performance which ask "examinees to do their best work; ability either attained or potential is being tested."¹⁰⁴ In addition, Lyman points out that there are three distinct factors reflected on a maximum performance test: innate ability, acquired ability, and motivation, but "there is no way of determining the degree of influence which each might have on the test performance."¹⁰⁵

Attempts to create culture-free IQ tests have also met with failure; in reality, there is no such thing as a culture-free test. In a test of mental ability, an attempt is made to determine the child's ability to manipulate certain elements of a problem into a predetermined solution. However, if all or some of the elements are not equally familiar to the child, the test is biased. The influence of cultural factors on conventional IQ test items is sometimes subtle, sometimes blatant, and measuring such influence is almost impossible. More important to an awareness of how discriminatory such tests may be

is the fact that, translated or otherwise, IQ tests often measure something other than that for which they were designed. Because the tests are created by middle-class Anglos, the tests seek answers that reflect the values of the dominant group, and cannot accurately measure the values of minority group members, levels of socialization, level of aspiration, or background experiences.

The literature indicates that the controversy surrounding the issue of whether or not the IQ model is a valid one continues, and educators must also deal with the less abstract issue of what information can accurately be obtained from such tests. All too often, the results of such tests tell the classroom teacher only what she already knows, and serve no function other than to insure that a child's record is replete with statistics.

The belief that existing testing practices and the tests themselves are basically racist and discriminatory in nature has been supported by the research of such persons as Mercer,¹⁰⁶ Kamin,¹⁰⁷ Abel,¹⁰⁸ and Brinson¹⁰⁹. Brinson points out that the testing institutions of this country were never "conceived or sustained to serve the interests of Blacks or other minorities."¹¹⁰ It is therefore not surprising that there are larger issues at stake in the continued use of such tests. Political and social power issues come into play. Mercer explains such a statement:

Two very different world views confront each other in the testing controversy: the Anglo-conformity view of American society, implicit in the APA paper, versus the view that America is culturally and structurally pluralistic, which is implicit in the writings of representative minority groups.¹¹¹

One group consists of the psychologists who control the APA and are the intelligentsia for those established elites in American society which control American governmental, industrial, educational, financial, and military institutions. . .the other is the emerging minority groups.¹¹²

Mercer further states the problem as follows:

In making inferences about children's 'intelligence' or 'aptitude', present procedure presumes that American is a culturally homogeneous society in which all children are being socialized into essentially the same Anglo culture and tradition. The fact that sociocultural factors are not systematically taken into consideration when test scores are interpreted reveals the latent assumption that sociocultural factors are constants which are not relevant to accurate 'diagnosis'.¹¹³

Sources of Test Bias

The literature identifies three major sources of test bias as being particularly detrimental to minority children. The first is content bias as defined by Reschly¹¹⁴ and ZirkeI.¹¹⁵ The bias herein is cultural in nature. In many tests little consideration is given to any culture other than the majority one.

Scheuneman defines an unbiased item as one where the probability of a correct response to an item is the same for all persons of a given ability level, regardless of that person's ethnic background.¹¹⁶ As has been well documented, such an unbiased item is rarely found in standard tests and many items reflect only the experiences and values of the dominant culture.¹¹⁷ Therefore, tests often do not measure mental ability, and in no way measure a child's ability to survive in the ghetto. "Ability" in these items is identified as the majority's perception of what constitutes ability, or the ability to succeed.

There are those who seek to justify such a bias as being helpful in determining those who will be able to succeed in school, in training programs, in jobs. They tell us that indeed, the tests do discriminate, but such discrimination is merely a reflection of the discrimination encountered in the "real" world (those who are competent vs. those who are less competent). Such a justification is of little consequence and even less comfort to those children who are forced to endure such discrimination from their earliest school years.

The idea of America as the great "melting pot" is no longer a sufficient rationalization for such a system. Certainly it is an idea unacceptable to the many diverse cultural/ethnic groups which comprise American society. Dr. Allen Sullivan addresses this issue:

Now, many of these culturally distinct groups have proclaimed a non-acceptance of amalgamation and that this picture of non-acceptance of cultural distinction must terminate, and that the society must be re-educated to the concept of the tossed salad philosophy rather than the melting pot (i.e., each element mixed with others while maintaining its own unique flavor, making a unique contribution to the total quality of the American experience with no element seen as worse or better than the other.¹¹⁸

The reality is that many behaviors commonly ascribed to the dominant culture are not inherent in other cultures and are, in fact, counter to the values and beliefs of such minorities. While all generalizations must be taken with a grain of salt, one might characterize many Anglos as being competitive, aggressive, and individualistic whereas many Latinos tend to be submissive and more readily attuned to peer pressure.

According to Adler, "asking and answering behaviors may be related to subcultural membership."¹¹⁹ According to him, "cultural

ethnocentrism that admits to only one correct way or method of performing violates the integrity of people with diverse heritage."¹²⁰

Taylor points out that to make the assumption that children will answer a question "correctly" even when they do not believe that answer to be correct, is erroneous. Many children will not verbalize answers and many times, they will completely refuse to participate in an experience which is alien to them, particularly when the questioner is someone to whom they do not relate well.¹²¹

The second source of bias as identified in the literature is linguistic in nature. Because the language used in the test items is often alien to both bilingual and monolingual children and often stilted, children may answer erroneously even when they know the information being asked. Clifford Stallings, Associate Professor at the United States International University in California has said that

. . . professionals who develop these tests do not come from the three to five thousand income bracket. The language used is not only language loaded but socially worded. For example, subsidy is welfare, an entrepreneur is a hustler, cool means cold, but cool also means a person who is together and a trick is not necessarily performed by a magician.¹²²

Stallings also points out that "one set of words is the language of one cultural value and the other set of words comes from a different cultural value."¹²³

Taylor has indicated that a test taker's chances for successful completion of test items is related, at least in part, to the similarity between the test taker's linguistic competence and the linguistic presuppositions of the test itself.¹²⁴

Peters discusses the language problem inherent in standardized tests and identifies such factors as complexity of instruction, language patterns which are alien to non-mainstream American children, and phonological bias (peculiar pronunciation systems of testors).¹²⁵

Meyers, in her examination of the type and frequency of errors on four verbal subtests of the WISC found to contribute to lower IQ scores of 131 black and Spanish speaking inner-city children, found that some of the children's answers to the verbal subtests reflect the deficiencies of the test manual rather than the children. She further questions whether we are "dealing with auditory perception or intelligence." As noted by Meyers, "Chile" was often confused with weather conditions and spiced food; "fur" was thought to be a type of tree; and "hero" was believed to be a sandwich.¹²⁶ Other psychologists would be in agreement, based on their own experiences in administering tests to minority children.

Taylor further proposes that the style of the written language might be "distinct and above colloquial speech" and that "certain phonemic distinctions have no relevance in the dialect."¹²⁷ Thus, linguistic problems of this nature may lead to false characterization of the children as being delayed in language acquisition.¹²⁸

The third important area of dispute deals with the disparity between the test taker and the testor. The famous Pygmalion study¹²⁹ and countless others have pointed out just how strongly attitude of teachers toward students can affect actual performance by the students. In the case of children who differ greatly from their teachers in environment, language, culture, religion, etcetera, the toll on student

performance is high. When teachers hold misconceptions about these children to be factual, the resulting low performance levels of the children are not surprising.

Political and social power struggles also effect test results, as pointed out by Eeles:

The fact that there is a definite and measurable relationship between the scores which pupils obtain on intelligence tests and the social status, or cultural background of their parents has been known since the time of Binet.¹³⁰

However, the saddest commentary on the testing industry may be the claim of Fine that

Testing has become a big business in this country. Those who manage and operate the standardized tests--and they are concentrated in a very few hands--are more interested in maintaining the status quo than in developing, evaluating and preparing better, more equitable tests. Often it is not the true measurement of the student's ability that really holds the greatest concern for test makers and their publishers, but how many tests can be sold that becomes the overriding factor and consideration.¹³¹

Cultural Considerations

A Thorough study of the behavior of Puerto Rican children warrants special consideration of the cultural factors which contribute to their individual make-up. The literature is replete with discussions of the differences among children and the ways in which such differences influence the behavior and the particular life-view of Puerto Ricans.

However, very little scientific evidence supports the conclusions reached in so many studies. It is very unlikely that an absolute definition of Puerto Rican culture can be created, since few Puerto Ricans adhere to or exhibit all behaviors which have been characterized

as Puerto Rican. We must remember that life's complexities defy easy classification. Thus, to anyone familiar with the national culture, many ideas found in the literature will be, to some degree, valid; others will be reflections of personal experience.

Towards a Definition of Culture

Edward B. Taylor, as cited by Mintz, offers the following definition of culture:

. . . that complex whole which includes knowledge, belief, art, morals, law, custom, and many other capabilities and habits acquired by man as a member of society.¹³²

Such a definition readily describes the culture of Puerto Rico. Because a definition of the culture is difficult to create, it is more practicable to outline those characteristics of the culture which seem to manifest themselves in the greatest number of Puerto Ricans. Bram, cited in Cordasco, has described such characteristics as being "probabilistic",¹³³ which means that the particular behaviors under discussion would more frequently occur among Puerto Ricans than non-Puerto Ricans. As Mintz points out, it is the meaning or interpretation given to cultural postulates, beliefs, institutions, symbols, etcetera, which distinctly reflects a Puerto Rican identity.¹³⁴

An example of one cultural institution found in many diverse cultures but distinctly different in purpose and importance among Puerto Ricans, is the idea of "compadrazgo" or "co-parenthood." For Puerto Ricans, the selection of a godparent is not merely an honor bestowed on a close friend or relative. Such a title carries with it distinct responsibilities and obligations.

The importance attached to the identification of cultural characteristics which are particular to Puerto Rican children becomes evident when one studies the reaction of such children to commonly administered tests, and when one examines the test items themselves. While it is possible to reach many conclusions about the influence of cultural traits on test results, it is important to remember that generalizations about any culture can lead to distortion. Although it is possible to generalize about the relationship between culture and test behavior, we must be aware of the fact that behavior varies for innumerable reasons. Social class, environment, urban or rural life-style, and countless other factors come into play in determining an individual's reaction to a specific situation.

Puerto Rican Culture: A Definition

History

In an attempt to characterize the predominant Puerto Rican culture of today, we must study the history of the Puerto Rican people, for theirs is a culture influenced by many other cultures. In 1493, the native Taino population of the island was invaded by the Spanish; subsequent colonization diluted the culture which existed prior to that time. The Spanish preoccupation with finding gold ultimately led to the extinction of the Tainos as the dominant group on the island. Those few Tainos who survived the cruel treatment of the conquerors remained isolated in the mountains, while elsewhere the Spanish influence tended to overwhelm Indian beliefs and practices. The frustration encountered by Spaniards when trying to utilize the Indians

as a labor force led the Spaniards to introduce African slaves to the island. Gonzalez describes the mixing of African and Indian blood as being responsible for the creation of the first "Puerto Ricans."¹³⁵

Gonzalez, in his very controversial work, "El Pais de Cuatro Pisos" also claims that the national culture of Puerto Rico, as described by many, has been the culture of the oppressor and not that of the oppressed. The culture of the oppressor, or the "elitist culture" according to Gonzalez, was a production of the landowners and the professionals. The culture of the oppressed is that of the slaves, the laborers and the artisans.¹³⁶

Gonzalez denies that Puerto Rican society has always been fragmented into classes and conflicting cultures. Rather, he believes that economic, social and cultural beliefs and practices of the Africans have always been the most important influence in Puerto Rico.¹³⁷ Such a theory is supported by Gonzalez's claim that the very smallness and instability of the Spanish population was no match for the larger and more stable African population consisting of slaves and laborers.¹³⁸ It is his conclusion that the African influences most strongly characterize the "true" Puerto Rican.¹³⁹

If we accept as true the conclusion of Gonzalez, we are led to believe that such cultural aspects as music, "national character", language, beliefs and customs are directly linked to the African heritage with a strong Spanish influence. But in addition to the Spanish and African heritages, Puerto Rican culture has also been shaped by the North Americans. Major changes in life-style, dress, language, and economic and social systems have resulted from the period

of North American colonization. However, North American influences were, according to Maldonado-Denis, by and large detrimental.¹⁴⁰

General Characteristics

In many instances, all Latinos are described by similar cultural attributes, although it is probable that it is Mexican and Puerto Rican peoples who most influence such descriptions. Steiner et al. present a summary of such general characteristics. Their research indicated that Hispanic groups in Chicago, despite individual differences in language and lifestyle, all tend to reflect one Hispanic culture and tradition.¹⁴¹

The three main themes which they found to run through all Latino groups were as follows:

1. Hispanic culture is based on extreme individual autonomy within the absolute boundaries created by (traditional Hispanic) society.
2. It is oriented toward persons rather than toward ideas or abstractions.
3. Because of extreme cultural commitment to individual autonomy, Hispanic culture exhibits the underlying mistrust of human nature.¹⁴²

The research of this group also concluded that cultural characteristics ascribed to some Mexican-Americans in the Southwest could, to some extent, be applied to Puerto Ricans. Among those traits were the following:

1. Limited stress on material gain as a primary goal;
2. An accommodating, cooperative attitude toward the solution of problems;
3. An emphasis on being rather than doing;
4. Emphasis on the father as the main authority figure;
5. Subordinate, domestically-oriented role for women;
6. Orientation to the present rather than the past or future;
7. A fatalistic, destiny-oriented outlook on life.¹⁴³

These seem to be the most commonly held beliefs about the nature of Hispanic culture. My review of the literature revealed that most authorities on Puerto Rican culture describe their subjects in similar terms.

Mintz claims that the following "value statements" best describe the Puerto Rican and serve to establish a Puerto Rican identity:

1. The near-universal use of Spanish and its attached sentimental significance;
2. The meaning of Puerto Rico's distinctive character as a Catholic country;
3. The underlying acceptance of a stratified society, with behavioral accompaniments attuned to near-automatic deference on the one hand, and the unchallenged exercise of authority on the other;
4. The belief in the integrity of the individual as based upon an inner worth, unrelated to worldly status or accomplishment;
5. A humanistic view of the world, with social values put above scientific values;
6. A double sexual standard, with a very strong emphasis on female chastity and a belief in the natural inferiority of women;
7. A much elaborated set of values dealing with maleness and male authority (machismo);
8. A reliance on shame, rather than guilt, as a source of social control, and a dependence on the opinions of others in forming and maintaining one's opinion of oneself;
9. A strong gregariousness and a dislike of solitude or loneliness;
10. A dependence on others expressed in docility, the inability to make difficult decisions, and the unwillingness to handle problems by correctly confronting them.¹⁴⁴

Mintz's conclusions are supported by the findings of many others, among them Maunez,¹⁴⁵ Casanova,¹⁴⁶ Nieves-Falcon,¹⁴⁷ etcetera.

Farquhar and Christensen identified six areas of traditional Spanish culture which, they believe, serve to explain many of the elements responsible for the responses of Puerto Rican children in a

testing situation. Among these was a preoccupation with authority figures, with the father being the total authority who demands obedience from his wife and children.

Also important was the strong differentiation in sex roles, with the children seeing the mother as defenseless and weak, while the man is perceived to be strong and superior. Work is not viewed as of importance in fostering independence per se, but as something that must be done for reasons of practical necessity.

Farquhar and Christensen also point out that Puerto Rican's world view is humanistic, absolutistic, and fatalistic, rather than scientific, realistic, and pragmatic. In discussing child rearing practices, they found that obedience to and dependence upon authority were of paramount importance, and also the repression of aggression specially in girls. Puerto Rican mothers tend to have a less rational attitude than Anglo mothers, and they justify behavior less frequently.¹⁴⁸

Specific Characteristics

Having identified some of the more outstanding general traits of Puerto Ricans, it is important to consider specific "Puerto Ricanisms" as they manifest themselves in a testing situation. Not all Puerto Rican children will manifest all traits, but the conscientious test administrator and data evaluator should be aware of their possible influence on a child's behavior.

The Puerto Rican idea of extended family distinctly differs from the more typical mainland family consisting of mother, father, and children. Among Puerto Ricans, the family includes not only the nuclear

family, but grandparents, aunts, uncles and cousins as well.¹⁴⁹

Shared moral and financial support, and shared child-rearing, are inherent in this concept. Perhaps it is the idea of shared child-rearing that most conflicts with the idea of family and authority held by teachers and school administrators. In many instances, an uncle or grandparent or cousin may be the one coming to the school, even when the parents of the child are in the home. In addition, the increasing divorce rate and penetration of North American life-styles into Puerto Rican culture may mean that the child's mother is solely responsible for providing for the child, thus necessitating the presence of another relative at school meetings and events.

The concept of co-parenthood or "compadrazgo", is a custom whereby a close family friend or relative stands in for the child during baptism, thus establishing a strong, life-time bond between godparent and child. The "madrina" (godmother) and "padrino" (godfather) are "compadres" (co-parents) of the child. The child is taught to extend the same respect and loyalty to godparents as to his natural parents and, according to Murillo,¹⁵⁰ the bond is a sacred one. Stycos has characterized this relationship as positive in providing family support:

. . . not only is the relationship sacred, but it taboos fighting and quarreling and establishes reciprocal rights and obligations such as aid in time of sickness, and in economic and other crises.¹⁵¹

Brams also views such a relationship as offering a sense of security beyond the capabilities of the immediate family. As he states,

the institution of godparenthood obviously extends the individual's trusts and reliances beyond the immediate family and, in some cases, provides a person with a substitute for a defaulting group.¹⁵²

Although school officials must be careful not to assume that the importance of the child's parents is diminished by the presence of other relatives or by "compadres" and "madrinas" and "padrinos", they must treat these extended family members as equally important to decisions affecting the child's education. Furthermore, they must realize that while classroom materials and test items may consider the nuclear family an adequate representation of the concept of "family", the Puerto Rican child may not. He may be confused or affronted by what amounts to a rejection of his family.

Considering the focus on family so common to Puerto Rican culture, it is not surprising that loyalty to the family takes precedence over loyalty to community members, school teachers, or anything or anyone else. According to Fitzpatrick,

In the period during which the Puerto Rican struggles for greater solidarity and identity as a community, the family remains the major psychological support for its members.¹⁵³

Unfortunately, loyalty to family above all else has also been a point of conflict between dominant and minority cultures.¹⁵⁴ For instance, school administrators cannot often understand or accept the fact that a child's entire family will just pick up and return to the Island when a relative dies, or that the entire family must leave the state to visit a relative in another state. The offensive attitude of school personnel when they condemn such travels makes the child feel that his or her family is quite peculiar.

Those school officials seeking to establish good rapport with the Puerto Rican child must therefore be careful to avoid condemnation of

the child's life-style, must respect the child's feeling that the family is paramount in importance, and must refrain from imposing their own values on the family lifestyle. The child will feel isolated and rejected if he or she perceives any attempt to condemn the activities of his or her parents.

The role of the parents in the Puerto Rican family may or may not be the same as that of parents in an Anglo family. For many Puerto Ricans, the father is the central authority figure and the wife and children, together with other members of the household, are expected to obey the rules established by the father. Whether or not such rules seem to be reasonable, unquestioning obedience is demanded.

Following the notion of male superiority, the father will often be allowed certain freedoms not available to the mother. For example, the father can go out drinking with "the guys," or may have a quiet extra-marital affair, but the wife is not permitted to do likewise. Although the degree of freedom and mobility she experiences is influenced by her class, age, education and financial status, the norm for a Puerto Rican woman is the life of mother and wife. She is ultimately responsible for raising the children, managing the home, taking care of her husband and, sometimes, other relatives. She may be free to go out unaccompanied but, basically, such ventures outside the home are for purposes of shopping or visiting, and wives are not permitted to enjoy activities comparable to the pleasures available to men. School officials, if they are aware of this double standard, may avoid making statements to the child which seek to condemn the child's whole family and existence. It is not that they must approve of it, but rather than they can appreciate the fact

that such a life-style is an integral part of the child's world.

Puerto Rican children are, by and large, raised within clearly defined sex role boundaries. Such roles are reinforced by both the family and the society. According to Nieves-Falcon, the value of submission is instilled in the girl, while "macho" aggressive behavior is expected and encouraged in boys; it is not considered necessary to teach boys about the equality of women. Thus, the belief in the supremacy of men over women is passed on from generation to generation.

The Puerto Rican boy is taught that he must be a "man" at all times--he must not show fear and must not play "sissy" games. The Puerto Rican girl, on the other hand, is taught to be soft and "helpless", and to depend upon men. The encouragement of submissiveness and reliance upon men ignores the girl's potential to be a capable, self-supporting, and independent woman. Complete womanhood is seen as being a woman who has married and had children. Dependency upon others is a way of life, first on parents and later, on a husband.

The irony of such role establishment is that in our society, particularly among Puerto Rican women living on the mainland, many women end up as single parents and sole supporters of the home. Despite all the attention paid to what a woman should be, little attention is given to the present state of affairs and women are often unprepared to deal with the realities of their lives.

Vazquez-Nuttal¹⁵⁵ found that among Puerto Rican women living in Boston, the majority of whom were single parents, there was little support from males. Most of the support these women received came from other females, and it appeared that such a female-support coping

mechanism emerged from the necessity of surviving without traditional male support. Although support from other females always existed, it is now a factor within a man-less context. For the children of such families, a new world-view has been created, despite the fact that they may have been programmed for traditional roles.

Within the school context, the more traditional sex role may cause conflict and impose upon the Puerto Rican child the sense of being a "freak." For example, school outings are often forbidden to Puerto Rican girls, not because the parents do not want the child to benefit from them, but because the parents do not allow their daughter to go out unaccompanied by a male member of the family. Boys, on the other hand, are often told that they must participate in what the culture considers to be "sissy" activities, and confusion and discomfort result when boys are placed in home economics classes, or asked to participate in gym classes with girls.

While much can be said for the attempt by school officials to offer to the children another view of life, it is important to remember that there is a difference between suggestion and imposition of a new value system. It is all well and good for teachers and test creators to present girls in non-feminine roles and boys in non-masculine roles, but at the same time they must be willing to accept the child's inability to accept such radical departures from traditional family values. In other words, educators should provide a different perspective on sex-role stereotyping without engaging in a conflict between "right" and "wrong". To shame boys for being "macho" or to

condemn girls for being submissive will only serve to further alienate the children.

Despite the severe financial deprivation which often characterizes the home-life of Puerto Rican children, most of these children receive an abundance of love, affection, and care. Children are considered to exist by the "grace of God" and many families believe in having as many children "as the Lord can provide."¹⁵⁶ Children tend to be the center of attention in the home and at family gatherings; in general, they accompany their parents everywhere. For instance, a requested parent-teacher conference may mean that the teacher will have to cope with several additional young children. This is not because the Puerto Rican parent intends to overwhelm or annoy the teacher, but that the parent expects all her children to be welcome. Babysitters are not much used, and children may come to school tired not because their parents do not care but because the parents care so much that they will not leave their children at home without them.

Children often are expected to live their lives as adults, and bedtime is often the same as that of the adults in the home. In some instances, toilet training is delayed until the child is considered "ready" with little attention being paid to set timelines. This, in itself, is a pattern of child-rearing which distinctly differs from that of the more dominant "American middle-class home."¹⁵⁷

Rather than make the assumption that Puerto Rican parents do not care, or that all Puerto Rican parents are bad parents, school officials must be careful to express their expectations without condemning the child-rearing practices of the family. For example, if

late bedtimes or excessive absenteeism are obviously taking their toll on the child's ability to function in school, parents must be so advised, but in a manner which expresses genuine concern for the child's welfare rather than disgust for the family's way of life.

Many teachers have commented on the seeming unruliness of Puerto Rican children when they enter school for the first time. Such labels as "hyper-active" have been indiscriminately attached to children, without any attempt to understand why such children may seem to be more physically and verbally active than their Anglo peers.

Discipline is largely a function of the mother, although the father is used as a threat by the mother. Discipline may include threats, punishment, ridicule, and in some instances, corporal punishment. It has been pointed out by Nieves-Falcon and Farquhar and Christensen that inconsistency on the part of the parent often leads the child to test the limits. Such inconsistency when administering disciplinary action may well be a result of the parent's strong feelings of love and tenderness and the simultaneous feeling of helplessness when a decision must be made.¹⁵⁸ Such a confusion of emotions is further complicated by the parent's assumption that the child does not yet have the "capacity" to understand adult ways and behaviors.

With regard to matters of classroom discipline, basic principles of behavioral management may be applied. Consistency in disciplining techniques is of utmost importance to the child and reinforcement of positive rather than negative behavior is to be recommended. Classroom teachers should realize that parents who are relied upon to discipline their children for school-related actions will soon lose respect for

the teacher. This is not because parents do not or cannot assume responsibility for their children, but rather because parents expect that the school will deal with school-related problems. Most parents consider education to be very important, and teachers and other school officials are expected to be able to handle the children on their own.

The idea of "respeto" or "respect" was once the most outstanding aspect of Puerto Rican culture and still plays a major role in interpersonal relationships. This concept is at once the dual one of self-respect and respect toward others.¹⁵⁹ According to Safa, the idea of "respeto" is a lasting relationship between the parents and the children, and is based upon the deference which the young are expected to show to their elders.¹⁶⁰

Lauria, as cited in Cordasco and Bucchioni defines the concept of "respeto" as follows:

(it) is a quality ascribed to the properties. It signifies proper attention to the requisites of the ceremonial order of behavior, and to the moral aspects of human activities. This quality is an obligatory self-presentation; no Puerto Rican is considered properly socialized unless he can comport himself with respeto.¹⁶¹

Puerto Rican children are taught to respect the family, the elders, the neighbors and those in positions of authority. Such a system of respect is reciprocal among adults but somewhat one-sided when children and adults are together. This is not to say that parents do not respect their children. Rather, it is that children are obliged to demonstrate respect at all times in dealing with their parents, regardless of the circumstances.

In the classroom, such an attitude is often mistaken for disrespect. When a child is being addressed by a teacher, and particularly, when a child is being scolded by the teacher, the child will tend to avoid eye contact with the adult. Such an evasion of eye contact does not connote disrespect as is often thought, but rather the proper degree of respect which the child has been taught to express. The down-cast eyes indicate total obedience and shame and yet, on countless occasions, a teacher is enraged by what seems to be an act of defiance. School administrators often encounter similar behavior when addressing parents of children and the same misunderstanding of intent is common.

"Respeto" is represented in the Spanish language by the incorporation of two very distinct forms of the word "you." In English, "you" is used in speaking to both children and adults but in Spanish, care must be taken to use "usted" when addressing an elder or a stranger. The more formal "tu" is reserved for use with children, close friends, or relatives and is considered to be insulting when used improperly.

Similarly, adults are addressed differently when one wishes to indicate respect. For example, in English it is permissible to address Johnny's mother as Mrs. Jones. However, a literal translation of "Mrs." into "Sra." is not evidence of the same degree of respect as the use of the more correct "Dona."

It is obvious from the above examples that the concept of "respeto" is so important to Latino culture that the language itself reflects the concept. For school officials to ignore or be unaware of the importance of "respeto" is such an affront to Puerto Ricans that

lack of respect may result.

A less obvious cultural trait is that of dependency. Nieves-Falcon points out that dependency by children is encouraged until the child is fully mature, regardless of the emotional or physical development of the child.¹⁶² And, for the Puerto Rican woman, dependency is a life-long characteristic. Children are told that they must do what the parents want and that they must rely on their parents for everything. It is very rare for Puerto Rican children to make decisions on their own and only marriage or the leaving of home, permits young people to attain some degree of independence.

Test administrators have often commented on the Puerto Rican child's seeming inability to proceed on his own in a testing situation. Again, one must be careful in drawing conclusions unless one is totally familiar with the culture of the child. What may appear to the educator to be evidence of immaturity or unassertiveness or lack of knowledge may be little more than a child's reluctance to some independence. For a child to respond independently may very well be considered an act of rudeness; children will often wait for teachers to tell them what to do and when to do it.

In pointing out some of the more distinctive cultural traits as they pertain to Puerto Ricans, it is not my intention to paint a picture which is bleak. Puerto Rican parents, despite possible differences in manner of expression, exhibit the same aspirations for their children as do the middle-class Anglo parents.¹⁶³ If we want our Puerto Rican children to achieve in our schools, we must concentrate

on teaching academic skills rather than attempting to inculcate in the children the values of an alien culture. It is not that Puerto Rican children must be sheltered from exposure to other life-styles but rather, that respect for their own be maintained.

Bucchioni claims that the curriculum of most schools actively excludes "all reference to the realities of poverty, discrimination and hostility which are the lot of many Puerto Ricans and their children."¹⁶⁴ For him, the child-teacher conflicts which often result from differences in backgrounds, are expressed by the child's restlessness, inattentiveness and sometimes, disorderly behavior.¹⁶⁵ He emphasizes the need for schools to demonstrate their willingness to accept the child's language and culture if optimal learning environments are to be created.

While many of these cultural traits are evident in the behavior of Puerto Rican children, not all children will demonstrate all traits. Particularly when considering the fact that our schools are made up of distinctly different groups of Puerto Rican children, we must remember that the experiences of the immigrant, transient, or third-generation child are all different. Valcourt describes the immigrant children as those born and raised in Puerto Rico and who migrated to the mainland during the last three years. He describes transients as those born in Puerto Rico or the United States mainland and who have attended school in both countries. And lastly, he defines a third group--the "neorican." Such a child was born and raised on the mainland and has always attended school on the mainland.¹⁶⁶ Each distinct group of Puerto Rican children has his own set of cultural values and

while many are common to all groups, an attempt to classify all as being the same will often produce disasters in the classroom.

For those who truly desire to win the confidence and respect of Puerto Rican children and their parents, it is essential that they pay attention to a child's educational and emotional needs. The child's background and experiences may be an asset in the classroom and if correctly interpreted, should allow for both teachers and children to function effectively.

Conclusion

Standardized tests are used for the purposes of prediction, diagnosis, evaluation, and the dissemination of data. Since the beginning of the testing movement, our children have endured countless testing experiences and it is certain that they will continue to be evaluated throughout their school years.

The original purpose of intelligence testing was the assessment of low-achieving children in order to differentiate between those with "normal" and "subnormal" intelligence. Binet and Simon, for example, developed their intelligence tests for the purpose of identifying those children who would not benefit from regular school programs and who could not be easily fitted into the behavioral mold demanded by their school.¹⁶⁷ Thus, tests were often used to exclude children from regular classes and in some instances, from public schools. As pointed out by Thomas Oakland, such practices may have benefitted institutions, but all too frequently, they have not benefitted the children.¹⁶⁸

In recent years, legislative and judicial actions have focused on this very issue of classification and exclusion. Court cases have been initiated in an attempt to define appropriate assessment practices or to alter existing practices which are inappropriate, while legislative modifications have attempted to provide educators with guidelines for improvement of educational opportunities for all students.

The 1954 U.S. Supreme Court decision in Brown v. Board of Education signaled a new era in which the federal court system has been willing to consider the legality of educational policies and practices which affect racial balance, the allocation of resources among and within school districts, and other issues relating to civil and constitutional rights. Assessment practices have entered into the litigation process in at least three ways. Perhaps the majority of civil rights cases reviewed by federal courts affecting education have utilized test data to document the effects of alleged discriminatory practices. In these cases test data are entered as reliable and valid evidence. Another group of cases, however, directly challenges the use of certain psychological tests and assessment practices with minority group children as being discriminatory. For example, the legality of classifying children, of assigning them to special education classes or low-ability groups or excluding them from certain educational programs has been considered. A third set of cases considers the appropriateness of curricula to advance minority students' language, academic, social, and vocational development. While testing is not directly an issue raised by the plaintiffs or defendants, it becomes an issue in the resolution of the cases (e.g., Lau v. Nichols).¹⁶⁹

Until very recently, judges have been notably reluctant to determine the appropriateness of various assessment practices. However, a more forceful role has been undertaken in the last few years as is evidenced by the 1971 class action suit, Larry P. v. Riles, 343 F. Supp. 1306, affirmed 502 F. 2d 963 (9th Cir. 1974). Plaintiffs in this case demanded that psychological evaluations or assessments of

black children, whether by means of group or individual ability or intelligence testing, be halted as such tests did not properly account for the cultural background and experience of the children tested. The plaintiffs also asked that placement of black children in classes for the mentally retarded, when based on the results of culturally discriminatory tests and testing procedures, be ended. Furthermore, plaintiffs demanded that children were not to be identified individually by data from individual or group I.Q. tests; data not be placed in children's school records or reported to classroom teachers or other school officials.

Defendants in Larry P. did not deny that biases may be inherent in I.Q. tests. Rather, they sought to justify the racial imbalance in their special education classes as being nother more than the result of the location of educable mentally retarded classes in predominantly black schools prior to desegregation of the San Francisco Unified School District. Defendants also pointed out that such racial imbalance was created by the parents themselves, as parents of white mentally retarded children frequently placed their children in private schools.

Defendants also sought to justify the use of conventional I.Q. tests by citing the lack of appropriate alternative measures. According to the defendants in this case, the plaintiffs' claim of violation of the Civil Rights Act of 1964 and the right to equal protection under the California Constitution and the Fourteenth Amendment was unfounded.

The court did not find defendants' argument to be very substantial

and rejected both their defense and plaintiffs' request for specific forms of relief. In the opinion of the court,

. . . the absence of any rational means of identifying children in need of such treatment can hardly render acceptable an otherwise concededly irrational means, such as the IQ test as it is presently administered to black students.¹⁷⁰

In rejecting plaintiffs' demands for specific forms of relief, the court granted only a preliminary injunction "as to future testing and future re-evaluation only."¹⁷¹ In other words, black students currently in classes for the mentally retarded could be retained in such classes "but their yearly re-evaluations must be conducted by means which do not deprive them of the equal protection of the laws."¹⁷²

No injunction was issued requiring defendants to take affirmative action to compensate black students wrongfully placed in classes for the retarded and the court rejected any ethnic quota system for special classes as proposed by the plaintiffs. In the court's opinion, such a quota would "leave fulfillment of the needs of retarded black children at the mercy of white parents who may decline to consent to the placement of their own retarded children in educable mentally retarded classes and thereby reduce the number of retarded black children who may be placed in them."¹⁷³

However, the court did order that the school district not assign black students to classes for the educable mentally retarded on the basis of criteria which place primary reliance on the results of IQ tests as they are currently administered if the consequence is social imbalance in the composition of special classes. The court

more recently reaffirmed its position by requesting a moratorium on the use of the Wechsler Intelligence Scale for Children, Revised (WISC-R) and the Stanford-Binet in any determination of placement of minority children into special programs.¹⁷⁴

Faced with the court's mandate, the California State Board of Education chose to declare a moratorium on the use of these two measures to include all children being considered for special education placements. These actions have resulted in a reduction in the number of children being placed in programs for the mentally handicapped and the learning disabled. Concurrent with such a trend has been the utilization of other tests such as the Peabody Picture Vocabulary Test and the Columbia Mental Maturity Scale in combination with the use of observational techniques to ascertain children's abilities.

Diana vs. California State Board of Education, C.A. No. C-70 37 RFP, was another significant court case but was resolved in an out-of-court settlement on February 5, 1970 rather than by judicial decree. This case had a marked impact on policies regarding the assessment of minority children. This suit's primary objective was to prevent children from being misclassified and misplaced, rather than remediating existing conditions of misplacement. In Diana the plaintiffs were Mexican-American public school students from predominantly Spanish-speaking homes claiming that they had been misplaced in classes for the mentally retarded based on inappropriate test measures derived from the Stanford-Binet and the Wechsler Intelligence Scale For Children. Results of these tests revealed I.Q. scores ranging from 30 through 72, with a mean score of 63, all such scores

being in the so-called "educable mentally retarded" range. After being retested bilingually, seven of the nine students were no longer within the retarded range and the average gain was 15 IQ score points.

The plaintiffs in Diana claimed that the testing procedures utilized for placement were discriminatory and completely inappropriate in view of the fact that the tests used placed heavy emphasis on verbal skills requiring fluency in the English language. Plaintiffs further claimed that ability in Spanish was ignored, that questions were culturally biased and that the tests had been standardized on white, native-born American children.

The Consent Decree required that all children whose home language was other than English be tested in both their primary language and in English, and that interpreters be used when a bilingual examiner was not available. It further stipulated that children could be tested only with such tests or sections of tests that did not depend on vocabulary, general information or other unfair verbal questions. Unlike the Larry P. decision, the Diana agreement stated that children already in classes for the mentally retarded must be retested in their primary language and re-evaluated only as to their achievement on nonverbal tests or sections of tests. In addition, each school district was required to submit to the state a summary of retesting and re-evaluation and a plan listing supplemental individual training which would be provided to help each child adjust to regular class placement. Psychologists in California were to develop norms for a new or revised IQ test which would reflect the abilities of Mexican-American children

on the basis of Mexican-American norms rather than on those of the population as a whole. In addition, any school district which evidenced significant disparity between percentages of Mexican-Americans in its regular classes and those for the retarded were required to submit an explanation of such a disparity.

Perhaps most significant of all, the Diana consent decree emphasized the need for all contesting parties to effect changes on the local and state levels that would minimize the occurrence of unfair and inappropriate use of tests. Since Diana, several policies regulating school testing practices have been changed in California and Burrello, DeYoung and Lang, in their undated report, disclosed that almost 10,000 students have been returned to regular classes.¹⁷⁵

The resolution of Diana was instrumental in resolving another class action suit, Guadalupe v. Temple Elementary School District,¹⁷⁶ which alleged inappropriate testing, misclassification and improper class assignment of Mexican-American and Yaqui Indian children. The January, 1972 out-of-court decision in this suit contained many of the provisions agreed to in Diana. In 1974, the United States District Court issued a judgment that 123 California school districts retaining a disproportionate number of Mexican-American children in classes for the educable mentally retarded must develop plans to reduce the numbers so that by 1976 the percentage of Mexican-Americans so-placed each year would not exceed the percent of Mexican-Americans in the general district population.¹⁷⁷

1970 marked a significant expansion of the basic concepts and issues dealt with in the above cases and new suits were brought asking

damages for children allegedly suffering irreparable harm as a result of discriminatory testing practices. The legal concept of "damages" includes money awarded to plaintiffs who have been injured and has caused great concern among school officials.¹⁷⁸

Pertinent court cases, legislation and numerous research studies have pointed out how important to the future of our children is the ability to attain an adequate education. Equal educational opportunity has been determined to be a right, rather than a privilege, and it is our task to find the means to guarantee such a right.

Because educational practitioners still believe that some sort of testing is necessary for purposes of evaluation, planning and placement, it is important that we develop a means of testing which serves to benefit rather than harm the children.

Cultural themes, values, language structure, personal learning styles, and psycho-linguistic skills are all aspects of a student's personal identity which are related to ethnic and cultural background. One premise of bilingual/bicultural education is that healthy personality development and adequate academic achievement are directly related to a school's ability to respond to individual needs and diverse cultural traits. When a student's cultural background is respected, his academic and psychological development is enhanced. And, the reverse has also been shown to be true. Acculturation is not a cure-all for the educational problems of Latinos and the problems inherent in a policy of acculturation have been summarized by such people as Manuel Ramirez, III, in "Effects of Cultural Marginality on

Education and Personality."¹⁷⁹ Ramirez points out that several studies have indicated that Latinos who identify with their own cultural background develop a more stable sense of identity.¹⁸⁰ Furthermore, when Latino students are forced to reject their cultural backgrounds, the schools become one cause of students' educational and psychological problems.¹⁸¹

It is in response to such studies as these that educators have begun to realize that cultural democracy and bilingual/bicultural educational programs are important concepts. Cultural democracy is quite distinct from the melting pot theory of education which our schools have followed for so many generations of students, and rather than deny or suppress cultural traits, seeks to enhance the students' knowledge of and respect for diverse cultures.

In the Guidebook which I have created as a part of this study, I seek to demonstrate just how respect for cultural traits may be incorporated into the testing process and how important it is that test administrators become aware of possible explanations for student test performance that are results of cultural rather than intellectual differences. It is my hope that such a guidebook will help to decrease the frequency of underestimation of a student's real ability. It is also supposed that more careful testing practices and scrutiny of test scores will serve to enhance the child's total school experience and end the practice of placing responsibility for failure solely on the shoulders of students. Negative influences on the child's self-concept and the resulting peer perceptions of a student's ability or

lack of it must be reduced and official "failures" must be re-evaluated. Even more importantly, we must consider just how far-reaching our testing policies are. A child summarily dismissed as incompetent or less competent than his peers, will continue to suffer from such a stigma for his entire life. Because test results and subsequent class placements may very well determine a child's entire future education and vocation, test administrators must be made accountable for their interpretation of test scores and recommendations about appropriate educational programs for the child. Such accountability should include a thorough analysis of testing instruments and a recognition by test administrators of their own biases.

A clearer understanding of Puerto Rican culture and how it may influence test performance should assist educators in the creation of a more democratic classroom atmosphere in which respect for basic abilities and the rights of each student is nurtured rather than suppressed.

FOOTNOTES

¹Chief Justice Warren, Brown v. Board of Education, 374. U.S. 483 (1954).

²E. Peal and W. E. Lambert. "The Relation of Bilingualism to Intelligence." Psychological Monographs, Volume 76, 1962, 1-23.

³U. Weinreich. Languages in Contact. New York: Linguistic Circle of New York, 1953, p. 1.

⁴J. B. Pride, The Social Meaning of Language. Oxford: Oxford University Press, 1971.

⁵C. A. Ferguson, "Diglossia" Word, Volume 15, 1965, pp. 325-340.

⁶J. A. Fishman, The Sociology of Language, Rowley, Mass.: Newbury House, 1972, p. 104.

⁷J. A. Fishman, "Bilingualism with and Without Diglossia; Diglossia With and Without Bilingualism" in J. Macnamara, editor, "Problems of Bilingualism" The Journal of Social Issues, Volume 23, 1967, pp. 29-38.

⁸Sadie Perrie, "They Must Think In English," Texas Outlook, Volume 26, June 1942, pp. 13-14.

⁹Eloy Gonzalez and Leroy Ortiz, "Social Policy and Education Related to Linguistically and Culturally Different Groups," in Journal of Learning Disabilities, Volume 10, No. 6, 1977, pp. 332-338.

¹⁰Francisco Cordasco, "Spanish-Speaking Children in American Schools," International Migration Review, Volume 9, No. 3, Fall, 1975, pp. 379-382.

¹¹Clara Rodriguez, "The Structure of Failure II: A Case in Point," The Urban Review, Volume 7, No. 3, 1974, pp. 215-226.

¹²Horatio D. Lewis, "To Train or Not To Train Teachers For Spanish-Speaking Communities," Viewpoints, Volume 49, No. 4, 1973, p. 16.

¹³Emilio L. Guerra, "The Orientation of Puerto Rican Students in New York City," Modern Language Journal, Volume 32, October 1948, pp. 415-420.

¹⁴Irving Lorg and Frank Mayans, Jr. "Vestible and Regular Classes for Puerto Rican Migrant Pupils," Teachers College Record, Volume 55, February 1959, pp. 231-237.

¹⁵Cayce Morrison, "The Puerto Rican Study--What It Is--Where It Is Going," Journal of Educational Sociology, Volume 28, December 1954, pp. 167-173.

¹⁶Isaura Santiago Santiago, "A Community's Struggle For Equal Educational Opportunity," ASPIRA vs. Board of Education of the City of New York, OME Monograph #2, Princeton, N.J.: Educational Testing Service, 1978.

¹⁷Lourdes Travieso, "Puerto Ricans and Education," Journal of Teacher Education, Volum 25, 1975, p. 128.

¹⁸U. S. Book of Facts, U.S. Bureau of the Census, 1967.

¹⁹Special Study of Reading Grades in Selected Manhattan Neighborhoods. Columbia University School of Social Work Research Center, 1961.

²⁰Unreleased Report on Analysis of High School Graduating Class of June, 1965. Prepared by Board of Education of the City of New York, cited in Francisco Cordasco and E. Bucchioni, The Puerto Rican Experience, Totowa, N.J.: Littlefield, Adams & Co., 1975, p. 327.

²¹Board of Education of the City of New York, New York City Public Schools--Facts and Figures, 1965 - 1966.

²²Ibid.

²³ASPIRA vs. Board of Education of the City of New York, 58 F.R.D. 62 (S.D., N.Y. 1973), "Needs Assessment Prepared for Submission to E.S.A.A. For Funding By Community School District 4."

²⁴Ibid.

²⁵Bureau of Labor Statistics, Bureau of the Census, 1980 Report.

²⁶ASPIRA of America, Inc. Hispanic Segregation Trends In Major School Districts With Large Hispanic Enrollment, New York, April, 1978, pp. 11-12.

²⁷Massachusetts State Advisory Committee, "Issues of Concern to Puerto Ricans in Boston and Springfield," Massachusetts State Advisory Committee to the United States Commission on Civil Rights, Boston, February, 1972.

²⁸Hector I. Vazquez, "Puerto Rican Americans" The National Elementary Principal, Volume 50, No. 2, 1970, pp. 65-70.

²⁹Center for National Policy Review, Trends in Hispanic Segregation 1970-74, No. 2, Washington, D.C., Catholic University Law School, January, 1977.

³⁰ASPIRA of America, Inc., op. cit., pp. 11-12.

³¹Association of Farmworker Opportunity Programs, The Interface Between Desegregation and Bilingual Education As It Affects Hispanic Migrant Children, Raleigh, North Carolina, June, 1979, pp. 18-20.

³²Ibid.

³³National Institute of Education (NIE), Trends in Hispanic Segregation, 1970-74, cited in Center for National Policy Review, op. cit.

³⁴Ibid.

³⁵The United States Census Bureau has used at least four different procedures to identify Hispanics. Dr. Reynolds Farley identifies the procedures and omissions in Report to the Honorable Judge Paul Egly In Response to Minute Order No. C822 854, Ann Arbor, Michigan: University of Michigan, Population Studies Center, November, 1978, pp. 7, 9 and 10.

³⁶Brown v. Board of Education, op. cit.

³⁷Keyes v. School District No. 1, 413 U.S. 189 (1973), rehearing denied, 414 U.S. 883 (1973).

³⁸Who is an Hispanic remains unclear. For example, the SY 1976-1977 Office for Civil Rights Elementary and Secondary School Civil Rights Survey data for Hispanics was collected on Spanish-surname rather than Hispanic identity.

³⁹Hart v. Community School Board of Brooklyn No. 2, 383 F. Supp. 699 at 733 (E.D.N.Y. 1974), aff'd 512 F.2d 37 (2d. Cir. 1975).

Morgan v. Hennigan, 379 F. Supp. 410 at 415 (D. Mass. 1974).

⁴⁰Evans v. Buchanan, 393 F. Supp. 428 (D. Delaware, 1975).

⁴¹Brown v. Board of Education, supra.

⁴²Luis A. Baez, Ricardo R. Fernandez and Judith F. Gaskin, "Safeguarding the Rights of Hispanic Children Desegregation in Milwaukee Public Schools: A Community Perspective," Midwest National Origin Desegregation Assistance Center, School of Education, University of Wisconsin at Milwaukee, 1979, unpublished document, pp. 79-80.

⁴³Lau v. Nichols, 414 US 563 (1974).

⁴⁴Bruce E. Cohen, et al., "The Co-Existence of Bilingual/Bicultural Programs with School Desegregation Decrees," Washington, D.C.: Mecian-American Legal Defense and Educational Fund, April 1978, p. 18.

⁴⁵Center for Law and Education, Inc. Harvard University Newsnotes #18, March 1981, p. 1.

⁴⁶Theodore Andersson, "Bilingual Education: The American Experience," The Modern Language Journal, Volume 55, No. 7, 1971, pp. 427-439.

⁴⁷Josue M. Gonzalez, "Coming of Age in Bilingual/Bicultural Education: A Historical Perspective," in Inequality in Education, Center for Law and Education, Inc., Harvard University, 1975, p. 10.

⁴⁸Ibid.

⁴⁹Bruce E. Cohen, op. cit.

⁵⁰Roberta Vann, "Bilingual Education Today: The Unresolved Issues," Language Arts, Volume 55, No. 2, February 1978, pp. 150-153.

⁵¹Theodore Andersson, op. cit.

⁵²Bruce Gaader, et al., "Bilingualism--From the Viewpoint of the Administrator and Counselor, November 4, 1966, ERIC ED 018286.

- ⁵³Ibid., p. 18.
- ⁵⁴Perry A. Zirkel and John Greene, "The Academic Achievement of Spanish-Speaking First Graders in Connecticut," Connecticut State Department of Education, Bureau of Comp. and Comm. Educational Services, April 1971, ERIC ED 054275.
- ⁵⁵Kal Gezi, "Bilingual-Bicultural Education: A Review of Relevant Research," California Journal of Educational Research, Volume 25, No. 5, 1974, pp. 223-239.
- ⁵⁶Rudolph Troike, "Bilingual Education in the United States: The First Decade," International Review of Education, Volume 24, 1978, pp. 401-405.
- ⁵⁷James G. Moffat, "Bilingual Teacher Training: What Is Really Needed?" Educational Horizons, Volume 55, No. 4, 1977, pp. 205-209.
- ⁵⁸Ibid.
- ⁵⁹Robert F. Roeming, "Bilingualism and the National Interest," The Modern Language Journal, Volume 55, 1973, p. 81.
- ⁶⁰Jose Hernandez, "Hispanic Migration from the Caribbean and Latin America: Implications for Educational Policy, Planning and Practice," Conference Proceeding. ERIC CUE Urban Diversity Series No. 65, August 1979, ERIC ED 179624.
- ⁶¹Tom Bethell, "Against Bilingual Education," The Modern Language Journal, Volume 63, 1975, pp. 276-280.
- ⁶²Bruce Gaader, "Teaching Spanish in School and College to Native Speakers of Spanish," Hispania, Volume 55, 1972, p. 120.
- ⁶³Ibid., p. 167.
- ⁶⁴Robert F. Roeming, "Bilingualism and the Bilingual Child: Symposium With Introduction," The Modern Language Journal, Volume 49, March/April 1965, p. 143.
- ⁶⁵Piccheotti, as cited in Ron Rodgers and Diego Rangel, "Learning for Two Worlds: Chicago's Juan Morell Campos Bilingual Center," American Education, Volume 8, 1972, p. 32.

⁶⁶Ibid.

⁶⁷Joshua Fishman, "Bilingualism in the Barrio," The Modern Language Journal, Volume 53, 1969, p. 151.

⁶⁸Ibid.

⁶⁹Geneva Gay, "Viewing the Pluralistic Classroom As A Cultural Microcosm," Educational Research Quarterly, Volume 2, No. 4, 1978, pp. 45-59.

⁷⁰Daniel Haker, "Psychological Aspects of Bilingualism," cited in R. F. Roeming, "Bilingualism and the Bilingual Child," op. cit.

⁷¹Wallace E. Lambert, "Psychological Approaches to the Study of Language Learning and Bilingualism," The Modern Language Journal, Volume 47, 1963, p. 114.

⁷²Barry McLaughlin, "Second Language Learning in Children," Psychological Bulletin, Volume 84, 1977, p. 456.

⁷³Ibid.

⁷⁴Ibid.

⁷⁵Ibid., p. 453.

⁷⁶Ibid., p. 456.

⁷⁷James Cummins, "Linguistic Interdependence and Educational Development of Bilingual Children," Review of Educational Research, Volume 49, 1979, pp. 221-251.

⁷⁸Richard Margolis, "The Losers, A Report on Puerto Ricans and the Public Schools" ASPIRA, Inc. N.Y. Office of Education, Dept. of HEW, Washington, D.C.: Bureau of Research, May 1968, ERIC ED 023779.

⁷⁹Natalie Darcy, "A Review of the Literature on the Effects of Bilingualism Upon the Measurement of Intelligence," Journal of Genetic Psychology, Volume 82, 1953, pp. 21-57.

⁸⁰Diane D. Goebes and Milton Shore, "Some Effects of Bicultural and Monocultural School Environments on Personality," American Journal of Orthopsychiatry, Volume 48, No. 3, 1978, pp. 398-407.

- ⁸¹Rudolph v. Skoczylas, "Bilingual Education: An Alternative to the Traditional All English Curriculum," California Journal of Educational Research, Volume 26, 1975, pp. 140-151.
- ⁸²Bertha Trevino, "Bilingual Instruction in the Primary Grades," The Modern Language Journal, Volume 54, 1970, pp. 255-256.
- ⁸³Warren Balinsky and Samuel Peng, "An Evaluation for Spanish-Speaking Children," Urban Education, Volume 9, No. 3, 1974, pp. 271-278.
- ⁸⁴Jacqueline Cordova-Ferrer, "Essays on Urban and Bilingual Education," 1978, ERIC ED 164677.
- ⁸⁵Mark M. Krug, "Bilingual Education--Let Us Clarify the Issues," Social Education, Volume 43, February 1979, pp. 113-116.
- ⁸⁶Harold Howe II. "Cowboys, Indians and American Education," Address given at National Conference on Education Oppression for Mexican-Americans in Austin, Texas, April 25, 1968, Published by the Southwest Educational Development Laboratory, Austin, Texas.
- ⁸⁷Centro de Estudios Puertorriquenos, "Toward a Language Policy for Puerto Ricans in the United States: An Agenda for a Community in Movement," City University of N.Y. 1977, ERIC ED 164690.
- ⁸⁸Anne Anastasi, Psychological Testing, 4th Edition, New York: Macmillan Publishing Co., Inc., 1976, p. 8.
- ⁸⁹George Robb; L. C. Bernardoni, and Ray W. Johnson, Assessment of Individual Mental Ability, New York: Intex Educational Publishers, 1972, p. 4.
- ⁹⁰E. Cerda, Psicometria General, Barcelona, Espana 1972, p. 84.
- ⁹¹Ibid., p. 85.
- ⁹²Ibid., p. 85.
- ⁹³Leon Kamin, "I.Q. Tests as Instruments of Oppression--From Immigration Quotas to Welfare," South Today, Volume 4, July 1973, pp. 6-10.

⁹⁴Ibid.

⁹⁵Ibid.

⁹⁶Oscar K. Buros, "Fifty Years In Testing: Some Reminiscences, Criticisms and Suggestions," Educational Research, Volume 6, No. 7, July/August 1977, pp. 9-15.

⁹⁷James P. Chaplin, Dictionary of Psychology. New York: Dell Publishing Co., 1975, p. 512.

⁹⁸A. R. Jensen, "How Much Can We Boost IQ and Scholastic Achievement?" Harvard Educational Review, Volume 39, 1969, p. 1-23.

⁹⁹Dissemination and Assessment Center for Bilingual Education, I.Q. Tests and Minority Children, Austin, Texas, 1977, p. 4.

¹⁰⁰Ibid., p. 2.

¹⁰¹Ibid., p. 3.

¹⁰²Howard B. Lyman, Test Scores and What They Mean, 3rd Edition, Englewood Cliffs, N.J.: Prentice Hall, 1978, p. 28.

¹⁰³Ibid., p. 20.

¹⁰⁴Ibid., p. 18.

¹⁰⁵Ibid., p. 19.

¹⁰⁶Jane R. Mercer and June F. Lewis, "System of Multicultural Pluralistic Assessment: Technical Manual," New York, N.Y.: The Psychological Corporation, 1978.

¹⁰⁷Leon Kamin, op. cit.

¹⁰⁸National Education Association Task Force, "Reports Presented at the 52nd Representative Assembly of the National Educational Association, Washington, D.C.: July 3-6, 1973.

¹⁰⁹Les Brinson, "Cultural Diversity Within a Framework of Psychological Assessment," The High School Journal, Volume 60, 1976, pp. 85-92.

¹¹⁰Ibid., p. 88.

¹¹¹Jane R. Mercer, "Test 'Validity', 'Bias', and 'Fairness': An Analysis From the Perspective of the Sociology of Knowledge," Interchange, Volume 9, No. 1, 1978-1979, p. 3.

¹¹²Ibid., p. 4.

¹¹³Ibid., p. 4.

¹¹⁴Daniel J. Reschly, "Non Biased Assessment and School Psychology" Des Moines, Iowa: State Department of Public Instruction, Division of Pupil Personnel Services, August, 1978.

¹¹⁵Perry A. Zirkel, "Spanish-Speaking Students and Standardized Tests," New York: State Department of Education, November, 1972, ERIC ED 080594.

¹¹⁶Janice Scheuneman, "Ethnic Group Bias in Intelligence Test Items," Paper presented at the Annual Meeting of the American Educational Research Association (62nd Annual Meeting), Toronto, Ontario, Canada, March 27-31, 1978.

¹¹⁷Lawrence M. Rudner, "Efforts Towards the Development of Unbiased Selection and Assessment Instruments," Paper presented at the International Symposium for Educational Testing (3rd Annual Meeting), The Netherlands: University of Leyden, June 28, 1977, ERIC ED 148899.

¹¹⁸Allen R. Sullivan, "Issues in Assessing Multi-Cultured Youth: Implications for Teachers." Paper prepared for the Conference on Competency Based Teacher Education, The Potential for Multi-Cultural Education. Madison, Wisconsin: Teacher Corps Association, November 1-2, 1973, ERIC ED 115621.

¹¹⁹Sol Adler, "Data Gathering: The Reliability and Validity of Test Data From Culturally Different Children," Journal of Learning Disabilities, Volume 6, 1973, p. 432.

¹²⁰Ibid., p. 434.

¹²¹Orlando L. Taylor, "Language Issues and Testing" Journal of Non-White Concerns in Personnel and Guidance, Volume 6, 1978, pp. 125-132.

¹²²Clifford J. Stallings, "Contemporary Identification and Program Models for Gifted Third World Children," Paper presented at the 54th Annual Convention of the Council for Exceptional Children, Chicago, Illinois: April 4-9, 1979, ERIC ED 122560.

¹²³Ibid.

¹²⁴Orlando L. Taylor, op. cit., p. 125.

¹²⁵Cassandra A. Peters, "Some Communications Problems Related to Testing Minority Populations with Standardized Instruments. Paper presented at the 62nd Annual Meeting of the Association for Education in Journalism, Houston, Texas, August 5-8, 1979.

¹²⁶Edna D. Meyers, "Is Chile a Food, A Description of Weather, or Why Black Children Do Poorly on the WISC." ERIC ED 101372.

¹²⁷Orlando L. Taylor, op. cit., pp. 126-127.

¹²⁸Ibid.

¹²⁹R. Rosenthal and L. Jacobson, Pygmalion In the Classroom: Teachers' Expectations and Pupil's Intellectual Development, New York: Holt, Rinehart and Winston, 1968.

¹³⁰Kenneth Eells, et al. Intelligence and Cultural Differences Chicago: The University of Chicago Press, 1951.

¹³¹Benjamin Fine, The Stranglehold of the I.Q.. Garden City, N.Y.: Doubleday and Co., Inc., 1975.

¹³²Edward B. Taylor, in Sidney Mintz, "Puerto Rico: An Essay on the Definition of a National Culture" in Status of Puerto Rico: Selected Background Studies, United Puerto Rico Commission on the Status of Puerto Rico, 1966, p. 342.

¹³³Joseph Bram, in Cordasco and Bucchioni, "The Lower Status Puerto Rican Family," The Puerto Rican Community and Its Children, Metuchen, N.J.: The Scarecrow Press, 1972, p. 103.

¹³⁴Mintz, op. cit.

135 Jose Luis Gonzalez, "El Pais de Cuatro Pisos y Otros Ensayos," Rio Piedras, Puerto Rico, Ediciones Huracan, Inc., 1980, pp. 9-45.

136 Ibid.

137 Ibid.

138 Ibid.

139 Ibid.

140 Manuel Maldonado-Denis, Puerto Rico: Una Interpretacion Historico-Social, Siglo Veintiuno--Editores S.A., 1971, p. 126.

141 Frank Steiner, et al., "Bilingual/Bicultural Education. . .A Privilege or a Right?" Illinois State Advisory Committee to the United States Commission on Civil Rights, Washington, D.C., May 1974, ERIC Document No. ED 097167.

142 Ibid., citing Jane and Chester Christian, p. 20.

143 Ibid., citing James G. Anderson and William H. Johnson, p. 20.

144 Mintz, op. cit., p. 371.

145 Juan Mose Maunez, "Proceedings of Conference on the Education of Puerto Rican Children on the Mainland," edited by Jose M. Gallardo, Puerto Rico. . . State Department of Education, Commonwealth of Puerto Rico, Dept. of Education Publishing Division, 1972 (October 18-21, 1970), p. 24. ERIC Document No. ED 114433.

146 Clara Casanova, "Puerto Ricans" Instructor, No. 81, January 1972, p. 43.

147 Luis Nieves-Falcon, Diagnostico de Puerto Rico, Rio Piedras, Puerto Rico, Editorial Edil, Inc., 1972.

148 William W. Farquhar, Christensen and Edwards, "Motivational Factors Influencing Academic Achievement of Eleventh Grade Puerto Rican High School Students," Educational Publication Series, Educational Research Series, No. 43, December 1967, Michigan State University.

- 149 Nieves-Falcon, op. cit.
- 150 Ildaura Murillo Rohde, "Family Life Among Mainland Puerto Ricans in New York City Slums," Perspectives in Psychiatric Care, Volume 14, 1976, p. 176.
- 151 M. J. Stycos, "Family and Fertility in Puerto Rico," in Cordasco and Bucchioni, op. cit., pp. 76-88.
- 152 Joseph Bram, op. cit., p. 109.
- 153 Joseph A. Fitzpatrick, "Transition to the Mainland," in Cordasco and Bucchioni, op. cit., pp. 114-120.
- 154 Frank Steiner, op. cit., citing Dr. Ramirez, p. 21.
- 155 Ena Vazquez Nuttall, "The Support System and Coping Patterns of the Female Puerto Rican Single Parent." Journal of Non-White Concerns in Personnel and Guidance April 1979, pp. 128-137.
- 156 Murillo Rohde, op. cit., p. 176 and Nives-Falcon; op. cit.
- 157 Stella Chess, et al. "Social and Child Rearing Practices," American Psychological Association Divisional Meeting, November 17, 1967, ERIC ED 016722.
- 158 Farquhar and Christensen, op. cit., and Nieves-Falcon, op. cit.
- 159 Claudia Lewis, "Some Puerto Rican Viewpoints," Childhood Education, Volume 43, October 1966, pp. 82-84.
- 160 Helen Icken Safa, "An Analysis of Upward Mobility in Low Income Families: A Comparison of Family and Community Life Among American Negro and Puerto Rican Poor," Syracuse University Youth Development Center, June 1967, ERIC ED 015226.
- 161 Anthony Lauria, "Respeto, Relajo and Interpersonal Relations in Puerto Rico" in Cordasco and Bucchioni, op. cit., pp. 36-48.
- 162 Nieves-Falcon, op. cit.

¹⁶³Perry Alan Zirkel, "Puerto Rican Parents and Mainland Schools, Hartford Model Cities," November 1971, ERIC No. ED 062473.

María A. Montalvo and Earl J. Ogletree, "Educational Aspirations of Puerto Rican Mothers for Their Children," ERIC ED 164728.

¹⁶⁴Eugene Bucchioni, "Home Atmosphere and Success in School," in Coradisco and Bucchioni, op. cit., pp. 278-283.

¹⁶⁵Ibid., p. 283.

¹⁶⁶Gladys Ann Valcourt, "The Puerto Rican Student in the American Public Junior High School Today," Unpublished Dissertation DAI 38 (6-A) December, 1977, p. 3346.

¹⁶⁷Thomas Oakland and Paula Matuszck, "Using Tests in Non-discriminatory Assessment," in Psychological and Educational Assessment of Minority Children, edited by Thomas Oakland. New York: Brunner/Mazel, 1977, p. 52.

¹⁶⁸Ibid.

¹⁶⁹Ibid., p. 38.

¹⁷⁰Larry P. v. Riles, 343 F. Supp. 1306, p. 1314.

¹⁷¹Ibid.

¹⁷²Ibid.

¹⁷³Ibid., at p. 1315.

¹⁷⁴Ibid., at p. 1316.

¹⁷⁵L. Burrello; H. DeYoung and D. Lang. Special Education and Litigation: Implications for Professional and Educational Practice, Ann Arbor, Michigan: Institute for the Study of Mental Retardation and Related Disabilities, University of Michigan, No date.

¹⁷⁶Gudalupe Org., Inc. v. Temple Elementary School District Civ. No. 71-435 (D. Arizona, 1972).

¹⁷⁷Burrello, DeYoung and Lang, op. cit.

¹⁷⁸For example, Stewart v. Philips, Civil Action No. 70-1199F, October 1970 (D. Massachusetts).

¹⁷⁹Manuel Ramirez, III, "Current Education Research: The Basis for a New Philosophy for Educating Mexican Americans," University of California, Multi-Lingual Assessment Project, 1972, pp. 8-13.

¹⁸⁰Ibid.

¹⁸¹Ibid.

C H A P T E R I I I
TESTING PUERTO RICAN CHILDREN: A PRACTICAL GUIDEBOOK
FOR PSYCHOLOGISTS AND TEACHERS

Overview

This chapter presents a guidebook for psychologists and teachers to testing Puerto Rican children in the least discriminatory manner. It follows a common sense approach, highlighting the most relevant issues, providing recommendations to improve test selection, administration and interpretation of scores as it pertains to Puerto Rican children.

The content for the guidebook reflects what the literature and experts in the field have identified as the major areas of concern to this particular population. A thorough research of the literature, approximately 950 publications, provided the backdrop from which the conceptualizations, design and development of the guidebook emerged.

The ^oguidebook consists of a preface, and of four (4) major discussion topics: Testing Practices; Testing Puerto Rican Children; Critical Issues and Recommendations, Alternative Testing Procedures; and Tests Most Widely Used with Puerto Rican Children. The most important issues under each section are presented and their relevance to the Puerto Rican population examined. Suggestions and recommendations are offered to guide test administrators in the least discriminatory assessment of Puerto Rican children.

TESTING PUERTO RICAN CHILDREN:
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PREFACE

The flagrant violations of the fundamental aspects of the theory of education and of the social and economic goals of America that are observed in the practice of education among bilinguals point to the urgent need for greater real professionalization of the educational practitioners and of further public enlightenment. The frequent prositution of democratic ideals to the cause of expediency, politics, vested interests, ignorance, class and "race" prejudice, and to indifference and inefficiency is a sad commentary on the intelligence and justice of a society that makes claim to those very progressive democratic ideals.

(Sanchez, 1934, 769-770)

The number of Puerto Ricans, as well as that of other minority children, is on the increase in the educational systems of "our" nation. More than ever, schools must provide services to meet the needs of these children. More than ever, testing practices must not hamper the educational development of these children. But as long as forty-six years ago, Sanchez was warning us about the use of mental tests on bilingual children. It is sad that, today, testing practices and instruments still serve to discriminate against bilingual children. Test administrators must therefore be conscious of the negative consequences which standardized tests have as a result of the cultural, linguistic, and socio-economic biases within them.

Because of the distinctiveness of the Puerto Rican population and its cultural, linguistic, and socio-economic background, a need

has arisen for a practical guidebook to assist test administrators in the process of testing Puerto Rican children in the least discriminatory manner.

The following assumptions about the readers of this guidebook have guided its development:

1. that they thoroughly understand the field of testing;
2. that they respect cultural diversity;
3. that they are committed to equal educational opportunities for all children;
4. that they have a genuine interest in providing non-discriminatory assessment services to Puerto Rican children.

Testing Practices

Historical Overview

As a practice, testing has been with us for the last century. In the United States, James Mackeen Cattell initiated the testing movement.² In 1916 Lewis Terman revised and adapted Binet's famous intelligence scales.³ In 1917, when the need to select troop commanders arose during World War I, group tests came into vogue. Developed for the Army by a team of psychologists, among them Terman, these first group tests were known as the Army Alpha Tests." A boom in the testing movement followed their widespread use.⁴

But in 1977, Oscar Buros, commenting on fifty years of testing in the United States, felt that nothing further had been accomplished in the field of testing since it reached maturity in 1927.⁵ According to him, a leading measurement expert, tests are constructed in the same way now as then, "mistakes and all," with advances being made only in the computerized technology used for scoring.⁶ Furthermore, Leon Kamin analyzed most of the history of testing in the United States as racist in nature.⁷ Test results were used to support assumptions about the relative superiority or inferiority of different races.⁸ Today, even if unintentionally, tests still discriminate against minority children, including Puerto Ricans. By means of their very construction, these tests are biased. They are developed by members of the dominant culture, and hence tend to reflect the experiences and background of their reference group. Thus, these tests favor children of similar background, and have negative consequences for children from other populations.

Testing Functions

Testing in the schools grew out of the necessity in school systems for sound administrative decisions regarding the efficiency and effectiveness of educational programs. Testing has also become important for the planning of interventions for individual childrens' needs. For example, the testing of ability has become requisite within the school format for the implementation of remedial programs and the provision of special services. Since the enactment of legislative mandates pertaining both to the identification of children with special needs, and the provision to them of appropriate services, the practice of testing in the schools has become even more critical.⁹

Testing practices, thus, have two major functions: edumetric and psychometric. In edumetric testing the concern is with within-person growth. Criterion-referenced testing is a crucial component of this form of testing.

Within the context of psychometric testing the emphasis is on the individual differences which exist among the subjects. Norm-referenced tests fall in this category. Because the emphasis is on determining differences among individuals it lends itself to erroneous comparison and conclusions as in the case of the racial inferiority issue.

Who Administers the Tests

The advent of the testing movement was also the advent of the testing specialist, or test administrator. The art of testing was imparted to prospective examiners in formal courses and through

practicums in the field.

Within the school setting, the examiners role became of central importance in the testing of children. In this role not only were the testing specialists found, but counselors and teachers as well, regardless of whether they received specific training for such a role. The child's actual educational future rested in their hands, as decisions were made for educational interventions based on test results.

Who Is Tested

Within the school system, it is usually counselors or teachers who refer for testing those children who appear to need special services. Among these are children whose academic progress is inadequate, children with behavior problems, and, once in a while, children who demonstrate outstanding ability. School systems may test children routinely to identify those with special needs; or to group them according to ability or to place them in various academic programs.

A majority of Puerto Rican children who are referred for testing are so referred because they have behavior problems, or because they may experience difficulty in school due to language limitations. Rarely are they referred because they are gifted children. Attesting to this is the disproportionate number of Hispanic children and other minorities in special education programs and particular education classes, such as those for the educable mentally retarded. Hispanic and other minority children are likewise under-represented in classes for the gifted.^{10, 11}

The question of whether or not the referral process itself is discriminatory has been raised more than once, but with inconclusive results.¹² Allegations have also been made that special education classes are a form of exclusion of minorities from full-time regular education.¹³ But what is certain is the fact that there are Puerto Rican children who need special education services in order to succeed in school. These children must be tested so that, based on test results, as well as on the results of other methods of assessment, educational interventions and strategies, may be planned for them.

Norm-Referenced Tests

Of particular importance in the assessment of Puerto Rican children is the use of standardized norm-referenced tests, defined as tests

which have been subjected to thorough empirical tryout and analysis and which provide time limits, instructions, scoring standards, reliability and validity coefficients, and norms.¹⁴

In these tests, the child's performance is compared to that of the norm group, whether or not the child belongs to that group or socio-economic class. According to test critics, these tests, typically standardized on white, middle-class populations, do not provide a fair assessment of the minority child's ability. In their content, their language, and the values inherent within them, these tests factor the class represented by the test makers who are also, typically, white and middle class. Furthermore, these tests often include a time factor, and thus promote a race against time rather than an atmosphere conducive

to optimal test performance. A child who misses an item may not know the answer, but he also might know it and just not be fast enough.

Standardized tests are of two kinds, group and individually administered. Group tests are used when there is a need to test a large number of subjects, such as for placement in ability groups. These instruments are easier to administer and score than individually administered tests, and do not require much intervention from the examiner other than an explanation of instructions. On the other hand, individually administered tests require the examiner's involvement, often throughout the test. The instructions are also more complex. But it is by this kind of testing that the examiner is able to observe the child and gather information which can be used in an assessment of the child's complete profile.

This guidebook will focus on individually administered tests, such as the Wechsler Intelligence Scales, the Stanford-Binet Scales, and others.¹⁵ It should be noted that many of the issues discussed in reference to individually administered tests are of relevance to group tests, and that reference to group tests will be made where necessary. But placement into special education classes and the provision of special education services are so greatly influenced by the results of individually administered tests, that their critical role in education suggests that if we must choose which tests to study here, we must choose them.

Suggested Readings

- Buros, O. K. "Fifty Years in Testing: Some Reminiscences, Criticisms and Suggestions." Educational Research 6 (1977): 9-15.
- Carrol, A. W.; Seeley, K. R. "Historical Review of Intelligence Testing and the Handicapped." Academic Therapy 10 (Winter, 1974-1975):141-149.
- Drew, C. "Criteria-Referenced and Norm-Referenced Assessment of Minority Group Children." Journal of School Psychology, 11 (1973):323-329.
- Kamin, Leon. "IQ Tests as Instruments of Oppression--From Immigration Quotas to Welfare." South Today, 4 (July 1973):6-10.
- Stone, Chuck. "Testing and the Power Struggle." Intergrated Education, 9 (July/August, 1971):4-9.
- Tyler, R. W. "Testing for Accountability," Nations Schools, 86 (December 1970):37-39.

Testing Puerto Rican Children:
Critical Issues and Recommendations

The Examiner in General

The reviewed literature reveals an overwhelming amount of evidence establishing the fact that when Puerto Rican children are tested in the United States, most examiners are not Puerto Rican, do not speak Spanish and come from middle class homes. Thus, in order to insure examiners' optimal understanding of Puerto Rican childrens' complete profile such as abilities, potentials, and the effects on them of culture, language and socio-economic background, examiners must have:

- *a thorough knowledge of themselves, including possible biases and negative attitudes, and how these may interfere in their perception and interaction with Puerto Rican children;
- *a thorough understanding of how the child's performance on a given test is affected by the cultural, linguistic, and socio-economic bias in the test;
- *a thorough familiarity with the tests most widely used with Puerto Rican children.

In addition to the aforementioned characteristics, which the examiner must possess in order to test Puerto Rican children, the following are considered fundamental:

- *formal training and practical experience in the assessment of children;
- *thorough knowledge of tests and testing procedures;
- *skill in the selection and utilization of tests;

- *awareness of the issues current in the field of testing;
- *knowledge of the processes used in test standardization and norming procedures;
- *thorough understanding of the significance of the norm population to generalizations with reference to other populations.

Test Bias in General

When a test favors one group of test takers over another, we say the test is biased. That is, the test has in it a quality which is susceptible to negative interaction with a particular factor or group of factors. Thus, when we say that a test is culturally, linguistically, or socio-economically biased, we mean that the test performance could be attributed to cultural, linguistic, or socio-economic conditions rather than to the factor(s) which the test purports to measure. Each of these types of bias as found in tests will be discussed subsequently, since they are the biases which discriminate the most against Puerto Rican children.

Many studies have failed to establish statistical evidence to support the notion that tests discriminate against minority children.¹⁶ Gordon and Rudert's study went as far as suggesting that if the test items showing differences between races or classes were eliminated, then all the items would have to be discarded.¹⁷ Apparently, the authors have forgotten that tests are not meant to differentiate races or social classes. The validity and reliability argument has also been used to

justify the use of tests which are biased against minority populations. Since these tests have been shown to be statistically reliable and valid instruments, their adequacy for all populations has been accepted.

However, test critics contend that the issue is not one to be decided by statistical analysis.¹⁸ The fact that Puerto Rican and other minorities so frequently score lower on these tests makes their validity questionable. The differences among children arise from the dissimilarities in backgrounds, not only from dissimilarities in actual capabilities. And according to a leading expert in the field, this issue will be settled, in the long run, in the political arena; as of now, the debate appears to continue, with no resolution forthcoming in the near future.¹⁹

Specific Issues

Examiner Bias

Bias is defined as "prejudice."²⁰ When we refer to the examiner's bias we are referring to the examiner's prejudice and how this may influence the test performance of Puerto Rican children. Even though the bias may sometimes have favorable consequences, we will discuss the negative consequences it may have and its significance in the children's test performance.

Stereotyping promotes ignorance about certain groups, ignorance which leads to misjudgement and to unfounded expectations. Sometimes an examiner's expectations lead to the self-fulfilling prophecy, i.e. having the children perform as expected rather than as they can

really perform. For example, referral forms for Puerto Rican children are often loaded with adjectives such as "shy", "withdrawn", "non-responsive", and "lethargic".²¹ Thus, the examiner may enter the testing situation expecting the children to behave in the same manner and will, by his or her mode of interaction with the children, elicit the same behavior from them as that described on the forms.

Test scores can be affected by the examiner. For instance, if the examiner maintains a distance, is not friendly, and projects a cold attitude, or if he or she maintains a "dead pan" face, the child will be inhibited. Anastasi provides a comprehensive summary of the literature on this subject.²² Influence over the examinee can come from the examiner in the following categories:

- *the examiner's personal characteristics: race, age, sex, professional or socio-economic background, training and experience, appearance;
- *the examiner's manner of interaction before and during the test administration: "warm" or "cold";
- *examiner's expectations: subtle postural and facial cues, non-verbal communication.

Examiner Bias: Recommendations

In view of the Central role which examiners play in the testing situation, and the significance of the effects which they may have on test performance, it is recommended that the examiner:

1. Bring into conscious awareness any hidden biases in themselves; these, when brought to light, can be understood, controlled, and, one hopes, eliminated;
2. Critically evaluate the ways in which their values, motives, and anxieties may come into play when they interact with Puerto Rican children, and how these may affect test performance;
3. Accept the notion that they will most likely influence test results, which will help in minimizing the possible effects;
4. Realize that the child will most likely be inhibited by unfamiliarity with the examiner, and that this is a natural reaction to an alien situation;
5. Make every effort to give confidence to the child;
6. During the testing situation:
 - Allow for ample time for establishing rapport;
 - Use activities which will relax the child and stimulate his eagerness to find out about the testing situation;
 - Maintain close proximity to the child, which will help to impart to him a sense of warmth and ease;
 - Insure that the child has become familiar with both the setting and the examiner

Cultural Bias

For the most part, Puerto Rican children come from a cultural background in which the climate, the clothing, even the foods they encounter in the United States will differ from what they have been used to in their native country. Moreover, there are many forms of behavior which are fostered by the dominant culture, but not necessarily by ethnic and other minority cultures. The widely held notion that North Americans foster competition, aggressiveness, and independence comes to mind when we talk about cultural differences. Hispanics have been thought more people-oriented, fatalistic, and dependent upon the family.²³ Although hard-core evidence to support these contentions is difficult to find, there are certain kinds of behavior which do predominate over others in one group or another. Mercer states that ". . . beyond simple reflex acts and basic organic processes, there are few if any, human behaviors that are culture-free."²⁴ Adler believes that even simple asking and answering behaviors may be related to sub-cultural membership.²⁵ Therefore, it is not surprising that cultural differences can be manifested in the test performance of children.

For example, Item 2 from the Comprehension Subtest in the WISC-R asks, "What are you supposed to do if you find someone's wallet or pocketbook in a store?"²⁶ In order to score the highest point, one must answer that one would return the wallet to some authority, so that it can then be returned to the owner. But this is not the only response possible. It is obvious that the designer of the test is using

criteria derived from the cultural values imparted to him. Children from different cultural backgrounds, espousing different sets of values, will be penalized if they do not abide with what the test designer chose as criteria. In this instance, it is a cultural value which may decide a score, not necessarily measure the child's ability. Adler says that ". . . the cultural ethnocentrism that admits to only one correct way or method of performing violates the integrity of people with diverse heritage."²⁷ Since Puerto Rican children come from different cultural backgrounds, and the tests are culturally biased, their performance will reflect this, usually in the form of depressed scores.

It is very unlikely that Puerto Rican culture can be defined absolutely. It is even more difficult to define a Puerto Rican child. There is no one single behavior which can be isolated as typically and exclusively Puerto Rican. However, there are certain recognizable behaviors which are manifested among the members of the Puerto Rican culture more frequently than in other groups. These behaviors and the meaning of interpretation ascribed to them within the group make up the idiosyncratic characteristic of the culture.

Although it is possible to generalize about the relationship between culture and test behavior, we must be aware of the fact that behavior varies for many reasons. Social class, environment, urban or rural lifestyle, and countless other factors come into play in determining an individual's reaction to a specific situation. Therefore, having noted some of these limitations, an attempt is now made to describe

some of the characteristics of Puerto Rican culture.

Understanding, knowledge, and awareness of the cultural idiosyncracies of Puerto Rican children will assist the test administrator in conceiving a better image of the child's test performance. The test administrator will be able to identify specific test item responses which have been influenced by culture, as well as to determine which test items are culturally biased.

Cultural Bias: Recommendations

In order to ameliorate the effects of cultural differences on test performance of Puerto Rican children, the examiner must take definite steps to become familiar with cultural themes which are characteristic of their upbringing. Listed below are those themes which are most prevalent and/or critical along with examples on how they may be manifested. However, it is suggested that the test administrator go beyond this list and benefit from the suggested readings pertaining to this topic. The minimum themes to become familiarized with are:

1. Religious upbringing: highly religious background characterized by the belief in God's will;
Example: children may attribute to God what an earthly being did, such as the discovery of America.
2. Concept of respect: children are taught to respect the family, the elders, neighbors, and those in position of authority;

Example: children, when addressed by the examiner may avoid eye contact, which connotes the proper degree of respect which the child has been taught to express, often misinterpreted as disrespect by those not familiar with the child's culture.

3. Emphasis on human values rather than material worth;

Example: may lead to interpretations of lack of aggressivity, when it is a matter of priority, with the person's worth coming before material worth;

4. Acceptance of authority: children are taught to accept an adult's authority as the final word;

Example: children's questioning behavior may be less frequent in the presence of adults such as the teacher or the examiner.

5. Dependence: children are expected to be dependent on their parents until adulthood (usually marriage);

Example: what may be interpreted as a lack of initiative may be the child's inability to volunteer without first consulting with the parents.

6. Reliance on family above all, on family as the most sacred institution;

Example: to have anyone question the integrity of the family, especially the mother, or to question

a child's family responsibility prior to a test will most likely upset the child, provoke a lot of anger, and hinder the child's response.

7. Extended family practices: the family not only consists of the nuclear family but grandparents, uncles, cousins, as well;
Example: representations of a nuclear family to these children may prove inappropriate since it deviates from the child's concept of family.
8. Discipline based on guilt, shame, and threats of punishment;
Example: often leads to misinterpretations of verbally threatening behavior which is normally more "bluffing" than real.
9. Double sexual standard by which the man is entitled to do as he pleases, and the woman is supposed to obey (machismo is an integral component of this belief);
Example: clearly distinct roles for boys and girls, therefore children will tend to manifest hesitancy in adopting roles inconsistent with the ones they have been taught to accept.
10. Collectively: children are encouraged to play and engage in other activities together;
Example: children will be more responsive and more willing to work in groups with friends; can be mistaken as "cheating" in the classroom.

11. Fatalistic view of the world: perhaps emerging from religious beliefs;

Example: fatalism will influence how the child sees his or her role as a responsible agent in his environment; perceiving a task, the child may overly rely on belief in destiny and doom.

During the actual testing situation and while interpreting test results the examiner must be particularly aware of the following:

1. There is not one particular behavior exhibited in the testing situation which is culture-free.
2. Cultural differences which exist between the test makers and examinees are largely insurmountable, and therefore, will affect test performance.
3. Test item--culture interactions must be clearly identified.
4. Test scores must be interpreted within the context of cultural differences.

Linguistic Bias

The second source of bias in standardized tests is linguistic in nature. Since the tests are in standard English, children who speak standard English will be favored over those who do not. The children who are negatively affected are those who speak a variation of the standard language, such as Black English or the Appalachian variety, or those who are of limited English-speaking ability. Puerto Rican and other linguistic minorities often fall into this latter category.

The bias is presented when the language of the test differs from the child's dialect, or when complexities of style, vocabulary, and phrasing make it difficult for the child to understand what is intended by the test instructions or items. According to Stallings,

. . . professionals who developed these tests are not from the three to five thousand income bracket. The language used is not only language loaded but socially warded. For example, subsidy is welfare, an entrepreneur is a hustler, cool means cold, cool also means a person who is together, a trick is not necessarily by a magician.²⁸

He points out that one set of words is in the language of one culture value, and the other comes from a different value.²⁹ To Taylor, success on standardized tests may be related to the similarities between the examinees' linguistic competence and the linguistic presuppositions of the test.³⁰ Furthermore, he feels that, when the examinees' pronunciation does not match that of the examiner or the test, even pronunciation can be a source of problems. When Meyers examined the type and frequency of errors in four verbal subtests of the WISC which contributed to the lower IQ scores of black and Spanish-speaking inner city children, she attributed the depressed scores to auditory perception rather than to intelligence per se.³¹ She pointed out that "Chile" was being confused with the weather, and also with a food, "fur" with a three, and "hero" with a sandwich. It should be noted that these words were subsequently eliminated from the WISC revision.³²

In the case of Puerto Rican children, they will most likely be of limited English-speaking ability. Their test results may therefore reflect no more than this limited facility with English, regardless of what the test is supposed to be measuring. Even when Puerto Rican

children appear to have sufficient knowledge of English, they may have vestigial language limitations. These may also surface in the test performance. Thus, classification of Puerto Rican children as having speech problems, as being language-impaired or language-delayed, sometimes results in labels which are incorrectly attached to them.

Linguistic Bias: Recommendations

In order to ameliorate the linguistic problems encountered by the examiner when testing Puerto Rican children, the following is recommended:

1. The examiner should have at least a working knowledge of Spanish. The rationale for this includes the following:
 - It will allow the examiner to communicate with the child without the interference of a translator.
 - It will allow for fluidity in the conversation between the child and the examiner.
 - It will allow the examiner to determine whether or not test responses are being influenced by language difficulties themselves.
 - It will allow the examiner to translate any item which the child may be experiencing as a problem due to language limitations.
 - It will allow the examiner to obtain a more comprehensive picture of the child's actual capabilities.
 - It will allow the child to use the language he or she most comfortable with, and, perhaps, to experience greater success.

2. In cases where the examiner cannot understand Spanish, a translator can be used; however, the examiner must be aware of the following:

- Translators who have not been trained in the field of testing may engage in unacceptable practices.
- Misunderstandings are bound to occur among all the parties involved.
- Subjective interpretations by the translator can stand in the way of objective translations.
- The use of a translator indicates little consideration on the part of the examiner for Spanish-speaking children, and also for the responsibility of an examiner to speak the child's language.

3. The examiner must be aware of these issues as they pertain to children of limited English-speaking ability, their tests, and their test performance:

- The style of the written language of the test may be too difficult.
- Even when the child can communicate and understand in English, his or her language may vary enough from the standard English used in tests to hinder test performance.
- Test scores may reflect linguistic ability rather than what the test purports to measure.
- Language is the vehicle of expression of a culture, and as such it can be value laden.

4. Examiners must be aware of the following considerations as they pertain to Puerto Rican childrens' language limitations:

-Always keep in mind the various degrees of proficiency in a language, and that bilingualism is a continuum, in motion towards mastery.

-There may be a difference in receptive versus expressive ability: children may understand what is being said without being able to verbalize.

-Auditory deficits are not the same as differences; what may be considered an auditory deficit may actually be a difference in language background. For example:

English has two i-phonemes; /i/ as in beat and /I/ as in bit. If a speaker of English is asked whether or not beat and bit are the same, he will quite naturally respond that they are not. Spanish, however, has only one i-phoneme. When asked whether English beat or bit are the same, speakers of Spanish will often given an affirmative answer.³³

-Do not consider language differences as speech impediments. There are certain sounds which have no differentiation in Spanish, therefore, Puerto Rican children will have some degree of difficulty pronouncing them or differentiating them; examples are "ch" versus "sh", "v" versus "b" and "th".

5. Obtain a thorough estimate of language dominance and the degree of proficiency in the language through a multi-

factored inventory which should include but not be limited to the following:

- Home language usage reports (usually can be done through formal or informal questionnaires, or reported by parents or guardians).
- direct observation of the child's language usage (should include the language the child speaks in various social contexts, e.g., classroom versus playground, or natural usage devoid of the observers interference).
- instruments: use instruments which have been designed to assess various language skills, such as auditory comprehension, reading comprehension, etcetera.

6. When establishing language dominance in Puerto Rican children, the examiner must consider the following:

- Mere classification of Puerto Rican children as bilingual does not insure competency in either language; for example, children can be deficient in both English and Spanish, or can have Spanish surnames and not be able to say a word in Spanish.
- The child's dominant language must still be established, and also the degree of his proficiency in the various language skills estimated.
- The dominant language refers to that language which the child has been shown to have mastered best in comprehension, fluency, etcetera.

- Establishing a dominant language will allow the examiner to use the language in which the child is most proficient as his or her medium of communication, instruction, etcetera.
- Degree of proficiency refers to the level of competence in the various language skills; for example, a child in the 6th grade may be Spanish dominant, functioning at 8th grade level in a language comprehension test, while performing at 5th grade level in a reading test.
- The degree of proficiency in the language can guide the examiner in selecting the proper intervention strategies, areas of remedial attention, and vehicles for assessment; for example, a child who is an English speaker will be tested in the language that he or she is most fluent in, but if the child has not yet mastered English reading skills, a test which requires mastery of such skills in English may not be suitable.
- In accordance with the Bilingual Education Act and the Lau Remedies,³⁴ non-native speakers of English have to be assessed to determine the extent of their language limitations; according to their level of proficiency in the English language, children are to be placed in programs which do not penalize them for language limitations. Although Bilingual Education Programs are an alternative, English as a Second Language programs are also acceptable.

7. Even though they purport to measure certain skills and abilities, the complexities of bilingualism and language development have yet to be clearly defined. Therefore, tests of language dominance or skills sometimes suffer from faulty design constructs, and are of questionable validity and reliability. Measures do not always converge in scores obtained. In view of such a problem, these suggestions are made:
 - Use as many diversified instruments as possible.
 - Carefully analyze areas of language strengths and weaknesses.
 - Give special attention to areas of convergence and disagreement.
 - Do not use tests designed for one purpose for another purpose; for example, do not use a test of receptive language ability to determine language dominance.
8. Although there are conflicting reports as to which environment is conducive to healthy language acquisition, the following environmental factors stand out:
 - the childrens' attitude towards themselves and the other group;
 - whether or not the conditions in which the new language is learned provide a positive experience for the children;
 - whether or not the childrens' cultural and linguistic

differences are recognized and utilized to enhance the learning situation rather than to bring shame to the children;

-whether or not there is a positive, receptive attitude towards the children on the part of those who interact with them, an attitude which implies acceptance and receptiveness rather than ridicule and rejection.

Socio-economic Bias

In a society which values buying power so highly, those who have more money will be exposed to more, and perhaps better, opportunities, experiences, and benefits. The poor, by the very nature of poverty, will have fewer advantages.

Since tests reflect the experiences and opportunities of the middle class, tests will be biased towards children from that particular population. As ample evidence has shown, in the tracking system ability groups are highly correlated with class, and the low ability groups are populated by a disproportionate number of low-income children.³⁵ Even when the issue of bilingualism may appear to be a crucial factor in the test performance of Hispanic children, it appears that socio-economic class is an overriding influence, more so than language.^{36, 37, 38}

Puerto Rican families in the continental United States are among the poorest, even within the Hispanic group.³⁹ One realizes the devastating effects of poverty when one learns that Puerto Rican children are behind urban whites and blacks in verbal ability, reading

comprehension, and mathematics.⁴⁰ These deficiencies are evident when the children are tested with instruments which are normed with a middle class population. It is certainly possible that the test performance of Puerto Rican children is mirroring the inequalities that exist in our society. The fact that the test results, or scores, are highly correlated with the socio-economic class of the children presents enough evidence to warrant guarding against any form of socio-economic bias.

The following describe some of the results of studies concerning the relationship between socio-economic status and test performance:

- *Significant differences on the WISC performance were more a function of socio-economic status than language.⁴¹
- *Differences between high socio-economic background children and low socio-economic background children on the Peabody Picture Vocabulary Test, the WISC, and the WISC-R were found.⁴²
- *Children from low socio-economic backgrounds score lower on tests, and are judged less accomplished by teachers than children from middle class homes.⁴³
- *Puerto Ricans, Native Americans, and Blacks come disproportionately from low socio-economic backgrounds.⁴⁴
- *Higher incidence of perceptual dysfunction has been found among disadvantaged children as measured by the Gender Gestalt Test.⁴⁵

Socio-economic Bias: Recommendations

In order to ameliorate the effects that socio-economic bias has on the test performance of Puerto Rican children, the examiner must be aware of the following factors:

- *Since Puerto Rican children most likely come from impoverished backgrounds, their test scores may reflect this reality.
- *Test scores may be lower because of the class condition and not necessarily the intellectual capacity of the child;
- *The examiner must not further penalize Puerto Rican children based on test scores which are only evidence of deprivation they are subjected to due to the inequalities that exist in our society;
- *Tests which are biased against children of impoverished background may help to perpetuate the same condition in these children.

In view of the findings as they refer to socio-economic status and Puerto Rican childrens' test performance the following is recommended:

1. A thorough evaluation of test responses must be made to determine to what extent the test items may be reflecting socio-economic class rather than ability per se. For example, Item 9 on the WISC Spanish Translation and Adaptation: "Why is it better to pay

bills by check than by cash?"⁴⁸ Replies to this test item may elicit answers associated with checks from the Welfare Department, which is most familiar to children from impoverished backgrounds who have to rely on public assistance for survival, while paying with personal checks is a condition more familiar to middle class children.

2. Determine from the test manual whether studies have shown a relationship between test performance and socio-economic background for that particular test in question.
3. If a relationship is found report so in the test results. Make these findings well known to all interested parties.
4. Take these factors into consideration when planning educational interventions and educational programs.
5. Always remember that the child's future may rest in your hands, and act accordingly.

If we utilize test scores as indicators of social deprivation to determine the degree of enrichment opportunities and experiences that need to be provided to Puerto Rican children, then we might see Puerto Rican children's test scores equalizing those of middle class children. Then, we might be able to see the elimination of economic bias in tests.

Suggested Readings

- Adler, S. "Data Gathering: The Reliability and Validity of Test Data from Culturally Different Children," Journal of Learning Disabilities 6 (1973):329-434.
- Bryen, D. N. "Speech-Sound Discrimination Ability on Linguistically Unbiased Tests," Exceptional Children 40 (1976):195-201.
- Cattell, R. B. "Are Culture Fair Intelligence Tests Possible and Necessary?" Journal of Research and Development in Education, 12 (1979)3-13.
- Chess, S. et al. "Social Class and Child Rearing Practices," American Psychological Association Division Meeting, 17 Nov. 1967, (ERIC ED 016722).
- Elam, S. L. "Acculturation and Learning Problems of Puerto Rican Children," Teachers College Record, 61 (1960):258-264.
- Hartlage, L.C.; Lucas, T.L.; Godwin, A. "Culturally Biased and Culture Fair Tests Correlated with School Performance in Culturally Disadvantaged Children," Journal of Clinical Psychology, 32 (1976):658-660.
- Hillard, Asa G. "Standardization and Cultural Bias as Impediments to the Scientific Study and Validation of Intelligence," Journal of Research and Development in Education 12 (1979):46-57.
- Laosa, L. M. "Child Care and the Culturally Different Child," Child Care Quarterly 3 (1974):214-224.

- Mercer, J. R. "Test 'Validity'; 'Bias'. and 'Fairness': An Analysis from the Perspective of the Sociology of Knowledge," Interchange 9 (1978-1979):1-16.
- Mintz, S. W. "Puerto Rico. . . An Essay in the Definition of a National Culture," Status of Puerto Rico: Selected Background Studies. Washington, D.C.: Government Printing Office, 1966.
- Modeular Sequence: Puerto Rican Pupils in Mainland Schools.
TTP 003.11 "Puerto Ricans and Their Mores" Teachers Corps Bilingual Project, Hartford Connecticut. (ERIC ED 103378).
- Murillo-Rohde, I. "Family Life Among Mainland Puerto Ricans in New York City Slums," Perspectives in Psychiatric Care 14 (1976): 174-179.
- Nieves-Falcon, L. Diagnostico de Puerto Rico. Rio Piedras, P.R.: Editorial Edil, 1972.
- Simon, B. Intelligence, Psychology and Education: A Marxist Critique, London: Lawrence and Wishart, 1971.
- Taylor, O. L. "Language Issues and Testing," Journal of Non-White Concerns in Personnel and Guidance 6 (April 1978):125-132.
- Thomas, A.; Hertizig, M.E.; Dryman, I.; Fernandez, P. "Examiner Effect in I.Q. Testing of Puerto Rican Working-Class Children," American Journal of Orthopsychiatry 41 (1971):809-821.

Alternative Testing Procedures

Overview

In trying to alleviate the problem in testing Puerto Rican children, the testing industry attempted to develop more equitable assessment instruments. This involved the modification of existing instruments, such as translations and adaptations of tests to particular populations. The development of culture-free or culture-fair tests was thought to be an advancement. Culture-specific tests, multicultural-pluralistic batteries, are also part of this general effort. It is by means of a critical examination of the alternatives to traditional testing practices that the examiner will be able to make an informed judgement of their suitability for Puerto Rican children.

Translations and Adaptations

Attempts to translate existing instruments into Spanish have probably created more problems than they have solved. This is the case even when the translations have been adapted for the particular population in question. An example is the Wechsler Intelligence Scale for Children, Spanish Translation and Adaptation.⁴⁶

Critique

1. As in any language, regional differences in Spanish make its applicability to all Hispanic groups difficult.

Examples: meanings of words differ; words may be unknown to some ("medio" and "chapas" are to a Cuban child what "vellon" and "licencia" are to Puerto Rican children).⁴⁷

2. Direct translation of a word or a phrase may result in the use of words unknown by the particular population:

Example: "belfry" was translated into "espadana",⁴⁹
a word which is non-existent in the vocabulary
of Puerto Rican children, even adults.

3. The socio-cultural bias in a given item is carried over into the translation:

Example: The question, "Why is it better to pay bills by check than by cash?"⁵⁰ definitely favors those who come from affluent backgrounds.

4. The value system from the original version is carried over into the translation.

Recommendation

Just because the test is a translation does not mean that it can be used indiscriminately. The same considerations must apply when choosing these instruments as in choosing any others. Thus, when using a translated version of the test:

1. Be aware of cultural, linguistic and socio-economic bias.
2. Exercise care during administration and interpretation.

Culture-Free Tests

Performance on culture free tests is not supposed to be affected by cultural differences. Culture tests are also known as non-verbal, performance and culture-fair tests. Regardless of the name, there is a widely held assumption that if a test is non-verbal it is culture-free.

However, these tests usually fall short of being what they promise. An example is The Leiter International Performance Scale.⁵¹

Critique

1. Just because the tests imply they are culture-free, they are not necessarily so. Certain skills and abilities may be influenced by some cultures but not by others.
2. Because of the tests reliance on the non-verbal factor, they may limit the range of abilities they measure. For example, they would not measure the same functions as verbal tests.
3. They can mislead users imparting too much confidence in an instrument which may be just as discriminatory as a verbal test.

Recommendations

In order to diminish the potential damage of falsely labeled culture-free tests the examiner should:

1. Assume it is not culture-free.
2. Since conclusions based on this test may be invalid, be careful when making inferences.

Culture Specific Tests

Since existing instruments were not meeting the needs of minority children, culture specific tests were developed. They rely heavily on culture specific items and, as expected, they discriminate against children who do not belong to the particular reference group. When administered to white, middle-class children they provide an excellent example of what has been done to Hispanic, black, and other minority children. A good example of this kind of test is: Black Intelligence Test of Cultural Homogeneity (BITCH).⁵²

Critique

1. These tests can discriminate against children who do not belong to the same socio-cultural group;
2. Their suitability is restricted to a narrow population;
3. They fall under the same pattern of mistakenly assuming validity without regard to within-group differences.

Recommendations

Culture specific tests should only be used with the population they were designed for, and never with any other population.

Learning Potential Measurement

The Learning Potential Measurement is defined as a measurement of a child's ability to learn and profit from experience.⁵³ This is an alternative to the conceptualization of the measurement of general ability. The tests are used to show that the children can learn. After the children are tested, they are trained in a non-verbal reasoning task, then post-tested to determine gains in scores. An example is the Budoff's Learning Potential Measurement.⁵⁴

Critique

1. An extensive amount of time is required to determine the acquisition rate. To determine learning achieved, the procedure requires training on a task after testing.
2. It does not give an immediate assessment of the child's capabilities. Because of the training time involved, one must wait for results.

Recommendations

Despite the drawbacks, it is a promising alternative to traditional testing that should be used whenever possible, and implemented along with various tests to determine ability to benefit from instruction.

Multicultural Pluralistic Assessment

This approach takes into consideration the total socio-cultural configuration of the children in determining their potential to learn. The best example is the System of Multicultural Pluralistic Assessment (SOMPA).⁵⁵ This assessment battery provides a comprehensive profile of the child's health history, adaptive behavior, physical dexterity, etcetera. It also provides norms for Hispanic children, which approximate Puerto Rican children. It is a definite safeguard against discriminatory assessment of minority children.

Critique

1. Reliability questions have been raised concerning the Estimated Learning Potential Measurement.
2. It is somewhat too time consuming to administer and score.
3. It does not provide suggestions for remedial programs.

Recommendations

Despite the disadvantage that it is time consuming, it is strongly recommended that such tests be used with Puerto Rican children as a real alternative in non-discriminatory assessment.

Criterion-Referenced Tests

Considered one of the most desirable alternatives by tests critics, their emphasis is on whether or not a particular child has learned specific material within a given content domain, and to what extent. Criterion-referenced tests place the emphasis on the child's acquisition of specific skills and concepts; and thus can be used to gauge learning of taught material. Examples are the criterion-referenced tests which are commercially designed and those which are designed by teachers and tests administrators for local use.

Critique

1. May be time consuming to develop.
2. Too time consuming between pre- and post-test administrations to determine acquisition of the skills or concepts.
3. The establishment of minimum acceptable levels of performance can be as biased as any other tests.

Recommendations

1. Despite their limitations their usage is strongly recommended.
2. Special care must be exercised when using commercially available criterion-referenced tests to insure their applicability to the population, as well as the domain to be tested.

Suggested Readings

Assessment Instruments in Bilingual Education: A Descriptive Catalog of 342 Oral and Written Tests. National Dissemination and Assessment Center, 5151 State University Drive, Los Angeles, CA 90032.

Berry, G. L.; Lopez, C.A. "Testing Programs and the Spanish Speaking Child: Assessment Guidelines for Counselors," The School Counselor 24 (1977):261-269.

Black Intelligence Tests of Cultural Homogeneity (BITCH). R. L. Williams, Williams and Associates, St. Louis MO, 1972.

Budoff, M.; Gimon, A.; Corman, L. "Learning Potential Measurement with Spanish-Speaking Youth as an Alternative to I.Q. Tests: A First Report," Interamerican Journal of Psychology 8 (1974):233-246.

I.Q. Tests and Minority Children. Dissemination and Assessment Center for Bilingual Education, Austin, TX, 1974.

Ehrlich, A. et al. "Tests in Spanish and other Languages and Non-Verbal Tests for Children in Bilingual Programs: An Annotated B.E.A.R.U. Bibliography." City University of New York, New York Hunter College Bilingual Education Applied Research Unit May 1973 (ERIC ED 078713).

Locks, N.A. et al. "Language Assessment Instruments for Limited English Speaking Students: A Needs Analysis." National Institute of Education, Washington, D. C. (ERIC ED 163062).

- Mowder, B.A. "A Strategy for the Assessment of Bilingual Handicapped Children," Psychology in the Schools 17 (January 1980):7-11.
- Roça, P. "Problems in Adapting Intelligence Scales from One Culture to Another" 38 (1955):124-131.
- Samuda, R. Psychological Testing of American Minorities: Issues and Consequences. New York: Dodd, Mead and Co., 1975.
- System of Multicultural Pluralistic Assessment. J. R. Mercer, The Psychological Corporation, 1978.

Tests Most Widely Used with Puerto Rican Children

Overview

The following section will present a series of tests which were selected because of their wide use with Puerto Rican as well as other minority children. A brief critique is offered which presents the advantages and disadvantages of the particular tests. In addition, some general comments on the tests' applicability to the Puerto Rican population, and suggestions for further reading are included.

The selection of these tests was made based on the frequency of their appearance in the literature that was reviewed. The majority of the tests are individually administered, are norm referenced, and will be found to be commonly used in school settings.

The tests chosen were from the following categories: visual-motor perception, intelligence, achievement, projective tests, and drawings.

Tests of Visual Motor Perception

These tests have been designed and constructed under the assumption that there are some specific tasks which, upon performance, can determine whether the children have any impairment of immaturity in visual motor development. The tasks involved deal mostly with the visual perception of a stimuli and the motor expression of such a perception. Discussed under this section are:

The Bender Visual Motor Gestalt Test

The Marianne Frostig Developmental Test

BENDER VISUAL MOTOR GESTALT TEST

Distributed by: The Psychological Corporation
757 Third Avenue
New York, New York, 10017

Purpose: To diagnose children with visual-motor problems.

Basic description: The child must reproduce a set of 9 stimulus (design) cards.

Ages/Grade: K to 5th grade (Koppitz Scoring System)
15 to 20 years old (Pascal and Suttell Scoring System)

Advantages:

- .Test instructions can easily translate into Spanish.
- .Quickly administered.
- .Does not require verbal responses, thus, it does not penalize children of limited English-speaking ability.
- .Has been normed with Black and Hispanic children to be used as part of the system of Multicultural Pluralistic Assessment (SOMPA).

Disadvantages:

- .There is a high degree of subjectivity involved in the scoring system.
- .Emotional indicators and brain damage diagnosis are questionable from the data obtained.
- .Scores are highly influenced by the child's educational experience and environmental effects.
- .Children's lack of experience with these kinds of tasks may hinder performance.
- .Fine-motor dexterity may have influence on score, rather than visual-motor perception per se.

Suggested Readings:

Amante, Dominic "Visual Motor Malfunction, Ethnicity and Social Class Position"
Journal of Special Education 9 (1979)
247-259.

MARIANNE FROSTIG DEVELOPMENTAL TEST OF VISUAL PERCEPTION (DTVP)

- Distributed By: Consulting Psychologists Press, Inc.
577 College Avenue
Palo Alto, CA 94306
- Purpose: The DTVP has been designed to measure perceptual skills: eye-motor coordination, figure-ground discrimination, form constancy, position in space and spatial relationships.
- Basic Description: A pencil and paper test with a booklet provided to the examinee on which to perform what is asked from the test item.
- Ages/Grades: 3 to 8 years.

Advantages:

- .Instructions can be translated into Spanish.
- .Examples to illustrate what is required from the child are given as part of the instructions.
- .Easy to administer.
- .Provides training program suggestions for remediation in areas where lack of skills are apparent.
- .Interesting and game-like for children.

Disadvantages:

- .Questionable validity regarding the different aspects of skills it is supposed to measure.
- .Sometimes confusing scoring system.
- .Test performance may be influenced by previous experience with pencil and crayon manipulation.
- .Unfamiliarity with the names of the geometrical figures rather than perceptual dysfunction may account for the variance in scores.
- .Instructions have to be simplified for children of limited English-speaking ability

Suggested Readings:

- Salvia, John; Ysseldyke, James E. Assessment in Special and Remedial Education. Boston: Houghton Mifflin, 1978.

Intelligence Tests

Involved in the majority of these tests are a wide variety of activities which jointly are supposed to give a measure of intelligence, usually in the form of an IQ or Intelligence Quotient. This particular kind of test is under attack by test critics because it has been used improperly with minority children. Discussed under this section are:

The Columbia Mental Maturity Scale

The Leiter International Performance Scale

The Stanford Binet Scale

The Wechsler Intelligence Scale for Children Revised Form

The Wechsler Intelligence Scale for Children, Spanish
Translation and Adaptation

COLUMBIA MENTAL MATURITY SCALE (CMMS)

- Distributed by: Harcourt Brace, Jovanovich, Inc.
757 Third Avenue
New York, New York, 10017
- Purpose: The CMMS was designed to measure intelligence in handicapped children.
- Basic Description: Originally designed to be used with cerebral palsied children. Consists of stimulus cards with drawings printed on them from which the child selects the drawing that does not belong to the set.
- Age/Grade: 3 to 10 years.

Advantages:

- .Easy to administer and score.
- .Good for language impaired children.
- .Instructions provided in Spanish.
- .Relatively good as ice breaker.
- .Since the test does not require verbalizations, it will not penalize children of limited English-speaking ability.
- .Good for supplementing other measures of intellectual capacity.

Disadvantages:

- .Even though the objects and drawings on the stimulus cards are supposedly drawn from the experience of most children, it does not necessarily follow that it is adequate for use with Puerto Rican children, especially the young ones who have not been exposed to school.
- .Invalidation of scores due to response sets among pre-school children has been reported.
- .Indications of score differences due to socio-economic status have been pointed out.
- .Has not been normed with Hispanic children.

Suggested Readings:

- Ratusnik, David L.; Koenigsnecht, Roy A. "Cross Cultural Item Analysis of the Columbia Mental Maturity Scale: Potential Application by the Language Clinician." Language, Speech and Hearing Services in the School 7(3):186-190, 1976.
- Vingoe, Frank J.; Birney, Daryl, S.; Kordinak, Thomas S. "Note on Psychological Screening of Preschool Children." Perceptual and Motor Skills 29:661-662, 1969.

LEITER INTERNATIONAL PERFORMANCE SCALE AND ARTHUR ADAPTATION

Distributed by: C. H. Stalling Co.
424 North Homan Avenue
Chicago, IL 60624

Purpose: Measures general mental ability, supposedly culture-free.

Basic Description: A card containing pictures is placed on a response frame. The examinee must, then, match blocks with pictures to the stimulus card.

Age/Grade: 2 to 8 years old.

Advantages:

- .Good for children who cannot express their knowledge and understanding verbally.
- .Will generate enthusiasm in children because of the blocks and play-like response activity.
- .Very little instruction, spoken or pantomime, is required to administer the scale.
- .Supposedly covers as wide a range of functions as those in verbal scales.

Disadvantages:

- .Lack of adequate norms.
- .Reliability and validity data when found, are not adequate (none for the 1969 Manual or Arthur Adaptation).
- .Test performance can be negatively affected by problems in visual perception rather than by intellectual incapacity per se.
- .Administration and Scoring is more difficult than for most tests.
- .The Arthur Adaptation, considered best for children 3-8; is limited by its middle-class standardization sample.
- .Just because the scale is non-verbal, does not mean that it is culture-free.

Suggested Reading:

Anastasi, A. "Test for Special Populations." in Psychological Testing 4th Edition. New York: Macmillan Publishing Co., 1976, pp. 287-295.

STANFORD-BINET INTELLIGENCE SCALE FORM L-M 1960 REVISION

Distributed by: Houghton Mifflin Company Test Department
Box 1970
Iowa City, IA 52240

Purpose: To measure general intelligence.

Basic Description: This test consists of various subtests arranged to be used according to chronological ages: 2 (II) to Superior Adult (III).

Age/Grade: 2 years to adult.

Advantages:

- .Low baseline and high ceiling makes it appropriate to test younger children and adults respectively.
- .Toy-like test materials make it appealing to children.
- .Because of its high verbal content, it is considered ideal to test gifted children.

Disadvantages:

- .It does not provide measures of differential abilities.
- .The only scores obtained are the IQ and mental age.
- .Reported are reliability and validity from the previous versions, rather than for the revision.
- .Administration and scoring somewhat difficult and time consuming.
- .High verbal content of test hinders performance of children of limited English-speaking ability.
- .Has not been normed with bilingual children.
- .Lends itself to improper classification of Hispanic children.

Suggested Readings:

- Smith, M. W. "Analysis of Culture Bias in the Stanford-Binet Intelligence Scale." Genetic Psychology Monographs, 89, 1974.
- Terman, Lewis M.; Merrill, Maud A. Stanford-Binet Intelligence Scale, Manual for the Third Revision Form L-M. Boston: Houghton Mifflin, Co., 1973.

WECHSLER INTELLIGENCE SCALE FOR CHILDREN REVISED FORM (WISC-R)

- Distributed by: The Psychological Corporation
757 Third Avenue
New York, New York, 10017
- Purpose: The WISC-R is a test of general intelligence.
- Basic Description: The WISC-R is a test consisting of Verbal and Performance Subtests which are supposed to survey a wide range of cognitive abilities and visual motor skills, among other things which comprise intelligence.
- Ages/Grades: 6 to 17 years.

Advantages:

- .Instructions for administration are clearly marked in the Manual.
- .Provides many different activities, which reduces the possibility of boredom.
- .The recording form provides guidelines for starting and stopping the test.
- .It can be used as part of the system of Multicultural Pluralistic Assessment to obtain measures of school functioning level and estimated learning potential.

Disadvantages:

- .Testing time is sometimes too long for younger children.
- .Scoring criteria for the Verbal Subtests are not clearly defined, which leads to confusion and makes the test prone to subjective interpretation.
- .Timed items may hinder childrens' performance.
- .Because of its high verbal content, it may hinder the performance of children with limited English-speaking ability.
- .It tends to favor white, middle-class children who espouse the values and other cultural derivatives of the dominant society; penalizing those from low socio-economic and linguistically different backgrounds.
- .Perpetuates the IQ halo.

Suggested Reading:

- Swerdlik, Mary E. "Comparison of WISC and WISC-R Scores of Referred Black, White and Latino Children."
Journal of School Psychology Vol. 16, No. 2,
Summer 1978, 110-125.

ESCALA de INTELIGENCIA WECHSLER PARA NINOS, 1951

- Distributed by: The Psychological Corporation
757 Third Avenue
New York, New York, 10017
- Purpose: The test was developed to assess general intelligence.
- Basic Description: A translation and adaptation of the original WISC. It consists of 12 Subtests which supposedly measure a wide range of cognitive abilities and skills.
- Age/Grade: 5 to 15 years and 11 months.

Advantages:

- .The test has been adapted and translated for use with Puerto Rican children.
- .Some norms are provided from the Puerto Rican sample of 128 children.

Disadvantages:

- .It is still culturally biased in favor of middle-class children.
- .Regional differences in the language do not insure its fairness.
- .Some of the vocabulary of the translation may be unknown to the Puerto Rican population.
- .The validity and reliability of the adaptation is questionable because of irregularities in the standardization procedures.
- .Norming sample is too small.
- .Puerto Rican children still tend to score an average of 10 points lower than their Anglo counterparts.

Suggested Readings:

Roca, Pablo. Problems in Adapting Intelligence Tests from One Culture to Another." High School Journal, 1955, 38:124-131.

Manual Escala de Inteligencia Wechsler Para Ninos, Traducción y Adaptacion al Espanol, Pablo Roca, director, The Psychological Corporation, 1951.

Achievement Tests

These tests are designed to determine what a child knows about a particular subject. Scores are typically used to establish the degree of proficiency in the subject as compared to the norm population. The form of these tests is mostly that of group tests. For our purposes, an individually administered test will be reviewed:

The Wide Range Achievement Test

WIDE RANGE ACHIEVEMENT TEST (WRAT)

- Distributed by: Guidance Associates of Delaware, Inc.
1526 Gilpin Avenue
Wilmington, Delaware, 19806
- Purpose: To measure achievement in reading, spelling and arithmetic.
- Basic Description: The WRAT is individually administered, with subtests in reading, spelling, and arithmetic.
- Ages/Grade: Level I: 5-0 to 11-11 years.
Level II: 12 years to adulthood.

Advantages:

- .Quick and easy administration and scoring.
- .Provides a quick estimate of academic performance.
- .Suitable for assessing growth by comparing re-test scores.
- .Can be used to assist with diagnostic assessment by the examiner observing the child's test performance.

Disadvantages:

- .The Reading and Spelling Subtests lose validity with children of limited English-speaking ability.
- .The Arithmetic Subtest only provides an estimate of computation skills.
- .The timing factor may affect the true estimate of the child's actual ability.
- .Spelling and Reading subtests are greatly affected by language limitations of some bilingual children.
- .Has been over-used to diagnose or classify children.

Suggested Reading:

Sells, S. B.; Cox, S. H. "Abstracts Related to Wide Range Achievement Test." Institute of Behavioral Research, Texas Christian University, June 1964.

Drawings

Drawings are utilized for ice-breaking purposes as well as for estimating intelligence. Their validity and reliability have been questioned, but they are still widely used within schools and clinical settings. For our purposes The Goodenough-Harris Drawings will be reviewed.

GOODENOUGH-HARRIS DRAWING TEST (GHDT)

- Distributed by: Harcourt, Brace and World, Inc.
757 Third Avenue
New York, New York, 10017
- Purpose: The GHDT is supposed to measure intellectual and conceptual capacity.
- Basic Description: The GHDT is a test whereby the child is asked to draw a man, a woman, and a self-portrait. Measurements are based on the sophistication of the drawings.
- Ages/Grades: 3 to 15 years.

Advantages:

- .Requires only pencil and paper for administration
- .Easy and quick administration.
- .Good ice-breaker with most children.

Disadvantages:

- .Cultural differences may influence performance.
- .Misinterpretation may result from ascribing projective test qualities or attributes to it.
- .Scoring points are based on what some consider sexist criteria.
- .Socio-economic background may also have an influence on test performance.
- .Questionable validity.

Suggested Readings:

- Roca, Pablo. "Problems in Adapting Intelligence Tests from One Culture to Another." High School Journal, 1955, 38:124-131.
- Troll, Enid Williams. "The Barbee Doll Mentality and the Goodenough-Harris Drawing Test." Paper presented at the Annual Meeting, APA, 84th, Washington, D.C., September 1976, ERIC ED 164546.

Projective Tests

Although used mostly in clinical settings, the projective tests or techniques are also used in school settings, either for clinical purposes or as ice-breaking tools.

Under this section the following tests will be discussed:

- Childrens' Apperception Test
- Rotter Sentence Completion Blank

CHILDREN'S APPERCEPTION TEST (CAT)

Distributed by: C. P. S. Inc.,
P. O. Box 83
Larchmont, New York, 10538

Purpose: To study children's personality.

Basic Description: The CAT consists of ten plates of animal figures depicting various human acts which supposedly elicit stories from the child's inner self.

Age/Grade: 3 to 10 years.

Advantages:

- .Good ice-breaker because of the animal figures.
- .May elicit verbalizations from children who otherwise would be less inclined to talk.

Disadvantages:

- .Reliability and validity are questionable.
- .Children stories elicited may change as much as 50% on the second administration, even within a couple of weeks.
- .Lends itself to abuse and misuse because of the subjectivity involved in interpreting the scores.
- .Needs a high degree of verbalization from children, limiting its usefulness with bilingual children.

Suggested Reading:

Palmer, James O. The Psychological Assessment of Children.
New York: John Wiley & Sons, Inc. 1970.

ROTTER INCOMPLETE SENTENCE BLANK

- Distributed by: The Psychological Corporation
757 Third Avenue
New York, New York, 10017
- Purpose: To elicit responses supposed to be expressions of the inner self.
- Basic Description: A single sheet, 40 item sentence stem which, when completed by the examinee, express his inner feelings.
- Age/Grade: Adolescents and adults.

Advantages:

- .May be suitable for ice-breaking.
- .May be used as an interviewing questionnaire aid or "gadget."
- .May elicit responses which may not otherwise be voluntarily given.

Disadvantages:

- .Requires developed reading skills in English.
- .No established validity and reliability.
- .Easily misused because of its subjective nature.
- .Responses can be highly influenced by the setting and the examiner.

Suggested Reading:

- Palmer, J. O. The Psychological Assessments of Children.
New York: John Wiley and Sons, Inc., 1970.

Language Assessment Instruments

From tests of auditory comprehension of language to vocabulary estimates, there is a wide range of instruments which are used in the area of language assessment. Since the advent of the Bilingual Education Act, many have appeared in the field, but they often lack research background. The following sample of such tests will be reviewed:

Test for Auditory Comprehension of Language

The Bilingual Syntax Measure

The Peabody Picture Vocabulary Tests

TEST FOR AUDITORY COMPREHENSION OF LANGUAGE

- Distributed by: Learning Concepts
2501 N. Lamar Blvd.
Austin, Texas, 78705
- Purpose: To measure auditory comprehension of the language.
- Basic Description: The test consists of 101 stimulus cards, from which the child is asked to point at what is called for.
- Age/Grade: 3 to 7 years.

Advantages:

- .It is easy to administer
- .It gives a quick estimate of the child's dominant language.
- .It allows the examiner to gather information as to specific areas of difficulty i.e., nouns, verbs.
- .Can be administered in English or Spanish.

Disadvantages:

- .Do not provide norms for Hispanic children.
- .It is too long for younger children.
- .Translations into Spanish may sound awkward, since they include forms not commonly used in the language.
- .May lend itself to the improper misclassification of children.

Suggested Reading:

Carrow, E. "Auditory Comprehension of Language of English by Monolingual and Bilingual Pre-School Children."
Journal of Speech and Hearing Research 15 (1972):407-412.

BILINGUAL SYNTAX MEASURE

- Distributed by:** The Psychological Corporation
757 Third Avenue
New York, New York, 10017
- Purpose:** To measure the child's acquisition of grammatical structures in English and Spanish. It is widely used for placement purposes.
- Basic Description:** Cartoon-type pictures are utilized to elicit oral responses.
- Age/Grade:** Pre-kindergarten to fourth grade.

Advantages:

- .Easy to administer.
- .Pictures designed to elicit natural speech samples.
- .It avoided the utilization of culturally biased stimulus pictures.
- .Does not penalize the child for pronunciation errors or derivations.

Disadvantages:

- .Somewhat complex scoring system.
- .Questionable validity.
- .Lends itself to improper use when deciding child's placement, or language dominance.
- .Language initially used by examiner may influence the child's performance/dominance.

Suggested Reading:

Burt, M. K.; Dulay, H. C.; Hernandez-Chavez, E. Bilingual Syntac Measure. New York: Harcourt, Brace, Jovanovich, 1975.

PEABODY PICTURE VOCABULARY TEST

- Distributed by: American Guidance Service, Inc.
 Publisher's Building
 Circle Pines, MN 55014
- Purpose: To provide an estimate of verbal intelligence.
- Basic Description: Contains stimulus picture cards. The child points to the picture corresponding to the word said by the examiner. It is basically a test of receptive language ability.
- Age/Grade: 2 to 18 years.

Advantages:Disadvantages:

- | | |
|---|--|
| <ul style="list-style-type: none"> .Easy to administer and score. .Good ice-breaker. .Provides indication of child's receptive language skills. .To some extent, can be used to determine receptive vocabulary growth. .Appropriate for estimating specific areas of vocabulary such as nouns, adjectives, etcetera. .There is a Spanish version. | <ul style="list-style-type: none"> .Provides only an estimate of a very limited area of language ability. .The child's attention and motivation can influence the score. .Pictures are sometimes unclearly defined. .Scores may be easily misinterpreted when obtained from bilingual children. .Cultural differences may hinder performance. .Lends itself to misuse such as establishing language dominance. |
|---|--|

Suggested Readings:

- Hickey, Tom. "Bilingualism and the Measurement of Intelligence and Verbal Learning Ability." Exceptional Children 39:24-28, 1972.
- Seitz, Victoria; Abelson, Willa D.; Levine, Elizabeth; Zigler, Edward. "Effects of Place of Testing on the PPVT Scores of Disadvantaged Head Start and Non-Head Start Children." Child Development 46:481-486, 1975.
- Zigler, Edward; Abelson, Willa D.; Seitz, Victoria. "Motivational Factors in the Performance of Economically Disadvantaged Children on the PPVT." Child Development 44:294-303, June 1973.

FOOTNOTES

¹George I. Sanchez "Bilingualism and Mental Measures, A Word of Caution" Jo. of Applied Psychology 18 (1934) 769-770.

²Anne Anastasi Psychological Testing 4th Edition (New York: MacMillan Publishing Co., Inc.) 1976, p. 8.

³George Robb; L. C. Bernardoni; R. W. Johnson Assessment of Individual Mental Ability (New York: Intex Educational Publishers) 1972, p. 4.

⁴E. Cerda Psicometria General (Barcelona, Espana: Editorial Herder) 1974, p. 84.

⁵Oscar K. Buros "Fifty Years in Testing: Some Reminiscences, Criticisms, and Suggestions" Educational Researcher 6 (July/August 1977) pp. 9-15.

⁶Buros, Ibid., p. 10.

⁷Leon Kamin "IQ Tests as Instruments of Oppression--From Immigration Quotas to Welfare" South Today 4 (July 1973), pp. 6-18.

⁸Kamin, Ibid.

⁹The Education for All Handicapped Act of 1975 (Public Law 94-142) requires that children be educated in the schools in the least restrictive environment. The issue of appropriate testing practices is of central importance to the process.

¹⁰Massachusetts Advocacy Center Report "Double Jeopardy: The Plight of Minority Students in Special Education" Boston: Massachusetts Advocacy Center, 1978.

¹¹J. R. Mercer Labeling the Mentally Retarded (Berkeley: University of California Press) 1972.

¹²J. R. Mercer "Current Retardation Procedures and the Psychological and Social Implications on the Mexican-American" A Position Paper, Southwest Educational Cooperative, Albuquerque, New Mexico, April 1970.

¹³John G. Richardson "The Case of Special Education and Minority Misclassification in California" Educational Research Quarterly 4 (1979), pp. 25-40.

¹⁴J. P. Chaplin Dictionary of Psychology (New York: Dell Publishing Co.), 1975, p. 512.

¹⁵The Wechsler Intelligence Scales. The Psychological Corporation, New York; Stanford-Binet Intelligence Scales, Houghton Mifflin Co., Boston.

¹⁶Two of the two most recent ones are: R. A. Gordon; E. E. Rudert "Bad News Concerning IQ Tests" Sociology of Education 52 (1979) pp. 174-190; D. A. Kennedy "Rationality, Emotionality and Testing" Journal of School Psychology 16 (1978) pp. 16-23. Gordon's and Rudert's work refers to the question of validity of IQ tests to minorities, while Kennedy's work deals with whether aptitude and ability tests are biased against minorities.

¹⁷R. A. Gordon; E. E. Rudert, Ibid.

¹⁸J. R. Mercer "Test 'Validity', 'Bias', and 'Fairness': An Analysis from the Perspective of the Sociology of Knowledge" Interchange 9 (1978) pp. 1-16.

¹⁹J. R. Mercer, Ibid.

²⁰J. P. Chaplin, op. cit., p. 60.

²¹Sophie L. Elam "Poverty and Acculturation in a Migrant Puerto Rican Family" The Record 70 (1969) p. 623.

²²Anne Anastasi, op. cit., p. 39.

²³F. Steiner, et al., "Bilingual/Bicultural Education. . . A Privilege or a Right?" Illinois State Advisory Committee to the United States Commission on Civil Rights, Washington, D.C. May 1974 ERIC Document No. ED 097167.

²⁴J. R. Mercer "Implications of Current Assessment Procedures for Mexican-American Children" Bilingual Education Paper Series Vol. I, No. 1 (August 1977), pp. 7-8.

²⁵S. Adler "Data Gathering: The Reliability and Validity of Test Data from Culturally Different Children" Journal of Learning Disabilities 6 (1973) pp. 429-434.

²⁶Item 2, Comprehension Subtest, Manual. The Wechsler Intelligence Scale for Children (New York, The Psychological Corp.) 1974, p. 97.

²⁷S. Adler, op. cit., p. 434.

²⁸C. J. Stallings "Contemporary Identification and Program Models for Gifted Third World Children" Paper presented at the 54th Annual International Convention. The Council for Exceptional Children, Chicago, Ill. 1976. ERIC Document, ED 122560.

²⁹C. J. Stallings, Ibid.

³⁰Orlando L. Taylor "Language Issues and Testing" Journal of Non-White Concerns in Personnel and Guidance 6 (1978) pp. 125-132.

³¹Edna D. Meyers "Is Chile a Food, a Description of Weather, or Why Black Children do Poorly on the WISC" Paper presented at the American Psychological Association Annual Meeting, New Orleans, September 1974. ERIC Document ED 10372.

³²Manual The Wechsler Intelligence Scale-Revised (New York: The Psychological Corp.) 1974, p. 13.

³³Potlizer, R. "Auditory Discrimination and the Disadvantaged: Deficit or Difference" English Record 21 (1971) pp. 174-179.

³⁴DelValle, et al. "Law and Bilingual Education: A Manual for the Community" Centro de Estudios Puertorriquenos 445 West 59th St., New York, 10019. 1978.

³⁵Bilingual Education Act and Law Remedies.
W. H. Findley; M. M. Bryan "Ability Grouping: 1970--IV Conclusions and Recommendations, Georgia Athens, College of Education, December 1970.

³⁶L. R. Killian "Cognitive Test Performance of Spanish American Primary School Children: A Longitudinal Study, Final Report. Ohio: Kent State University, November 1971.

- ³⁷M. Palmer; P. D. Gaffney "Effects of Administration of the WISC in Spanish and English and Relationship of Social Class to Performance" Psychology in the Schools 9 (1962) pp. 61-64.
- ³⁸T. Christiansen; G. Livermore "A Comparison of Anglo American and Spanish American Children on the WISC" Journal of Social Psychology 81 (1970) pp. 9-14.
- ³⁹U. S. Commission on Civil Rights Report "Puerto Ricans in the United States: An Uncertain Future" October 1976.
- ⁴⁰R. Margolis (citing the Coleman Report) "The Losers: A Report of Puerto Ricans in the Public Schools" ASPIRA, Inc., New York, 1968. ERIC Document 022779.
- ⁴¹M. Palmer; P. D. Gaffney, op. cit.
- ⁴²A. S. Appelbaum; J. M. Tuma "Social Class and Test Performance: Comparative Validity of the Peabody with the WISC and WISC-R for two Socio-economic Groups" Psychological Reports 40 (1977) pp. 139-145.
- ⁴³W. G. Findley; M. M. Bryan, op. cit.
- ⁴⁴W. G. Findley; M. M. Bryan, Ibid.
- ⁴⁵S. A. Cohen "Some Learning Disabilities of Socially Disadvantaged Puerto Rican and Negro Children" Academic Therapy Quarterly (1969), p. 2.
- ⁴⁶Wechsler Intelligence Scale for Children, Translation and Adaptation. The Psychological Corporation, 1951.
- ⁴⁷In a Cuban translation and adaptation of the WISC-R; Penny Martin Cameron translated the word dime (from Item 4, Information subtest) to "medio" and license plates (from Item 9, Comprehension subtest) to "chapas". Pablo Roca on his translation and adaptation of the WISC for usage with Puerto Rican children, translated those same items as "vellon" for dime, and tablillas, even though non-existent as an item in the Puerto Rican translation, is the translation for license plate.
- Penny Martin Cameron "A Spanish Translation, Adaptation and Standardization of the Wechsler Intelligence Scale for Children-Revised" Ph.D. Dissertation, University of Miami, 1977.

P. Roca, Project Director, Wechsler Intelligence Scale for Children, Spanish Translation and Adaptation Manual, The Psychological Corp., 1951.

⁴⁸Item 8, Comprehension subtest Wechsler Intelligence Scale for Children-Spanish Translation and Adaptation, op. cit., p. 10.

⁴⁹Item 33, Vocabulary Subtests, op. cit., p. 19.

⁵⁰Item 9, Comprehension Subtest Wechsler Intelligence Scale for Children Spanish Translation and Adaptation, op. cit., p. 10.

⁵¹Leiter International Performance Scale,
Adaptation C. H. Stallings Co., 424 North Homan Ave., Chicago, Ill.
60624.

⁵²Black Intelligence Test of Cultural Homogeneity (BITCH)
R. L. Williams, Williams and Associates, St. Louis, MO 1972.

⁵³M. Budoff; A. Gimon; L. Corman "Learning Potential Measurement with Spanish-Speaking Youth as an Alternative to IQ Tests: A First Report" Interamerican Journal of Psychology 8 (1974) 233-246.

⁵⁴System of Multicultural Pluralistic Assessment (SOMPA)
J. R. Mercer, The Psychological Corp., 1978.

BIBLIOGRAPHY

- Abraham, W. "The Bilingual Child and His Teacher" Elementary English 34 (Nov. 1957):474-478.
- Adler, S. "Data Gathering: The Reliability and Validity of Test Data from Culturally Different Children." Journal of Learning Disabilities 6(7) (1973):429-434.
- Agrawal, Khazan C. "The Short Tests of Linguistic Skills and Their Calibration" TESOL Quarterly 13 (June 1979):185-208.
- Amante, Dominic. "Visual Motor Malfunction, Ethnicity and Social Class Position." Journal of Special Education 9 (1975):247-259.
- Anastasi, Anne. Psychological Testing 4th edition. New York: Macmillan Publishing Co., Inc., 1976.
- Anastasi, A. "Tests for Special Populations" in Psychological Testing, 4th edition. New York: Macmillan Publishing Co., 1976.
- Andersson, T. "Bilingual Education: The American Experience." The Modern Language Journal 55 (1971):427-439.
- Arnold, M. R.; Rosado, J. R.; Penfield, D.A. "Language Choice by Bilingual Puerto Rican Children on A Picture Labeling Tasks." The Modern Language Journal 63 (1979):349-354.
- Assessment Instruments in Bilingual Education: A Descriptive Catalog of 342 Oral and Written Tests. Center for Bilingual Education, Northwest Regional Education Laboratory, National Dissemination and Assessment Center, California State University, Los Angeles, CA 90032, 1978.
- Bender Visual Motor Gestalt Test. The Psychological Corporation, New York, New York, 10017.
- Berry, G. L.; Lopez, C. A. "Testing Programs and the Spanish-Speaking Child: Assessment Guidelines for Counselors." The School Counselor 24 (1977):261-269.
- Bilingual Syntax Measure. The Psychological Corporation, 757 Third Avenue, New York, New York, 10017.
- Black Intelligence Test of Cultural Homogeneity, (BITCH). R. L. Williams, Williams and Associates, St. Louis, MO, 1972.
- Brinson, L. "Cultural Diversity Within a Framework of Psychological Assessment." The High School Journal 60 (1976):85-92.

- Bryen, D. N. "Speech-Sound Discrimination Ability on Linguistically Unbiased Tests." Exceptional Children 40 (Jan 1976):195-201.
- Budoff, M.; Gimon, A.; Coman, L. "Learning Potential Measurement with Spanish-Speaking Youth As An Alternative to IQ Tests: A First Report." Interamerican Journal of Psychology 8 (1974):233-246.
- Buros, O. K. "Fifty Years in Testing: Some Reminiscences, Criticisms and Suggestions." Educational Research 6 (1977):9-15.
- Burt, M. K.; Dulay, H.C.; Hernandez-Chanez, E. Bilingual Syntax Measure. New York: Harcourt, Brace, Jovanovich, 1975.
- Carrol, A. W.; Seeley, K. R. "Historical Review of Intelligence Testing and the Handicapped." Academic Therapy 10 (Winter 1974-1975):141-149.
- Carrow, Elizabeth. "Auditory Comprehension of Language of English by Monolingual and Bilingual Preschool Children." Journal of Speech and Hearing Research 15 (1972):407-412.
- Cattell, R. B. "Are Culture Fair Intelligence Tests Possible and Necessary?" Journal of Research and Development in Education, 12 (1979):3-13.
- Chess, S. et al. "Social Class and Child Rearing Practice." American Psychological Association Divisional Meeting 17 Nov. 1967. (ERIC ED 016722).
- Children's Apperception Test. CPS Inc. P. O. Box 83, Larchmont, New York, 10538.
- Columbia Mental Maturity Scale. New York: Harcourt Brace Jovanovich.
- Compton, Carolyn. A Guide to 65 Tests for Special Education. Fearon Education, Pitman Learning, Inc., 1977.
- Cross, Lee; Goin, Kenneth (eds.). Identifying Handicapped Children: A Guide to Casefinding, Screening, Diagnosis, Assessment and Evaluation. First Chance Series, Walker and Company, New York, New York, 1977.
- Cummins, James. "Linguistic Interdependence and the Educational Development of Bilingual Children." Review of Educational Research 49 (1979):222-251.
- D'Oyley, V. "Comments on Whether Multiculturalism Should Have an Impact on Testing and Counseling." School Guidance Worker 30 (April 1975):9-13.

- Del Valle, M. et al. "Law and Bilingual Education: A Manual for the Community." Centro de Estudios Puertorriquenos, 445 West 59th Street, New York, New York, 10019, 1978.
- Drew, C. "Criterion-Referenced and Norm-Referenced Assessment of Minority Group Children." Journal of School Psychology 11 (1973):323-329.
- Ehrlich, Alan, et al. "Tests in Spanish and other Languages and Non-Verbal Tests for Children in Bilingual Programs: An Annotated B.E.A.R.U. Bibliography." Cit University of New York, Hunter College Bilingual Education Applied Research Unit, May 1973. (ERIC ED 078713).
- Elam, S. L. "Acculturation and Learning Problems of Puerto Rican Children." Teachers College Record 61 (1960):258-264.
- Elam, S. L. "Poverty and Acculturation in a Migrant Puerto Rican Family." The Record 70 (1969):617-626.
- Evaluation Instruments for Bilingual Education: An Annotated Bibliography. Dissemination Center for Bilingual Bicultural Education, Austin, Texas, January 1975.
- Fernandez, E. "Persons of Spanish Origin in the United States." Social Education 43 (Febr. 1979):104-107.
- Figueroa, R. A.; Gallegos, E. A. "Ethnic Differences in School Behavior." Sociology of Education 51 (1978):289-298.
- Fishman, J.A.; Cooper, R.L. "Alternative Measures of Bilingualism" Journal of Verbal Learning and Verbal Behavior 8 (1969):276-282.
- Gaarder, B.A. "Teaching the Bilingual Child: Research, Development, and Policy." Modern Language Journal 49 (March 1965):165-175.
- Gallardo, J. M. (Ed.) "Proceedings of Conference on the Education of Puerto Rican Children on the Mainland." (Oct. 18 to 21, 1970) Puerto Rico State Department of Education, Hato Rey, 1972, (ERIC ED 114433).
- Goodenough-Harris Drawing Test. New York: Harcourt Brace and World Inc.
- Hickey, Tom. "Bilingualism and the Measurement of Intelligence and Verbal Learning Ability." Exceptional Children 39 (1972):24-28.
- I.Q. Tests and Minority Children. Dissemination and Assessment Center for Bilingual Education, Austin, Texas, 1974.

- Johnson, D. L. "The Influence of Social Class and Race on Language Test Performance and Spontaneous Speech of Pre-School Children." Child Development 45 (1974):517-521.
- Hartlage, L. C.; Lucas, T. L.; Godwin, A. "Culturally Biased and Culture-Fair Tests Correlated with School Performance in Culturally Disadvantaged Children." Journal of Clinical Psychology 32 (1976):658-660.
- Hilliard, Asa G. "Standardization and Cultural Bias as Impediments to the Scientific Study and Validation of 'Intelligence'." Journal of Research and Development in Education 12 (1979):47-57.
- Houts, Paul L. "Behind the Call for Test Reform and Abolition of the I.Q." Phi Delta Kappan 57 (1976):669-673.
- Kamin, Leon. "IQ Tests As Instruments of Oppression--From Immigration Quotas to Welfare." South Today 4 (July 1973):6-10.
- Koppitz, Elizabeth M. The Bender Gestalt Test for Young Children. Vol. I. New York: Grune & Stratton, 1964.
- Koppitz, Elizabeth M. The Bender Gestalt Test for Young Children. Vol. 2. New York: Grune & Stratton, 1975.
- Lamberg, W. J. "Assessment of Oral Reading Which Exhibits Dialect and Language Differences." Journal of Reading. 22 (April 1979): 609-619.
- Lambert, W. E. "Psychological Approaches to the Study of Language Learning and Bilingualism." Modern Language Journal 47 (March 1963):114-121.
- Laosa, L. M. "Child Care and the Culturally Different Child." Child Care Quarterly 3 (1974):214-224.
- Leiter International Performance Scale. Arthur Adaptation C. H. Stallings Co., 424 North Homan Avenue, Chicago, ILL. 60624.
- Locks, N.A. et al. "Language Assessment Instruments for Limited English Speaking Students: A Needs Analysis." National Institute of Education. Washington, D.C.: Department of Health, Education and Welfare, October 1978. (ERIC ED 163062).
- McLaughlin, B. "Second-Language Learning in Children." Psychological Bulletin 84 (1977):438-459.
- Mangan, J. "Piaget's Theory and Cultural Differences. The Case for Value-Based Modes of Cognition." Human Development 21 (1978): 170-189.
- Marriane Frostig Test of Visual Perception (DRVP) Consulting Psychologists Press, Inc., 577 College Avenue, Palo Alto, CA 94306.

- Martin, Penny C. "A Spanish Translation, Adaptation and Standardization of the Wechsler Intelligence Scale for Children-Revised." Ph.D. Dissertation, University of Miami, 1977.
- Mattleman, M. S.; Emans, R. L. "The Language of the Inner-City Child: A Comparison of Puerto Rican and Negro Third Grade." 38 (1969):173-176.
- Mecham, M. J. "Enhancing Environments for Children with Cultural-Linguistic Differences." Language, Speech, and Hearing Services in Schools 6 (July 1975):156-160.
- Mercer, J. R. "Test 'Validity'; 'Bias', and 'Fairness' An Analyses from the Perspective of the Sociology of Knowledge." Interchange 9 (1978-1979):1-16.
- Mintz, S. W. "Puerto Rico. . . An Essay in the Definition of a National Culture." 1966 Status of Puerto Rico: Selected Background studies. Washington, D.C.: Government Printing Office, 1966.
- Modular Sequence: Puerto Rican Pupils in Mainland Schools TTP 003.11. Puerto Ricans and Their Mores. Teachers Corps Bilingual Project, Hartford University, West Hartford, Connecticut (ERIC ED 103378).
- Morris, J. "What Tests do Schools Use with Spanish Speaking Students?" Integrated Education 15 (March/April 1977):21-23.
- Mowder, B. A. "A Strategy for the Assessment of Bilingual Handicapped Children." Psychology in the Schools 17 (April 1980):7-11.
- Murillo-Rohde, Ildaura. "Family Life Among Mainland Puerto Ricans in New York City Slums." Perspectives in Psychiatric Care 14 (1976):174-179.
- Nieves, Falcon, L. Diagnostics de Puerto Rico. Rio Piedras, P.R.: Editorial Edil, 1972.
- Oakland, T. "Assessing Minority Group Children: Challenges for School Psychologists." Journal of School Psychology 11 (1973):294-303.
- Palmer, J. O. The Psychological Assessment of Children. New York John Wiley and Sons, 1970.
- Pascal, G. R.; Suttrell, B. J. The Bender-Gestalt Test: Quantification and Validity for Adults. New York: Grune & Stratton, 1964.
- Peabody Picture Vocabulary Test. American Guidance Service, Inc. Publishers Building, Circle Pines, MN 50014.

- Peters, C. A. "Some Communication Problems Related to Testing Minority Populations with Standardized Instruments, August 1979. Paper presented at the Annual Meeting of the Association for Education in Journalism (62nd Houston, Texas, August 5-8, 1979).
- Potlizer, R. "Auditory Discrimination and the Disadvantaged: Deficit or Difference." English Record 21 (1971):174-179.
- Ratusnik, D. L.; Koenigsnecht, R. A. "Cross Cultural Item Analysis of the Columbia Mental Maturity Scale: Potential Application by the Language Clinician." Language, Speech and Hearing Services in Schools 7 (1976):186-190.
- Reschly, D. J. "Non-Biased Assessment and School Psychology." Iowa State Department of Public Instruction, Des Moines, Division of Pupil Personnel Services, August 1978 (ERIC ED 157240).
- Richardson, J. G. "The Case of Special Education and Minority Misclassification in California." Educational Research Quarterly, 4 (1979):25-40.
- Robb, George P.; Bernardoni, L. C.; Johnson, Ray W. Assessment of Individual Mental Ability. New York: Intext Educational Publishers, 1972.
- Roca, P. "Problems in Adapting Intelligence Scales from One Culture to Another." High School Journal, 38 (1955):124-131.
- Roca, P. Project Director. Wechsler Intelligence Scale for Children-Spanish Translation and Adaptation. The Psychological Corporation, New York, 1971.
- Rodriguez, C. "The Structure of Failure II: A Case in Point." The Urban Review 7 (1974):215-226.
- Rodriguez, R. C. "Effectiveness with Bicultural Children: Approaches for Monocultural Teachers." Contemporary Education 50 (1979): 134-138.
- Roeming, R. F. "Bilingualism and the Bilingual Child: Symposium with Introduction." Modern Language Journal 49 (April 1965):143-239.
- Roeming, R. J. "Bilingualism and the National Interest." The Modern Language Journal 55 (1977):73.
- Rotter Incomplete Sentence Blank. The Psychological Corporation, 757 Third Avenue, New York, New York, 10017.
- Sabatino, D. R.; Kelling, K.; Hayden, D. L. "Special Education and the Culturally Different Child: Implications for Assessment and Intervention." Exceptional Child 39 (Apr. 1973):563-566.

- Salvia, J.; Ysseldyke, J. E. Assessment in Special and Remedial Education. Boston: Houghton Mifflin, 1978.
- Samuda, R. Psychological Testing of American Minorities: Issues and Consequences. New York: Dodd, Mead and Co., 1975.
- Sanders, Marion. Clinical Assessment of Learning Problems, Model, Process, and Remedial Planning. Boston: Allyn and Bacon, Inc. 1979.
- Seda-Bonilla, E. "Cultural Pluralism and the Education of Puerto Rican Youths." Phi Delta Kappan 53 (Jan. 1972):294-296.
- Seitz, V.; Abelson, W. D.; Lerune, E.; Zigler, E. "Effects of Place of Testing on the PPVT Scores of Disadvantaged Head Start and Non-Head Start Children." Child Development 46 (1975):481-486.
- Sells, S. B.; Cox, S. H. "Abstracts Related to Wide Range Achievement Test." Institute of Behavioral Research, Texas Christian University, June 1964.
- Simon, B. Intelligence, Psychology and Education: A Marxist Critique. London: Lawrence and Wishart, 1971.
- Smith, M. W. "Analysis of Cultural Bias in the Stanford-Binet Intelligence Scale." Genetic Psychology Monographs 89 (1974).
- Stanford-Binet Intelligence Scale. Houghton Mifflin Co., Test Department, Box 1970, Iowa City, IA 52240.
- Stone, Chuck. "Testing and the Power Struggle." Integrated Education. 9 (July/Aug 1971):4-9.
- Sugarman, S. D.; Widess, E. G. "Equal Protection for Non-English Speaking School Children: Lau v. Nichols." California Law Review 62 (1974):157-182.
- Swerdlik, M. E. "Comparison of WISC and WISC-R Scores on Referred Black, White and Latino Children." Journal of School Psychology 16 (1978):110-125.
- System of Multicultural Pluralistic Assessment Technical Manual. J. R. Mercer, The Psychological Corporation, 1978.
- Taylor, Orlando L. "Language Issues and Testing." Journal of Non-White Concerns in Personnel and Guidance 6 (April 1978):125-132.
- Terman, L. M.; Merrill, M. A. Stanford-Binet intelligence Scale, Manual for the Third Revision Form L-M. Boston: Houghton Mifflin Co., 1973.

- Test for Auditory Comprehension of Languages. Learning Concepts, 2501 N. Lamar Blvd., Austin, Texas, 78705.
- Thomas, A.; Hartzig, M. E.; Dryman, F.; Fernandez, P. "Examiner Effect in IQ Testing of Puerto Rican Working-Class Children." American Journal of Orthopsychiatry 41 (1971):809-821.
- Tireman, L. S.; Zintz, M. V. "Factors Influencing Learning a Second Language." Education 81 (Jan. 1961):310-313.
- Troike, Rudolph. "Bilingual Education in the U.S.: The First Decade." International Review of Education 24 (1978):401-405.
- Troll, E. W. "The Barbee Doll Mentality and the Goodenough-Harris Drawing Tests." Paper presented at the Annual Meeting, APA (84th) Washington D.C. 1976 (ERIC ED 164546).
- Tyler, R. W. "Testing for Accountability." Nations Schools 86 (Dec. 1970):37-39.
- Valcourt, G. A. "The Puerto Rican Student in the American Public Junior High School today." Ed.D. Dissertation, Lehigh University 1977.
- Vingoe, F. J.; Birney, D. S.; Kordinak, S. "Note on Psychological Screening of Preschool Children." Perceptual and Motor Skills 29 (1969):661-662.
- Wechsler Intelligence Scales for Children. The Psychological Corporation, 1949.
- Wechsler Intelligence Scale for Children, Translation and Adaptation. The Psychological Corporation, 1951.
- Wechsler Intelligence Scale for Children-Revised Form. The Psychological Corporation, 1974.
- White, M. J.; Snyder, J.; Lira, Frank T. "Some Sociocultural Determinants of Academic Performance Among Behaviorally Disturbed Adolescents." Journal of Genetic Psychology 131 (1978):145-146.
- Wide Range Achievement Test Guidance Associates of Delaware, 1526 Gilpin Avenue, Wilmington, Delaware, 19806.
- Zigler, E.; Abelson, W. D.; Seitz, V. "Motivational Factors in the Performance of Economically Disadvantaged Children on the Peabody Picture Vocabulary Test." Child Development 44 (1973):294-303.
- Zirkel, P. A. "The Why's and Ways of Testing Bilinguality Before Teaching Bilingually." The Elementary School Journal 76 (1976): 323-330.

C H A P T E R I V

CONCLUSIONS AND RECOMMENDATIONS

The major effort of this study has been to develop a guidebook for psychologists and teachers who test Puerto Rican children. The need for such a guidebook was foreseen when court orders, legislative mandates, and ethical guidelines mandated the assessment of minority children in a non-discriminatory manner. This followed from the realization that testing practices were discriminating against members of minority groups which differed from the dominant group, linguistically, culturally, and socio-economically.

The preceding chapters presented and analyzed the art of testing as it pertains to Puerto Rican children, as well as to other minority children. They showed that many tests and testing procedures, although not intentionally, discriminate against children from minority groups. They provided a portrait of Puerto Rican children's cultural, linguistic, and socio-economic backgrounds and how these affected their test performance.

The review of the literature presented a bleak picture of what testing practices have meant to Puerto Rican and other Hispanic children in this country. It also made what might appear to be a startling revelation: that today the same criticisms as those of 60 years ago are made of assessment practices and instruments as applied to Hispanic children. The literature review also revealed that, despite the

profession's ethical guidelines, and legislative and court mandates, the assessment of these children has continued mostly in a business-as-usual manner; discriminatory effects and all.

The differences among children are just too vast to be fully accounted for by present testing practices. The issues involved are too extensive and too intensive, perhaps even too painful, for complete treatment in this one study. It was therefore decided that a practical approach to the subject, a guidebook to assist examiners in testing Puerto Rican children in as non-discriminatory a way as possible, would provide at least a comprehensive review of the problems, the highlights of the most relevant issues, and recommendations to improve test selection and administration.

Thus, the development of this guidebook had two major purposes: 1) the provision of recommendations to be followed in the psycho-educational assessment of Puerto Rican children, and 2) the raising of awareness and consciousness in the reader of what the problems are in testing them. This guidebook had to be a practical and simple one; it had to stress the fact that improper testing practices, misuse of tests, and unfamiliarity with the population in question only serve to discriminate against these children. It had, in a way, to summarize what has been said for half a century.

Feelings of impotence and despair often surfaced during the course of this study. Pain and anger would accompany the struggle to present an objective view of reality. Some resolution of these feelings was found in the acceptance of the issues raised in the study as part of

the reality of society in the United States. By the very nature of this society, in which opportunities for equality are minimized by differences in, among other things, race, national origin, language, and class, discriminatory practices are bound to occur.

However, this is not a justification; on the contrary, it is a condemnation of those very same practices which have served to deter, rather than advance the educational achievement of those who need it the most: our linguistic minorities. It is those who are in most need, who deserve every effort on our part to assist them in achieving what society has to offer to the majority of its people.

No longer can we tolerate, and be participants in a process which may bring, then perpetuate, the same injustices which are faced by Puerto Rican children daily in our school systems. Test administrators are entrusted with the tasks of deciding in the long run the educational future of children. As hundreds of thousands of non-English speaking children, among them Puerto Ricans, enter the public schools of this country it is imperative that corrective action be taken to insure a non-discriminatory testing process.

As a recourse, minority groups have gone to the courts of the land. As has been seen lately, the courts have found that testing practices have discriminated against these minority groups. The evidence has been too blatant to be disguised in what has been attributed to the genetical and/or mental inferiority of these groups. Thus, the responsibility falls back on test administrators as agents of the system; that is the responsibility of insuring a fair and non-discriminative testing process of these children.

There must be a realization and an acceptance of the issues here presented, so that the efforts of test administrators as well as other professionals involved in the assessment of Puerto Rican children can be directed toward the elimination of discriminatory testing practices. It is my belief that this can be accomplished by basically following two fundamental pre-requisites in the assessment of Puerto Rican children, which are the final recommendations of this study:

- 1 The examiner must remember that the current testing practices may result in the discriminatory, unfair and invalid assessment of Puerto Rican children. The differences between these children's background and that of the Anglo-tailored school are insurmountable; but they must never be ignored or disregarded as unavoidable without an active and conscious effort for rectification.
2. The examiner must remember that test administrators should be one of the responsible agents who guard against unfair assessment practices. As specialists in the field, they are supposedly knowledgeable about the intricacies of testing. Thus, they must realize that the child's future may rest on their hands, and that as a moral and ethical duty of their profession they must insure that Puerto Rican children, as well as other minority children, must not be penalized for their differences. This country boasts of the qualities of opportunities for all its members, it is up to test administrators to live up to this constitutional mandate.

By having an understanding of the issues, test administrators will be able to assess the capabilities of Puerto Rican children from the perspective of greater knowledge of the complexities involved. This guidebook will help test administrators to identify problems of children clearly, and to distinguish real learning disabilities from differences between the child's background and that of the test makers. This guidebook is a concrete step towards the resolution of the problem of unfair testing of Puerto Rican children.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Abel, T. M. Psychological Testing in Cultural Contexts. New Haven, Connecticut, 1973.
- Abraham, W. "Bilingual Child and His Teacher." Elementary English, 34 (Nov. 1957); 474-478.
- Abraham, W. "Bilingual Children, His Parents, Their Schools." Exceptional Children, 23 (Nov. 1956), 51-52.
- Adler, S. "Data Gathering: The Reliability and Validity of Test Data from Culturally Different Children" Journal of Learning Disabilities, 6 (August 1973), 429-434.
- Agrawal, Khazan C. "The Short Tests of Linguistic Skills" TESOL Quarterly, 13 (June 1979), 185-208.
- Aguayo, A. L. "The Effects of Bilingual-Bicultural Instruction on Conceptual Development and Self-Concept of Kindergarten Pupils in an Urban Setting." Diss. Abs. Int. 38 (12-A) June 1978, 7143.
- Ainsworth, J. N. "Zombies and Other Problems: Theory and Methodology in Research on Bilingualism." Language Learning 241 (June 1974) 105-133.
- Aitken, K. "Performance of Non-native and Native Speakers of English on Compre English Language Test." T.E.S.L. Talk. 10 (Fall 1978) 1-4.
- Alers, Jose O. et al. "Puerto Ricans and Health: Findings from New York City." Monograph No. 1, New York: Fordham University Hispanic Research Center June 1978. ERIC ED 167650.
- Aliotti, N. C. "Alternative Assessment Strategies in A Pluralistic Society." School Psychology Digest, 6(3) Winter 1977, 6-12.
- Altus, Grace T. "W.I.S.C. Patterns of a Selective Sample of Bilingual School Children." Journal of Genetic Psychology, 83 (1953) 241-248.
- Alvira-Benitez, S. "Selected Factors in Home Environment and Puerto Rican Fourth Grade Pupil's Reading Achievement." Diss. Abs. Int. 37 (12-A, Pt. 1), June 1977, 75-28.
- Alzati, Gloria. "Analysis of Testing Problems in Spanish Speaking Children." Paper presented at the World Congress on Future Special Education (First, Sterling Scotland). June 25-July 1, 1978. ERIC Ed 157282.

- Anastasi, A. Implications for Testing. In A. Anastasi (Ed.). Testing Problems in Perspective: Topical Readings from the International Conference on Testing Problems. Princeton, New Jersey: Educational Testing Services, 1966.
- Anastasi, Anne. Psychological Testing, 4th edition. New York: Macmillan Publishing Co., 1976.
- Anastasi, A.; Cordova, F.A. "Some Effects of Bilingualism Upon the Intelligence Test Performance of Puerto Rican Children in New York City." Journal of Educational Psychology 44 (June 1953), 1-19.
- Anastasi, A.; DeJesus, C. "Language Development and Non-Verbal IQ of Puerto Rican Preschool Children in New York City." Journal of Abnormal and Social Psychology, 48 (July 1953) 357-366.
- Anderson, Lorin W. "Opportunity To Learn, Tests Bias, and School Effects" Paper presented at the Annual meeting of the National Council on Measurement in Education, Washington, D.C., March 30-April 2, 1975. ERIC ED 114409.
- Anderson, T. "Bilingual Education: the American Experience" Modern Language Journal 55 (November 1971): 427-440.
- Anderson, T. "Bilingual Schooling: Oasis or Mirage" Hispania 52 (March 1969):69-74.
- Anderson, Theodore; Past, A.W.; Past, K.E. "Early Childhood: The Best Time to Become Bilingual and Biliterate" Childhood Education 54 (Jan 1978) 155-161.
- Andre, Joseph. "Intelligence, I.Q. and Race: When, How and Why They Became Associated." R and E Research Associates, Inc., 4843 Mission St., San Francisco, California, 94112. ERIC ED 173359.
- Angle, John. "Mainland Control of Migratory and Reward for Bilingualism in Puerto Rico." American Sociological Review 41 (Jan 1976) 85-94.
- "Annotations on Selected Aspects of the Culture of Puerto Rico and its People." New York State Education Department, Albany, 1969. ERIC ED 059933.
- Ansell, P.N. "Psychological Differentiation, Social Reinforcement, and Task Performance with Black, White and Hispanic First and Second Grade Children." Diss. Abs. Int. 38 (2-A, Aug 1977); 697.

- Anthony, J.J. "Comparison of WIPSI and Stanford-Binet Intelligence Scores for Disadvantaged Preschool Children." Psychology in the Schools 10 (July 1973): 293-299.
- Antonovsky, A. "Aspiration, Class and Social-Ethnic Membership." Journal of Negro Education 36 (Fall 1967): 385-393.
- Appelbaum, S.A.; Tuma, J.M. "Social Class and Test Performance: Comparative Validity of the Peabody with the WISC and WISC-R for Two Socioeconomic Groups." Psychological Reports 40 (1977) 139-145.
- Araoz, D.L. "Male Puerto Rican Parental Self-Image (How Puerto Rican Men in New York Feel About Being Fathers). Ed.D. dissertation, Columbia University, 1969.
- Aragon, J.A.; Wibarri, S.R. "Learn, Amigo, Learn." Personnel and Guidance Journal 50 (Oct. 1971) 87-89.
- Armstrong, R.A. "Test Bias from the Non-Anglo Viewpoint: A Critical Evaluation of Intelligence Test Items by Members of 3 Cultural Minorities." Diss. Abs. Int. 33 (4-A) 1502, Oct. 1972.
- Arnold, M.R. "Language Choice by Bilingual Puerto Rican Children on A Picture Labeling Task." Modern Language Journal 63 (Nov. 1979) 349-354.
- Arnold, R.D. "Reliability of Test Scores for the Young Bilingual Disadvantaged." Reading Teacher 22 (January 1969):341-345.
- Arreche, Paquita R. "Vocational Needs of the Puerto Rican Migrant in New York City." In Fordham University, Dissertation accepted for higher degrees, New York, 13 (1946) 26-30.
- Arrisman, P.H. "Some Aspects of Code Switching in New York Puerto Rican English." Bilingual Review 2 (Jan-Aug 1975) 56-85.
- Arvey, R.D. "Some Comments on Culture Fair Tests." Personnel Psychology 25 (Fall 1973) 433-448.
- ASPIRA of America, Inc. Hispanic Segregation Trends in Major School Districts with Large Hispanic Enrollment. New York, April 1978.
- ASPIRA vs. Board of Education of the City of New York, 58 F.R.D. 62 (S.D., N.Y. 1973).
- "Assessment Instruments in Bilingual Education: A Descriptive Catalog of 342 Oral and Written Tests. National Dissemination and Assessment Center, 5151 State University Drive, Los Angeles, California, 90032. ERIC ED 173373,

- "Assimilation Through Cultural Understanding." ERIC ED 024713.
- Association of Farmworker Opportunity Programs. The Interface Between Desegregation and Bilingual Education as it Affects Hispanic Migrant Children. Raleigh, North Carolina, June 1979.
- Austin, J.S. "Cultural Dynamics of the Elementary School Classroom: An Ethnographic Approach." Diss. Abs. Int. 38 (4-A, Oct. 1977): 1957.
- Ayala-Vazquez, N. "Exploratory Study of Selected Child Rearing Practices Among English Speaking Puerto Ricans in New York City." Ph.D. dissertation, University of Pittsburgh, 1975.
- Azevedo, M.M.; Garcia, M.R. "Pitfalls in the Preparation of Bilingual Materials." Hispania 60 (May 1977) 313-319.
- Baca, W. and Cervantes, H. "Assessment of Minority Students: Are Adaptive Behavior Scales the Answer?" Psychology in the Schools, 15 (July 1978) 364-366.
- Baecher, R.E. "An Exploratory Study to Determine Levels of Educational Development, Reading Levels, and the Cognitive Styles of Mexican American Students in Michigan." Ph.D. dissertation, University of Michigan, 1974.
- Baez, L.A.; Fernandez, R.R.; Gaskin, J.T. "Safeguarding the Rights of Hispanic Children Desegregation in Milwaukee Public Schools: A Community Perspective." Midwest National Origin Desegregation Assistance Center, School of Education, University of Wisconsin, Milwaukee, 1979.
- Bain, B. "Verbal Regulation of Cognitive Processes: A Replication of Lurias Procedures with Bilingual and Unilingual Infants." Child Development 47 (June 1976) 543-546.
- Balinsky, W.; Peng, S. "An Evaluation of Bilingual Education for Spanish Speaking Students." Urban Education, 9 (Oct. 1974): 271-278.
- Barnes, E.J. "I.Q. Testing and Minority School Children: Imperatives for Change." Journal of Non White Concerns in Personnel and Guidance. 2 (1) (Oct. 1973) 4-20.
- Batisti, A.V. "Attitudes of Hispanic Parochial School Parents and Professional Staff Towards Bilingual/Bicultural Education." Diss. Abs. Int. 39 (3-A) (Sept. 1978): 1193.
- Beckham, J. "Legal Implications of Minimum Competency Testing." Phi Delta Kappa Fastbacks No. 138:7-42.

- Bedotto, M.J. "The effect of Non-native speech upon the Reading Achievement of Spanish-Speaking Students at Different Levels of Intelligence and Upon Their Ability to Use Syntactic Clues to Meaning in Reading English." Diss. Abs. Int. 34 (7-A) (Jan. 1974) 3978-3979.
- Beez, W.V. "Influence of Biased Psychological Reports on 'Teacher' Behavior and Pupil Performance." Ph.D. dissertation, Indiana University, 1971.
- Belcher, J.C. "A Cross-cultural Household Level-of-Living Scale." Rural Sociology 37 (June 1972) 208-220.
- Belcher, J.C.; Crader, K.W. "Social Class, Style of Life and Fertility in Puerto Rico." Social Forces 52 (June 1974) 488-495.
- Ben-Zeev, S. "The Influence of Bilingualism in Cognitive Strategies and Cognitive Development." Child Development 48 (Sept. 1977): 1009-1018.
- Ben-Zeeb, Sandra. "The Effect of Bilingualism in Children from Spanish-English Low Economic Neighborhoods on Cognitive Development and Cognitive Strategy: Working papers on Bilingualism, No. 14, Ontario Institute for Studies in Education, Toronto Bilingual Education Project, Oct. 1977. ERIC ED 148106.
- Berquer, M.M. "The Relationship of Parent Participation and Selected Variables in Three Multi-ethnic Elementary Schools in Dade County, Florida." Diss. Abs. Int. 39 (1-A July 1978): 34.
- Berg, K.R. "Trust as a Factor in Working with Residents of a Black Community." Hospital and Community Psychiatry 28 (Aug. 1977) 619-620.
- Bergman, C.R. "Problems in the Developmental Psycholinguistics of Bilingualism: Language Acquisition and Language Use." Diss. Abs. Int. 38 (9-A) (March 1978), 5430.
- Berkowitz, E. "Family Attitudes and Practices of Puerto Rican and Non-Puerto Rican Students." High Points 43 (Mar 1961) 25-34.
- Bernardoni, L.C. "The Testing of Bicultural Children." ERIC ED 077977.
- Bernstein, N.T. "Effects of Training in the Cognitive Uses of Language Deficit of Disadvantaged Kindergarten Children: Double Classification Concepts." International Reading Association Conference Papers (Better Reading in Urban Schools. 17 (1972) 1-8.

- Berney, T.D. "The Effects of Language Choice on the Task Success of Bilingual Children." Diss. Abs. Int. 33 (7-A, Jan. 1973), 3366.
- Berney, T.D.; Cooper, R.L.; Fishman, J.A. "Semantic Independence and Degree of Bilingualism in Two Puerto Rican Communities." Revista Interamericana de Psicología 2 (1968) 289-294.
- Berry-Cabain, Christobal S. "A Survey of the Puerto Rican Community on Milwaukee's Northeast Side in 1976. Milwaukee Urban Observatory, Wisconsin, 1977. ERIC ED 164649.
- Berry, G.R., Lopez, C.A. "Testing Programs and the Spanish Speaking Child: Assessment Guidelines for School Counselors." School Counselor 24 (Mar 1977) 261-263.
- Bethell, I. "Against Bilingual Education." Modern Language Journal 63: (Sept/Oct 1979) 276-278.
- Beytagh, L.A. "Family Dynamics in 32 Puerto Rican Families." Ed.D. dissertation, Columbia University, 1967.
- Bilingual Education Act 20 U.S.C. 800(b) et seq. (Supp. IV 1974).
- "Bilingual Education and Desegregation." University of Pennsylvania Law Review 127 (June 1979): 1564-1606.
- Bilingual ERIC Reprtngs N.Y.C. Board of Education, Brooklyn, N.Y. Office of Education (DHEW), Washington, D.C. May 1973. Dissemination List L-17RS. ERIC ED 078719.
- Bilingual Syntax Measure M.K. Bur,; H. C. Dulay, E. Harnandez. The Psychological Corporation, 757 Third Avenue, New York, New York, 10017.
- Board of Education of the City of New York. New York City Public Schools--Facts and Figures, 1965-1966.
- Boardman, A.E.; Hoyd, A. "Process of Education for Twelve Grade Asian and Puerto Rican American Children." Integrated Education 16 (Mar/Apr 1978) 44-46.
- Bolotin, Max. "The Use of Human Picture Drawings in Evaluating Children and Adolescents of Special Educational and Cultural Background: An Effectiveness of Current Diagnostic Criteria With the Draw-A Person Test as Applied to Puerto Rican Children." Ph.D. dissertation, New York University, 1959.
- Borges, F. "Variables Associated with Successful Learning to Read Experiences of Children When they Enter School in Puerto Rico." Ed.D. dissertatin, Lehigh University, 1975.

- Borrego, E.R. "American Children with a Second Language Heritage." National Elementary Principal 25 (June 1946) 325.
- Bortin, Barbara H. Procedures for the Identification of Limited English Skills Ability Students and Development of Entrance and Exist Criteria for Bilingual/Bicultural Program. Paper presented at the Annual Meeting of American Educational Research Association, San Francisco, California, April 1979. ERIC ED 179082.
- Bosma, B. "NEA Testing Moratorium." Journal of School Psychology. 11(Wint. 1973):304-306.
- Bouquet, S. "Acculturation of Puerto Rican Children in New York and their Attitude Toward Negroes and Whites." Ph.D. dissertation Columbia University, 1962.
- Bowd, A.D. "Linguistic Background and Non-Verbal Intelligence: A Cross-cultural Comparison." Journal of Educational Research 68 (Sept. 1974) 26-27.
- Boyd, D.L. "Bilingualism as an Educational Objective." Educational Forum 32 (March 1968): 309-313.
- Bracht, Glenn H.; Hopkins, Kenneth D. Developmental Trends and Stability of Verbal and Non-verbal IQ Scores for Spanish-Surname Students. ERIC ED 976603.
- Brainard, Clarie H. "A Comparison of the Attitudes Toward Bilingual Education of Cuban, Mexican-American, Puerto Rican and Anglo Parents in Palm Beach County, Florida. Diss. Abs. Int. 38 (12-A) June 1978:7187.
- Bram, Joseph. "The Lower Status Puerto Rican Family. Revised Mobilization for Youth, Inc., New York, NY March 1963. ERIC ED 016690.
- Breland, Hunter M. et al. Cross Cultural Stability of Test Items. An Investigation of Response Patterns for Ten Socio-cultural Groups with Exploration of an Index of Cross Cultural Stability Final Report. Educational Testing Services, Princeton, N.J. ERIC ED 115682.
- Breland, Hunter M. Sex and Ethnic Comparisons of Test Validity Using A Blind-Scored Essay as a Criterion. Paper presented at the Annual Meeting of the Educational Research Association. ERIC ED 164589.
- Brennan, E.M.; Ryna, E.B.; Dawson, W.E. "Scaling of Apparent Accentedness by Magnitude Estimation and Sensory Modality Matching." Journal of Psycholinguistic Research 4 (Jan. 1975) 27-36.

- Bresnan, M.T. "The Effects of Ethnicity, Sex, and Locus of Control on Vocational Maturity of Disadvantaged High School Students." Diss. Abs. Int. 37 (2-A) (Aug. 1976) 800.
- Brick, Maria E. Bilingual Education and School Desegregation: The Case of Boston. Paper presented at the International Conference for Bilingual Bicultural Education, Chicago, Illinois, May 22-24, 1975. ERIC ED 126199.
- Brison, Les. "Cultural Diversity Within the Framework of Psychological Assessment." High School Journal 60 (Nov. 1976) 85-91.
- Brown, F. "Minimum Standard: Cure or Curse for Minority Children?" Education and Urban Sociology 12 (Nov. 1979) 109-118.
- Brown, F. "The SOMPA: A System of Measuring Potential Abilities?" School Psychology Digest 8 (1) (Winter 1979) 37-46.
- Brown v. Board of Education 347. U.S. 483 (1954).
- Bruzek, M. [The System and Structure of Culture] Sociologicky Casopis 12 (5) 1976, 449-459.
- Bryen, D.N. "Special Education and the Linguistically Different Child." Exceptional Children 40 (May 1974) 589-599.
- Bryen, Diane N. "Speech-Sound Discrimination Ability on Linguistically Unbiased Tests." Exceptional Children 40 (Jan 1976): 195-201.
- Budoff, M.; Gimon, A.; Corman, L. "Learning Potential Measurement with Spanish-speaking Youth as an Alternative to IQ Test: A First Report." Revista Interamericana de Psicologia 8 (3-4) (1974) 233-246.
- Buehler, M.H.; Weigert, A.J.; Thomas, D.L. "Correlates of Conjugal Power: A Fine Culture Analysis of Adolescent Perceptions." Journal of Comparative Family Studies 5 (1) [Spring 1974] 5-16.
- Burdette, Barbara; Echevaria Francisco. The Puerto Ricans on the Mainland, in Connecticut. The People of Connecticut. Multi-cultural Ethnic Heritage Series, Number Four. State Department of Education, Connecticut. Bureau of Elementary and Secondary Education, Connecticut. University of Connecticut, Storrs. World Education 1976. ERIC ED 160488.
- Bureau of Labor Statistics, Bureau of the Census, 1980 Report.
- Buros, O.K. "50 Years in Testing: Some Reminiscences, Criticisms and Suggestions." Educational Research 6 (July/Aug 1977) 9-15.

- Burstein, A. "Schizophrenic Patterns on the WISC and Their Validity for White, Black and Hispanic Children." Diss. Abs. Int. 37 (2-A) (Aug. 1976) 875.
- Calderon, C. L. "Put the Accent on Speech Errors" Texas Outline 43 (Feb. 1959):26-28.
- Caldwell, F. F.; Mowry, M.D. "Essay Versus the Objective Examination as Measures of the Achievement of Bilingual Children" Journal of Educational Psychology, 24 (Dec. 1933):696-702.
- Campbell, Ann, et al. "Native Language and Black Dialect Interference in the Oral Reproduction of Standard English by Puerto Rican Pupils" 1972 ERIC ED 114439.
- Cance, A. M. et al. "The Assessment of the Intelligence of Latinos in the U.S." ERIC ED 150456.
- Caplan, S. W.; Ruble, R. N. "Study of Culturally Imposed Factors on School Achievement in a Metropolitan Area" Journal of Educational Research 58 (Spring 1964):16-21.
- Carroll, A. W.; Seeley, K. R. "Historical Review of Intelligence Testing and the Handicapped" Academic Therapy 10(2) (Winter 1974-75):141-149.
- Carrow, Elizabeth "Auditory Comprehension of English by Monolingual and Bilingual Pre-school Children" Journal of Speech and Hearing Research 15 (June 1972):407-412.
- Carrow, R. A. "Comparative Study of the Family Relationships of Immigrant Chinese and Puerto Rican Children" Graduate Research in Education 4 (Spring 1969):85-87.
- Carrow, M. A. "Linguistic Functioning of Bilingual and Monolingual Children" Journal of Speech and Hearing Disabilities 22 (Sept. 1957):371-380.
- Carter, D. G.; Brown, F.; Harris, J. J. "Bilingual Bicultural Education: A Legal Analysis" Education and Urban Society 10 (1978):295-304.
- Cartwright, G. P. "Note on the Use of the P.P.V.T. With Disadvantaged Children" Journal of Educational Research 61 (Fall 1968):285.
- Casanova, C. "Puerto Ricans" Instructor 81 (January 1972):43-46.
- Castaneda, A. "Persisting Ideologies of Assimilation in America: Implications for Psychology and Education" ATIS BOS (Summer 1975):79-91.

- Castellanos, D. "The Hispanic Experience in New Jersey School: An Issue Paper on a Topical Subject in Education" ERIC ED 074831.
- Castillo, Martin. "Are the Spanish-Speaking Another Immigrant Group" (Document) Integrated Education 91 (Jan-Feb 1971):45-49.
- Casto, Glen, et al. "Cultural Awareness: Learning Your Way Around a New Culture" ERIC ED 109547.
- Castro, F. "The Politics of Local Education in New York City: A Puerto Rican View" Ed.D. dissertation, Rutgers University, 1973.
- Cattell, Raymond B. "Are Culture Fair Intelligence Tests Possible and Necessary?" Journal of Research and Development in Education 12 (1979):3-13.
- Center for Applied Linguistics: Final Report of the Bilingual Symposium: Building a Research Agenda, Volume a Arlington, Va. National Institute of Education, Washington, D.C., 1975. ERIC ED 152072).
- Center for Law and Education, Inc. Harvard University Newsnotes #18, March 1981.
- Center for National Policy Review, Trends in Hispanic Segregation 1970-74, No. 2, Washington, D.C.: Catholic University Law School, January 1977.
- Centro de Estudios Puertorriquenos. "Toward a Language Policy for Puerto Ricans in the United States: An Agenda for a Community in Movement." City University of New York. ERIC ED 164690.
- Cerda, E. Psicometria General Barcelona, Espana: Editorial Herder, 1972.
- Chandler, J. T.; Plakos, J. "Spanish Speaking Studies Classified as EMR: Integration in Education 7 (November 1969):28-33.
- Chaplin, J. P. Dictionary of Psychology. New York: Dell Publishing Co., 1975.
- Chapman, D. W. "Translation Procedures for the Cross-Cultural Use of Measuring Instruments" Educational Evaluation and Policy Analysis 1 (May-June 1979):71-76.
- Chastain, K. D. "A Methodological Study Comparing the Audiolingual Habit Theory and the Cognitive Code-Learning Theory: A Continuation" Modern Language Journal 54 (1970):257-266.
- Chess, Stella, et al. "Social Class and Child Rearing Practice" ERIC ED 016722.

- Children's Apperception Test, L. Bellak, S. S. Bellak, CPS Inc.,
P. O. Box 83, Larchmont, New York, 10538.
- Ching, D. C. "Reading and the Bilingual Child" Reading Aid Series,
International Reading Association. Newark, Delaware, 1976
ERIC ED 123582.
- Christiensen, E. W. "Counseling Puerto Ricans: Some Cultural
Considerations" Personnel and Guidance Journal 53 (January 1975):
349-356.
- Christian, Chester "Pre-school Literacy in Spanish" Hispania 60 (Sept.
1977):530-532.
- Christiansen, T.; Livermore, G. "A Comparison of Anglo American and
Spanish American Children on the WISC" Journal of Social
Psychology 81 (June 1970):9-14.
- Cicirelli, V. G. "Note on the Factor Analysis of Disadvantaged
Children's ITPA and Achievement Test Scores" Journal of
Experimental Education 41 (Fall 1972):5-8.
- Clark, R. M. "Cognitive Styles of Puerto Rican Children" (ERIC ED
119823.
- Coberly, M.S. "Fronting, Voicing and Stopping: Natural or English-
Specific" ERIC ED 152076.
- Cirino-Gerena, G. "The Development of a Vocational Interest Inventory"
Diss. Abs. Int 31 (10-B) 6313, April 1971.
- Clarence, S. "Strangers and Neighbors; the Story of our Puerto
Rican Citizens" New York: Anti Defamation League, B'nai B'rith
1952.
- Clarizio, H. F. "In Defense of the I.Q. Test." School Psychology
Digest 8(1) Winter 1979:79-88.
- Clarizio, Hausy "Non Biased Assessment of Minority Group Children"
Measurement and Evaluation 11 (July 1978):106-113.
- Close, J. S. "A Study of the Development of Linear Paterning Among
Young Economically Disadvantaged Children of 3 Ethnic Groups"
Diss Abs. Int 37 (9-A, Mar. 1977):5693.
- Cooper, R. L.; Fowles, B. R.; Givner, A. "Listening Comprehension in
a Bilingual Community" Modern Language Journal 53 (1969):235-241.
- Cohen, A. D. "Culver City Spanish Immersion Program: How does
summer recess affect spanish speaking ability?" Language Learning
24 (June 1974):55-68.

- Cohen, B. E. "The Co-existence of Bilingual/Bicultural Programs with School Desegregation Decrees" Washington, D.C.: Mexican America Legal Defense and Educational Fund, April 1978.
- Cohen, J. S. "Legal Issues in Non-Discriminatory Testing" School Psychology Digest 6(3) Winter 1977:35-42.
- Cohen, S. A. "Some Learning Disabilities of Socially Disadvantaged Puerto Rican and Negro Children" Academic Therapy Quarterly 2(1969):1.
- Coleman, J. S. Equality of Educational Opportunity Survey ("The Coleman Report"), 1966.
- Coles, G. S. "Learning Disabilities Test Battery: Empirical and Social Issues" Harvard Education Review 48 (August 1978):313-340.
- Collazo, A. A. "A Comparison of the Self-report and the Inferred Self-concept of 6th Grade Puerto Rican Children of Low and Middle Socio-economic Status" Diss. Abs. Int. 38 (6-A) Dec. 1977, 3359.
- Columbia Mental Maturity Scale. B. B. Burgemeister, L. M. Blum, I. Lorge. The Psychological Corporation, 757 Third Avenue, New York, New York, 10017.
- Concanna, J. J. "Student and Maternal Correlates of Academic Achievement in an 8th Grade Male Puerto Rican Population" Ed.D. dissertation, St. Johns University, 1978.
- Cooney, N. "Control of Aggression in Child Rearing Practices in Puerto Rico: A Study of Professed Practices Used with Boy and Girls in Two Socio-economic Urban Groups." Ph.D. dissertation, Columbia University, 1967.
- Cooper, J. G. "Predicting School Achievement for Bilingual Pupils" Journal of Educational Psychology 49 (Feb. 1958):31-36.
- Cooper, Robert L. "Two Contextualized Measures of Degree of Bilingualism" Modern Language Journal 53 (March 1969):172-178.
- Cooper, R. L.; Fowles, B. A.; Givner, A. "Listening Comprehension in a Bilingual Community" The Modern Language Journal 53 (1969): 235-240.
- Cooper, R. L.; Greenfield, L. "Word Frequency Estimation as a Measure of Degree of Bilingualism" Modern Language Journal 53 (March 1969): 163-166.

- Cordasco, F. M. "Puerto Rican Pupils and American Education" School and Society 95 (Feb. 18, 1967):116-119.
- Cordasco, F. M. "Spanish-Speaking Children in American Schools" International Migration Review 9 (1975):379-382.
- Cordasco, F. M. "The Bilingual Education Act." Phi Delta Kappan 52 (Oct. 1969):75.
- Cordasco, F. M.; Bucchioni, E. "Institute for Preparing Teachers of Puerto Rican Students" School and Society 100 (Summer 1972): 308-309.
- Cordasco, F. M.; Bucchioni, E. The Puerto Rican Community and Its Children. Metuchen, N.J.: The Scarecrow Press, 1972.
- Cordasco, F. M.; Covello, R. "Studies of Puerto Rican Children in American Schools: A Preliminary Bibliography" ERIC Ed 021910.
- Cordova-Ferrer, J. "Essays on Urban and Bilingual Education" ERIC Ed 164677.
- Corman, L.; Buddoff, M. "Factor Structures of Spanish Speaking Children on Ravens" Educational and Psychological Measurement 34 (Winter 1974):977-981.
- Cornett, J. D. et al. "Effect on an Intervention Program on High Risk Spanish American Children" Journal of Educational Research 67 (April 1974):342-343.
- Cortez, E. G. "The Puerto Rican Non-English Speaking Child: What Can I Do?" Language Arts 53 (1976):767.
- Covello, L. "Puerto Rican Life in New York City as Seen by the Puerto Rican Press" High Points 35 (Dec. 1953):46-49.
- Cronbach, L. J. Essentials of Psychological Testing. New York: Harper and Brothers, Publishers, 1960.
- Cruz, M. "Social Factors and Self-Esteem Among Puerto Rican Students" Ph.D. dissertation, University of Illinois at Urbana, 1974.
- Cruz, M. R. "Spanish-Speaking Students and the Language Factor in the MRT" Integrating Education 13 (November 1975):43-44.
- Cruz, S. et al. "A Further Examination of the Effects of Administering the Metropolitan Reading Tests in Spanish and English to Spanish Speaking School Entrants." ERIC ED 115663.

- Cruz-Sanjurjo, J. "Study of Puerto Rican, Mexican and Cuban Parents View of Bilingual/Bicultural Education" Ph.D. dissertation North Western University, 1977.
- Cummins, James "Cognitive Factors Associated with the Attainment of Intermediate Level of Bilingual Skills" Modern Language Journal 61 (Jan-Feb 1977):3-12.
- Cummings, James "Linguistic Interdependence and the Educational Development of Bilingual Children" Review of Educational Research 49 (Spring 1979):222-251.
- Curley, J. E. "Televised and Conventional Administrations of Objective Scales on a Disadvantage Bilingual Population" Diss. Abs. Int. 34 (6-B) (Dec. 1973):2893-2894.
- Dahl, R. J. "The Attainment of Conservation of Mass and Verbal Synthesis Between Latin-American Children Who Speak One or Two Languages" Diss Abs. Int., 38 (3-A, Sept. 1977):1285.
- Dalton, Starette "Language Dominance and Bilingual Recall" Journal of Psychology 84 (July 1973):257-265.
- Dalton, Starrett "Validation of the Language Assessment Scales" Educational and Psychological Measurement 39 (1979):1001-1013.
- Daniels, J.; Houghton, V. "Jensen, Eysenck and the Eclipse of the Galton Paradigm" In K. Richardson, D. Spears and M. Richards (Eds.) "Race and Intelligence: The Fallacies Behind the Race-IQ Controversy"
- Darcy, N. "A Review of the Literature on the Effects of Bilingualism Upon the Measurement of Intelligence" Journal of Genetic Psychology 83 (1953):21-57.
- Darcy, N. T. "Effect of Bilingualism Upon the Measurement of Intelligence of Children of Preschool Age" Journal of Educational Psychology 37 (Jan. 1946):21-44.
- Darcy, N. T. "Performance of Bilingual Puerto Rican Children on Verbal and Non-Language Tests of Intelligence" Journal of Educational Research 45 (March 1952):499-506.
- Darlington, R. B. "Cultural Test Bias: Comment on Hunter and Schmidt" Psychological Bulletin 85 (4) July 1978:673-674.
- Davis, J. C.; Foreyt, J. P. Mental Examiners Source Book. Springfield, Illinois: Charles C. Thomas Publishers, 1975.

- Davis, O. L.; Personke, C. R. "Effects of Administering the Metropolitan Readiness Test in English and Spanish to Spanish Speaking School Entrants" Journal of Educational Measurement 5 (1968): 231-234.
- DeLopatequi, M. N. "Needs and Problems of Puerto Rican High School Students Related to N Variables" Ph.D. dissertation, Purdue University, 1957.
- DeGeorge, G. P. "Guidelines for Selecting Tests for use in Bilingual/Bicultural Education" ERIC ED 108529.
- Decker, M. E. "From Si to Yes." Elementary English 46 (Jan. 1965): 35-37.
- Del Castillo, Ricardo "Reactions of Bilingual and Monolingual Speakers to Accented and Non-accented Speech" Diss. Abst. Int 36 (F-B) (Jan. 1976):3595.
- Del Valle, M. et al. "Lau and Bilingual Education: A Manual for the Community" National Puerto Rican Task Force on Education Centro de Estudios Puertorriquenos, New York, 1978 ERIC ED 164689.
- Department of Health, Education, and Welfare, "May 25th Memorandum" 35 Fed. Reg. 11595 (July 18, 1970).
- Deutsch, m.; Fishman, J.; Kogan, L.; North, R.; Whiteman, M. "Guidelines for Testing Minority Children" The Journal of Social Issues 20 (1964):127-145.
- Diamond, E. E. "Testing: The Baby and the Bath Water are Still With Us" Proceedings of the Educational Testing Services Invitational Conference 1976 (Oct):31-44.
- Diana v. California State Board of Education C. A. No. C-70-37-R.F.D. (Consent Decree).
- Diaz de Concepcion, A "Resources in the Lives and Culture of Puerto Rican Students Which will Aid in the Understanding and Use of Basic Concepts in Social Psychology" Ph.D. dissertation, Columbia University, 1961.
- Diaz, Royo, A. "The Enculturation Process of Puerto Rican Highland Children" Ed.D. dissertation University State of New York, Albany, 1975.
- Dillon, R.; Carlson, J. S. "Testing for Competence in 3 Ethnic Groups" Education and Psychological Measurement 38 (Summer 1978):437-443.

- Dissemination and Assessment Center for Bilingual Education I.Q. Tests and Minority Children, Austin, Texas, 1977.
- Dixon, J. C.; Garcia-Esteve, Joel; Sigvorten, M. L. "Personality and Language Structure in Two Languages" Revista Interamericana de Psychologia 2 (1968):13-23.
- Dixon, Margaret A.; Duncan, N. R. "Facilitating the Adjustment to and Participation in the Life of the School and Community by Newly Arrived Puerto Rican Pupils and Their Parents" Ed.D. dissertation, Nova University, Florida, 1974.
- Diott, S. P. "The Relationship Between a Community Based Puerto Rican Studies Program and Self-Concept of Inner-city, Puerto Rican, Elementary Children" Diss. Abs. Int. 37 (9-A) (March 1977):5478.
- Domenech, D. A. "The Relationship Between the Language Dominance and Cultural Affinity of Hispanic Students in Bilingual Programs" Diss Abs. Int 38 (6-A) Dec. 1977, 3341.
- D'Oyley, V. "Comments on Whether Multiculturalism Should Have an Impact on Testing and Counseling" School Guidance Worker 30 (Apr. 1975): 9-13.
- Dozier, Justin P.; Gelz, S. B. "Problems Involved in the Placement of a Deaf Puerto Rican Child in an Educational Environemtn in the U.S." American Ann. Deaf 98 (1953):260-267.
- Dreher, B. B. "Language Training in a Pre-School for Spanish Speaking Migrant Children" Speech Teacher 20 (January 1971):64-65.
- Drenth, P. J.; Van der Flier, H. "Cultural Differences and Comparability of Test Scores" International Review of Applied Psychology 25 (Dec. 1976):137-144.
- Drew, C. J. "Criterion-referenced and Norm-referenced Assessment of Minority Group Children." Journal of School Psychology 11 (Winter 1973):323-329.
- Druist, J. "Grammatical Patterns in the Spoken Spanish of Bilingual Teenagers" ERIC ED 172589.
- Dulay, Heidi; Pepe, Helene "The Influence of a Social Setting on Second Language Learning" ERIC ED 071472.
- Dulay, H.; Shultz, J. "Cross-cultural Miscommunication in the Classroom" ERIC ED 064439.
- Duncan, S. E. "Bilingualism and Cognition: Somr Recent Findings" Journal of National Association for Bilingual Education.

- Durga, R. "Bilingualism and Interlingual Interference" Journal of Cross Cultural Psychology 9 (Dec. 1978):401-415.
- Dyer, F. N. "Color-Naming Interference in Monolinguals and Bilinguals" Journal of Verbal Learning and Verbal Behavior 10 (July 1971): 297-302.
- Ebel, R. E. "Eight Critical Questions About the Use of Tests" Education 81 (Oct. 1960):67-68.
- Echternacht, Gary. "A Quick Method for Determining Test Bias" Educational Testing Services, Apr. 1972 ERIC ED 0670404.
- Edelman, M. "The Contextualization of School Children's Bilingualism" The Modern Language Journal 53 (1969):179-182.
- Edwards, N. "Suggestion of Spanish Speaking Children in Public Schools" Elementary School Journal 52 (Fall 1952):318.
- Eells, K. et al. Intelligence and Cultural Differences. Chicago: The University of Chicago Press, 1951.
- Ehrlich, A. et al. "Tests in Spanish and Other Languages and Non-verbal Tests for Children in Bilingual Programs: An Annotated B.E.A.R.U. Bibliography ERIC ED 078713.
- Elam, S. L. "Acculturation and Learning Problems of Puerto Rican Children" Teachers College Record 61 (Feb. 1960):258-264.
- Elam, S. L. "Poverty and Acculturation in a Migrant Puerto Rican Family" Record 70 (April 1969):617-626.
- Erwin-Tripp, S. M. "Language Acquisition and Communicative Choice" Stanford, CA: Stanford University Press, XIV, 1973.
- Estes, G.D.; Estes, C. "What is the Criterion of Interest in Identifying Limited English Speaking Students: Language Dominance or Proficiency? ERIC ED 167613.
- Evans v. Buchana 393 F. Supp. 428.
- Eyring, E. "spanish for the Spanish Speaking Student in the U.S." Modern Language Journal 22 (May 1937):138-145.
- Faneslow, J. F. "The Responses of Ninth Grade Spanish Speaking Bilingual Students to Four Short Stories" Bilingual Review 1 (Jan-Apr. 1974):16-41.

- Farguhar, W. W.; Christensen, E. "Motivational Factors Influencing Academic Achievement of Eleventh Grade Puerto Rican High School Students" Educational Publications Series, Educational Research Series, No. 43, Michigan State University, December 1973.
- Farley, R. Report to the Honorable Judge Paul Egly in Response to Minute Order No. C822854. Ann Arbor, Michigan: University of Michigan, Population Studies Center, November 1978.
- Feldman, C.; Shen, M. "Some Language Related Cognitive Advantages of Bilingual 5 year olds" Journal of Genetic Psychology 118 (June 1971):235-244.
- Felsten, E. "The Non-English Speaking Child and Learning to Read" English Record 23 (Spring 1973):93-97.
- Fergenbaum, D. B. "An Assessment of Test Bias on th ABIC, WISC-R and Bender Gestalt Test Using Multiple Statistical Criteria" Diss. Abs. Int 38 (12-A) June 1978; 7225.
- Ferguson, C. A. "Diglossia" Word 15 (1965) 325-340.
- Fernandez de Cintron, C.; Vales Pedro, R. "Social Dynamics of Return Migration to Puerto Rico" ERIC ED 126192.
- Fernandez, Edward "Persons of Spanish Origin in the U.S." Social Education 43 (Feb. 1979): 104-107.
- Fernandez, R. G. "Hubrid Verbs: Ar or Ear?" Hispania 62 (1979):336-339.
- Figuroa, R.; Gallegos, E. "Ethnic Differences in School Behavior" Sociology in Education 51 ()ct. 1978):289-298.
- Figuroa, R. A. "The SOMPA" School Psychology Digest 8(1):(Winter 1979) 28-36.
- Findley, W. G.; Bryan, M. "Ability Grouping: 1970-IV Conclusions and Recommendations Georgia University, Athens, Georgia College of Education.
- Findley, W. G.; Bryan, M. M. "Ability Grouping: 1970-I Common Practices in the Use of Tests for Grouping Students in Public Schools" Center for Educational Improvement, College of Education, University of Georgia Athens, Georgia, 30601.
- Findling, J. "Bilingual Need Affiliation and Future Orientation in Extra Group and Intra-group Domains" Modern Language Journal 53 (1969):227-231.
- Fine, B. The Strangelhold of the I.W. Garden City, New York: Doubleday and Co., Inc., 1975.

- Finocchiaro, M. "Education of Puerto Ricans on the Mainland: overcoming the Communication Barrier" ERIC ED 043871.
- Finocchiaro, Mary "Puerto Rican Newcomers in Our Schools" Journal of Educational Sociology 28 (1954):157-166.
- Finocchiaro, M. "Experiment in Teaching of Spanish in the First Grades" Bilingual Readiness Project N.Y. Society Experimental Study Education Yearbook, 1967: 30-32.
- Fisher, J. C. "Bilingualism in Puerto Rico: A History of Frustration" English Record 21 (1971):19-24.
- Fisher, J. C. et al. "Parents Career Aspirations for their Children Enrolled in Bilingual Programs" ERIC ED 150205.
- Fisher, R. I. "Study of Non-Intellectual Attributes of Children in First Grade Bilingual Bicultural Programs" Journal of Educational Research 67 (March 1974):323-328.
- Fishman, J. A. "Attitudes and Beliefs About Spanish and English Among Puerto Ricans" Viewpoints 47 (March 1971):51-72.
- Fishman, J. A. "Bilingualism in the Barrio" Modern Language Journal 53 (1969):151-185.
- Fishman, J. A. "Bilingualism with and Without Diglossia: Diglossia With and Without Bilingualism" In J. Macnamara Editor "Problems in Bilingualism" The Journal of Social Issues 23 (1967):29-38.
- Fishman, J. A. The Sociology of Language Rowley, Mass.: Newbury House, 1972.
- Fishman, J.; Cooper, R. L. "Alternative Measures of Bilingualism." Journal of Verbal Learning and Verbal Behavior 8 (1969):276-282.
- Fishman, J. A.; Casiano, H. "Puerto Ricans in Our Press" The Modern Language Journal 53 (1969):57-162.
- Fishman, J. "The Measurement and Description of Widespread and Relatively Stable Bilingualism" The Modern Language Journal 53 (1969):152-156.
- Flaugher, R. L. "The New Definitions of Test Fairness in Selection: Developments and Implications" ERIC ED 087336.
- Flicker, J. "Classes for Spanish-speaking Children" High Points 29 (Nov. 1977):58-62.
- Flumen, A. L.; Flumen, L. B. "WISCOS and WPPSICLES" Journal of School Psychology 17(1) 1979.

- Freytes-Dieppa, C. "Paired-associate Learning with Spanish and English Mediation in a Bilingual Population" Diss Abs. Int 38 (4-A), Oct. 1977:2040.
- Fuller, G. W. "Dimensions of Interactive Space in Classrooms: A Sociolinguistics Study in Bilingual Bicultural Education" Diss Abs. Int. 38 (0-A) March 1978, 5432.
- Gaader, B. "Special Psychological Effects of Bilingualism" Nordisk Psykologi 24 (4) (1972):321-330.
- Gaader, B. A. et al. "Bilingualism--From the Viewpoint of the Administrator and Counselor" November 4, 1966. ERIC ED 018286.
- Gaader, Bruce A. "Teaching Spanish in School and College to Mature Speakers of Spanish" Hispania 55 (Oct. 1972):619-631.
- Gaader, B. A. "Taching the Bilingual Child: Research, Development and Policy" Modern Language Journal.
- Gallardo, J. M. (Ed.). Proceedings of Conference on the Education of Puerto Rican Children on the Mainland" Commonwealth of Puerto Rico: Department of Education, Publishing Division, 1972. ERIC ED 114433.
- Galvan, R. R. "Bilingualism as it Relates to Intelligence Test Scores and School Achievement Among Culturally Deprived Spanish American Children" Diss. Abs. 28 (8-A) (1968):3021.
- Garcia, A. "A Study of the Relationship Between Teacher Perception and Bilingual/Bicultural Affective Interaction in the Classroom" Diss. Abs. Int. 33 (10-A):5599 Apr. 1973.
- Garcia, E. E.; Trujillo, A. "A Developmental Study of Spanish-English Production in Bilingual Children" Journal of Educational Psychology 71 (April 1979):161-168.
- Garcia, Moya R. "Pitfalls in the Preparation of Bilingual Materials: A Case Study: Hispania 60 (May 1977):313-319.
- Garcia, R. L. "Language and Reading Development of Bilinguals in the United States" ERIC ED 145449.
- Gaines, C. J. "The Effects of an English Program and a Spanish/English Program Upon Concept Development in Bilingual Children" Diss. Abs. Int. 35 (5-A) (Nov. 1976):2725.
- Gardiner, J. "The Effectiveness of Bilingual Education on Second Grade Children" Diss. Abs. Int 34 (7-A) (Jan. 1974):3687.

- Gasse, Yvon "Contextual Transposition in Translated Research Instruments" META 18 (Sept. 1973):295-307.
- Gardwood, D. A. "Experiments in Bilingual Bicultural Education" Liberal Education 48 (Mar 1962):49-59.
- Gavillan-Torres, E. M. "The Forgotten Rican: The Puerto Rican Community on the Mainland" Harvard Graduate School of Education Association Bulletin 20 (Spr/Sum 1976):10-12.
- Gaviria, M.; Wintrob, R. M. "Supernatural Influence in Psychopathology: Puerto Rican Folk Beliefs About Mental Illness" Canadian Psychiatric Association Journal 21(6) (Oct 1976):361-369.
- Gay, G. "Viewing the Pluralistic Classroom as a Cultural Microcosm" Educational Research Quarterly 2 (Winter 1978):45-59.
- Gecos, V.; Thomas, D. L.; Weigert, A. J. "Social Identities in Anglo and Latin Adolescents" Social Force 51 (June 1973):477-484.
- Gekoski, W. L. "Associative and Translation Habits of Bilinguals as a Function of Language Acquisition Contexts" Diss. Abs. Int. 30 (1-13) 1969:404-405.
- Genesse, F.; Tucker, G. R.; Lambert, W. E. "Communication Skills and Bilingual Children" Child Development 46 (Dec 1975):1010-1014.
- Geniski, C.; Chambers, R. "Informal Assessment of the Bilingual Child" Language Arts 54 (May 1977):496-500.
- Geniski, Celia "Code-Switching in Four Six-year old Spanish English Speakers" ERIC ED 145953.
- Gerry, M. H. "Cultural Myopia: The Need for a Corrective Lens" Journal of School Psychology 11 (1973):307-315.
- Gezi, Kal "Bilingual Bicultural Education: A Review of Relevant Research" California Journal of Educational Research 25 (5) (1974):223-239.
- Gilmore, G. M.; Stallings, W. M.; Randall, R. S. "A Comment on Nedler and Seberas' Intervention Strategies for Spanish Speaking Preschool Children" Child Development 43 (Sept. 1972):1035-1040.
- Gimelli, J. C. "Influence of Skin-Color and Sex-Role Identity on Self-Concept of Puerto Rican Adolescents" Ph.D. dissertation Fordham University, 1978.
- Gimon, A. T. "Maternal Expectancies: Effects of their Modification on Training Behavior of Puerto Rican Mothers Towards their Retarded Children" Ph.D. dissertation, Yeshiva University, 1973.

- Ginorio, A. B.; Berry, P. C. "Measuring Puerto Rican's Perceptions of Racial Characteristics" Proceedings of the Annual Convention of the APA 7 (Pt. 1) (1972):287-288.
- Ginorio, Angela B. "The Social Significance of Race and Sex in Acculturation" Topics in Culture Learning 4 (Aug 1976):24-25.
- Giordano, G. "Neurological Research on Language and the Implications for Teaching Bilingual Children to Read" ERIC ED 144396.
- Glad, D. et al. "A Comparison of English Language Acquisition Patterns in English Monolingual and Bilingual Children" ERIC ED 175258.
- Goeber, D. D.; Shore, M. F. "Some Effects of Bicultural and Monocultural School Environments on Personality Development" American Journal of Orthopsychiatry 48 (July 1978):398-407.
- Golazeski, C. T. "Language Interference and Visual Perception for Native and Puerto Rican Speakers of English in Second Grade" M.Ed. dissertation, Rutgers University, 1971.
- Goldberg, G. A.; Gordon, E. W. "Puerto Rican Migrants on the Mainland of the United States" ERIC ED 021941.
- Golightly, M. G. "Construction of a Culture-Fair Primary Grade Geometry Test: Kindergarten to Grade Three" Diss. Abs. Int. 37 (8-A) (Feb. 1977):4931.
- Gomez, G. I. "Questioning Behavior of First-Grade Bilingual Teachers during Reading Instruction: English versus Spanish" Diss. Abs. Inst. 37 (12-A, Pt. 1) June 1977:7506.
- Gomez, G. I. "Reading in a Second Language: Native Language Approach vs. Direct Method" Reading Teacher 32 (Nov 1979):665-670.
- Gonzalez, E.; Ortiz, L. "Social Policy and Education Related to Linguistically and Culturally Different Groups" Journal of Learning Disabilities 10 (June 1977):332-338.
- Gonzalez, J. L. El Pais de Cuatro Pisos y Otio Ensayos Rio Piedras, Puerto Rico: Educiones Huracan, 1980.
- Gonzalez, J. M. "Coming of Age in Bilingual/Bicultural Education: A Historical Perspective" Inequality in Education Center for Law and Education, Inc., Harvard University, 1975.
- Gonzalez, P. C. "Error Patterns of Bilingual Readers" Journal of the National Association for Bilingual Education 3 (Spr. 1979): 15-25.

- Goodenough-Harris Drawing Test, D. B. Harris, F. Goodenough. New York: Harcourt Brace and World, Inc., 757 Third Avenue.
- Goodman, J. F. "Is Issue the Issue? A Critique of SOMPA's Models and Tests" School Psychology Digest 8(1) Winter 1979:47-62.
- Goodman, S.; Diamond, L. K.; Fox, D. J. "Who are the Puerto Rican Pupils in the New York City Public Schools?" New York: Board of Education, City of New York, 156, XIV.
- Gordon, E. Compensatory Education for the Disadvantaged. New York: York: College Entrance Examination Board, 1966.
- Gordon, R. A.; Rudert, E. E. "Bad News Concerning I.Q. Tests." Sociology on Education 52 (July 1979):174-190.
- Goslin, R. D. "Language and Reading Factors as Indicators of Achievement in Science and Social Studies for Students in a Bilingual Education Program" DA1 39 (1978) 3331A (Pennsylvania State University).
- Gostkowski, Zygmunt (Polish Academy of Science Warsaw) [The Need to Humanize Mass Survey Research] Studia Socjologiczne 1 (52) (1974):99-112.
- Grassi, J. R.; LaMorto-Corse, A. "Identification and Remediation of Basic Cognitive Deficits in Disadvantage Children" Journal of Learning Disabilities 12 (Aug/Spt 1979):483-487.
- Green, D. R.; Roudabush, G. E. "An Investigation of Bias in Criterion-Referenced Tests ERIC ED 113379.
- Green, E. A. "Is There a Significant Gain In Language Development for Children Attending Summer Head Start Programs Beyond the Ten Month Session" Diss. Abs. Int. 38 (7-A) Jan. 1978, 3996.
- Greene, John F.; Zirkel, Perry Alan. Academic Factors Relating to the Self-concept of Puerto Rican Students, 1971. Paper presented at the annual convention of the American Psychological Association Washington, D. C., 1971 ERID ED 054284.
- Greene, J.; Zirkel, P. A. "The Influence of Language and Ethnicity on the Measurement of Self-Concept of Spanish Speaking Migrant Pupils" Journal of Comparative Cultures 1:165-169, Spring 1973.
- Greene, J. F.; Zirkel, P. A. "The Use of Parallel Testing of Aural Ability as an Indication of Bilingual Dominance" Psychology in the Schools 11 (Jan 1974):51-55.

- Greene, J. F.; Zirkel, P. A. "The Validation of a Scale Designed to Measure Cultural Attitudes" ERIC ED 117246.
- Grill, J. J.; Bartel, N. R. "Language Bias in Tests: ITPA Grammatical Closure" Journal of Learning Disabilities 10 (Apr 1977):229-235.
- Groome, M. L.; Groome, W. R. "Item Bias Identification: A Comparison of Two Approaches" ERIC ED 174685.
- Groff, Patrick "Children's Oral Language and Their Written Composition" Elementary School Journal 78 (Jan 1978):180-191.
- Guerra, E. "The Challenge of Bilingualism in Education in the City of New York" ERIC ED 030339.
- Guerra, E. L. "Orientation of Puerto Rican Students in New York City" Modern Language Journal 32 (Oct 1948):415-420.
- Guerra, M. H. "Why Juanito Doesn't Read" In CTA 61 (Oct 1965):17-19.
- Guillmore, G. M.; Stallings, W. M. "A Comment on Nedler and Sebera's International Strategies for Spanish Speaking Preschool Children" Child Development 43 (1972):1035-1038.
- Guren, G. E.; Korte, J. R.; Baum, J. F. "Group Measure of Locus of Control" Developmental Psychology 10 (1974):683-684.
- Gurren, L. "Foreign Children Like to Sound American" Instructor 67 (June 1958):79-80.
- Gurren, L. "Special Class for Puerto Rican Students" High Points 30 (Feb 1948):77-80.
- Guzman, J. "Community Conflict: A Case Study of the Implementation of a Bilingual Education Program" Diss. Abs. Int 39 (1978) 1465A.
- Guzman, L. P. "Puerto Rican Self-esteem and the Importance of Social Context" Diss. Abs. Int. 37 (8-B) (Feb. 1977):4140.
- Guzman, M. D. "A Comparative Study of the WISC-R, the Spanish WISC, PPVT (English and Spanish Version) and the CMMS on Mexican American Children" Diss Abs. Int. 37 (7-A) Jan. 1977:4280.
- Hagin, R. A. et al. "Clinical-Diagnostic Use of the WPPSI in Predicting Learning Disabilities in Grade I" ERIC EDO46999.
- Hailer, R. M. "Meeting the Needs of the Bilingual Child: A Historical Perspective of the Nation's First Transitional Bilingual Education Law" ERIC ED 152096.

- Haker. "Psychological Aspects of Bilingualism" from R. F. Roeming "Bilingualism and the Bilingual Child: Symposium with Introduction" The Modern Language Journal 49 (March/April 1965): 143-175.
- Halpen, S. "A Response to the APGA Position paper on the "Responsible Use of Tests" Journal of Non-White Concerns 2 (Oct. 1973): 52-54.
- Halstead, D. W. "An Initial Survey of the Attitudinal Differences Between the Mothers of Over-Achieving and Underachieving 11th Grade Puerto Rican Students" Ph.D. dissertation, Michigan State University, 1966.
- Hamalian, L.; Hutch, J. V. "City College Rebellion Revisited" Changing Education 4 (Winter 1969):15-21.
- Harris, L. M. R. "A Spanish Translation of the Personality Inventory for Children (PIC): Preliminary Validation Diss. Abs. Int. 38 (3-B) (Sept. 1977):1403.
- Harris, M. B.; Hassemer, N. G. "Some Factors Affecting the Complexity of Children's Sentences: the Effects of Modeling, Age, Sex and Bilingualism" Journal of Exceptional Child Psychology 13 (June 1972):447-455.
- Harris, M. B.; Stockton, S. J. "Comparison of Bilingual and Monolingual Physical Education Instruction with Elementary School Students" Journal of Educational Research 67 (October 1973):53-54.
- Hart, S. N. "The Culture Fair Assessment of Intelligence: Diss. Abs. Int. 33 (7-b) (Jan. 1973):3284-3285.
- Hart v. Community School Board of Brooklyn No. 2. 383 F. Supp. 699.
- Hartlage, L. C.; Lucas, T. L.; Goodwin, A. "Culturally Biased and Culture-Fair Tests Correlated with School Performance in Culturally Disadvantaged Children" Journal of Clinical Psychology 32 (July 1976):658-660.
- Healey, G. W.; DeBlassie, R. R. "Comparison of Negro, Anglo, and Spanish American Adolescent's Self Concepts" Adolescence 9 (Spring 1974):15-24.
- Hennessy, J. J.; Merrifield, P. R. "Comparison of the Factor Structure of Mental Abilities in 4 Ethnic Groups" Journal of Educational Psychology 68 (Dec. 1976):754-759.
- Heras, I.; Nelson, R. K. "Retention of Semantic, Syntactic, and Language Information by Young Bilingual Children" Psychonomic Science 29 (6-B) (Dec. 1972):391-392.

- Herman, D. H. "The Identification of Bilingual Handicapped Students" ERIC ED 169709.
- Hermenett, A. M. "Ethnic Identification of Puerto Rican 7th Graders" Ed.D. Dissertation, University of Massachusetts, 1972.
- Hernandez, C. E. "Critique of a Critique: Issues in Language Assessment" The Journal of the National Association of Bilingual Educators 2 (Mar 1978):47-56.
- Hernandez, J. "Hispanic Migration From the Caribbean and Latin America: Implications for Educational Policy, Planning and Practice" ERIC ED 179624.
- Hernandez, L. "Bilingual vs. Migrant Education: The Educational Paradox of Migrant Farm Workers" Farmworker Journal 1 (Spr 1979):37-40.
- Hernandez, Leodoro, Calquist-Hernandez, K. "Humanization of the Counseling/Testing Process for Latinos: Learning Principles 7 (Jul 1979):154-158.
- Hernandez, Leodoro, Calquist-Hernandez, K. "Humanistic Counseling of Bilingual Students: A Continuous Process K-12" Journal of Non-White Concerns 7 (Apr 1979):100-107.
- Herrans, L. L. "Cultural Factors in the Standardization of the Spanish WAIS or EIWA and the Assessment of Spanish Speaking Children" School Psychologist 28 (Nov 1973):2734.
- Herrera, D. "Puerto Ricans in the U.S.: A Review of the Literature" Dissemination Center for Bilingual Bicultural Education, Austin, Texas, 1973.
- Hersh, Jeffrey, B. "The Influence of Biased Referral Reports in a Clinical Testing Situation" Ph.D. dissertation, Indiana University, 1970.
- Hertzog, M. E.; Birch, H. G. "Longitudinal course of Measured Intelligence in Preschool Children and Ethnic Backgrounds" American Journal of Orthopsychiatry 41 (April 1971):416-426.
- Hester, P. H. "The Educational Benefits of Four Puerto Rican Communities as Indicators of Political Interaction: A Comparative Study" Ph.D. dissertation, University of Connecticut, 1976.
- Hickey, E. C. "Adjusting the Curriculum for Bilingual Children" National Elementary Principal 36 (Sept. 1956):53-57.

- Hickey, Tom "Bilingualism and the Measurement of Intelligence and Verbal Learning Ability" Exceptional Children 39 (Sept. 1972): 24-28.
- Hidalgo, H. A. "The Puerto Ricans of Newark, New Jersey" ERIC ED 102239.
- Hill, H. S. "Correlation Between I. Q.s of Bilinguals at Different Ages on Different Tests" School and Society 44 (June 1936): 89-98.
- Hilliard, Asa G. "Alternatives to I.Q. Testing: An Approach to the Identification of Gifted Minority Children" ERIC ED 147009.
- Hilliard, Asa G. "Standardization and Cultural Bias: Impediments to the Scientific Study and Validation of 'Intelligence'" Journal of Research and Development in Education 12 (Winter 1979): 47-58.
- Hines, T. M. "The Independence of Language in Bilingual Memory" Diss. Abs. Int. 39 (2-B) Aug. 1978:1012.
- Hittinger, M. "Bilingualism and Self Identity" Educational Leadership 22 (Dec. 1969):247-249.
- Hocker, P. N. "Two Stimulus Transposition as Demonstrated by Spanish/English Speaking Children from Bilingual (Spanish/English) and Monolingual (English) Instruction Classroom" Diss. Abs. Int. 35 (1-A) July 1974:259.
- Hocker, P. N.; Muller, D. "Stimulus Discrimination Learning and Transposition in Bilingual Children" Perceptual and Motor Skills 42 (1976):55-62.
- Hoffman, M. N. H. "The Measurement of Bilingual Background" Teacher College Contributions in Education No. 625 (1934):v & 75.
- Holland, W. R. "Language Barrier as an Educational Problem of Spanish Speaking Children" 27 (Sept. 1960):42-44.
- Hoosain, R. "Foward and Backward Digit Span in the Languages of the Bilingual" Journal of Genetic Psychology 135 (Dec. 1979):263-268.
- Horne, M. D. "Occupational Attitude: A Comparison of Monolingual and Bilingual Student Groups" Journal of The National Association for Bilingual Education 3 (Spr. 1979):6169.
- Horst, B. "The New York Uperto Rican: Patterns of Work Experience Poverty Area Profiles Regional Reports: Bedford-Stuyvesant; Central Harlme; East Harlem; So. Bronx" Bureau of Labor Statistics (DOL) Washington, D.C.: ERIC ED 053226.

- Houtz, John C.; Phillips, R. H. "Relation of Self-esteem and Divergent Thinking Among Blacks and Puerto Rican Children" Perceptual and Motor Skills 47 (Oct. 1978):363-368.
- Howe, H. "Cowboys, Indians and American Education" Address given at National Conference on Education Oppression for Mexican-Americans in Austin, Texas, April 25, 1968. Southwest Educational Development Laboratory, Austin, Texas.
- Hunt, McVicker, J. "Psychological Assessment in Education and Social Class" ERIC ED 077943.
- Hunter, J. E.; Schmidt, F. L. "Bias in Defining That Bias: Reply to Darlington" Psychological Bulletin 85 (July 1978):675-676.
- "Informe sobre la Conferencia (Think Tank) de Aspira Nacional Sobre la Educacion Bilingue" ASPIRA ERIC ED 110528.
- Illinois Test of Psycholinguistic Abilities. S. A. Kirk; J. J. McCarthy; W. D. Kirk, University of Illinois Press, Urbana, Illinois, 61801.
- Inmiss, James "Counseling the Culturally Disrupted Child" Elementary School Guidance and Counseling 11 (Feb. 1977):229-235.
- Inter-American Series Tests, H. T. Manuel. Guidance Testing Associates, St. Marys University, One Camino Santa Maria, San Antonio, Texas, 78284.
- Irrizarry, R. A. "Bilingual Education: State and Federal Legislation Mandates, Implications for Program Design and Evaluation" National Dissemination and Assessment Center Los Angeles, Calif. ERIC ED 165503.
- Iwamoto, C. K. "High School Drop Outs: Effects of Hispanic Background and Previous School Achievement" Urban Education 11 (April 1976): 23-30.
- Jacobs, J. F.; Pierce, M. L. "Bilingualism and Creativity" Elementary English 43 (May 1966):499-503.
- Jacobs, P.; Landau, S.; Pell, E. "To Serve the Devil" Vol. I. Natives and Slaves, Vol. II Colonials and Sojourners New York: Random House, 1971.
- Jacobson, K. "Bilingual/Bicultural Education: Why, For Whom? What? How?" Minnesota Language Review 3 (Dec. 1974) ERIC ED 115123.
- Jacobson, V. S. "The Effect of Bilingualism on the Development of the Concept of Space" Diss. Abs. Int. 37 (8-A): (Feb. 1977):4988.

- Jenkins, J. R.; Parry, D. "Curriculum Bias in Reading Achievement Tests" Journal of Reading Behavior 10 (Winter 1978):345-357.
- Jensen, A. R. "An Unfounded Conclusion in M. W. Smith's Analysis of Culture Bias in the Stanford-Binet Intelligence Scale" Journal of Genetic Psychology 130 (March 1977):113-115.
- Jensen, A. R. "How Much Can We Boost IQ and Scholastic Achievement?" Harvard Educational Review 39 (1969):1-23.
- Jensen, J. V. "Effect of Childhood Bilingualism" Elementary English 39 (Feb.-Apr. 1962):132-143.
- Johnson, D. L. "Influence of Social Class and Race on Language Test Performance and Spontaneous Speech of Pre-School Children" Child Development 45 (June 1974):517-521.
- Johnson, Granville, B. Jr. "Bilingualism as Measured by a Reaction Time Technique and the Relationship Between a Language and a Non-language Intelligence Quotient" Journal of Genetic Psychology 82 (1953):3-9.
- Johnson, Granville B. Jr. "The Relationship Existing Between Bilingualism and Racial Attitude" Journal of Educational Research 42 (1951):357-254.
- Johnson, L. W. "A Comparison of the Vocabularies of Anglo-American and Spanish American High School Pupils" Journal of Educational Psychology 29 (1938):135-144.
- Johnson, P. F.; Warner, D. A. "A Bilingual Teacher is Not Enough" Integrated Education 15 (May June 1977):39.
- Johnson, P. F.; Warner, D. A. "The Influence of a Bilingual Teacher on the Short Term Academic Progress of Spanish-Speaking Elementary School Children" Journal of Instructional Psychology 5 (Winter 1978):2-4.
- Jones, B. J.; O'Brien R. W. "Migration Patterns and Backgrounds of Puerto Rican Workers in Lorain, Ohio" Journal of Human Relations 2 (1954):48-54.
- Jones, R. L. (Ed.) Black Psychology New York: Harper and Row, 1972.
- Jorgensen, C. C. "IQ Tests and their Educational Supporters" Journal of Social Issues 29 (1973):33-40.
- Junge, B. J. "The Effect of Bilingualism on Selected Verbal Learning Tasks" Diss. Abs. Int. 33 (4-A) Oct. 1972.

- Kabach, G. R. "Comparison of WAIS, Binet and WISC Test Results of Mentally Retarded Young Adults Born in New York City and Puerto Rico" Training School Bulletin 62 (Nov. 1965):108-112.
- Kahnheimer, L. W. "Programs in Social Living for Puerto Rican Pupils" High Points 36 (June 1954):58-68.
- Kamin, Leon "IQ Test as Instruments of Oppression. . . From Immigration Quotas to Welfare" South Today 4 (July 1973):6-10.
- Kangas, Tove ["Choice of Language of Instruction: Research or Politics?"] Nordisk Psykologi 25(2) (1973):102-112.
- Karl, Herbert G. "The Development of Language in Children: An Analysis of Selected Works of Jean Piaget with Implications for the English Program K-9" Diss. Abs. Int 33 (10-A):5617, Apr. 1973.
- Kaufman, M. "Will Instruction in Reading Spanish Affect Ability in Reading" Journal of Reading (April 1968):521-527.
- Kaller, G. D. "The Systematic Exclusion of the Language and Culture of Boricuas, Chicanos and other U.S. Hispanos in Elementary Spanish Grammar Textbooks Published in the U.S." Bilingual Review 1 (1974):227-238/
- Kendall, W. S. "Public Law 94-142 and the Minority Retarded Child: An Overview of Issues and Practices" ERIC ED 169737.
- Kennedy, D. A. "Rationality, Emotionality and Testing" Journal of School Psychology 16 (Spring 1978):16-24.
- Kepecs, J. G. "Psychiatric Disorders with Puerto Rican Troops" War Medicine Chicago 9 (1945):244-249.
- Keston, J. M.; Jimenez C. "Study of the Performance on English and Spanish Editions of the Stanford Binet Intelligence Tests by Spanish American Children" Journal of Genetic Psychology 85 (Dec. 1954):263-269.
- Keyes v. School District No. 1 413 U.S. 189 (1973).
- Killian, L. R. "Cognitive Test Performance of Spanish American Primary School Children: A Longitudinal Study, Final Report. Kent State University Ohio, Nov. 1971.
- Killiam, L. R. "WISC, ITPA, Bender Test Performance of Spanish American Kindergarten Children and First Grade School Children" Journal of Consulting Clinical Psychology 37 (Aug. 1971):38-43.

- King, M. L. "Puertorriquenos as Hispanics in the United States" ERIC ED 164634.
- Kirk, S. A.; Elkins, J. "Summaries of Research on the Revised Illinois Test of Psycholinguistics" ERIC ED 115024.
- Kittell, J. E. "Bilingualism and Language: Non-Language Intelligence Scores of Third Grade Children" Journal of Educational Research 52 (Mar. 1959):268-269.
- Kittell, J. E. "Intelligence-Test Performance of Children from Bilingual Environments" Elementary School Journal 64 (Nov. 1963): 76-83.
- Kleiber, W. C. "Academic Achievement and Aspects of Acculturation Among Puetto Rican Male Community College Students" Ph.D. dissertation, New York University, 1974.
- Kline, C. L.; Lee, N. "A Transcultural Study of Dyslexia: An Analysis of Language Disabilities in 277 Chinese Children Simultaneously Learning to Rad and Write English and Chinese" Journal of Special Education 6 (1972):9-26.
- Kobruck, W. J. "Compelling Case for Bilingual Education" Saturday Review 55 (April 29, 1972):54-58.
- Koenig, Frances G. "Improving the Language Abilities of Bilingual Children" Exceptional Children 19 (1953):183-186.
- Kohn, H. W. "Non-Destructive Testing" Education 24 (October 1972): 176-178.
- Kolasa, Blair John "The Relationship Between Bilingualism and Performance on a Linguistic Type Intelligence Test" Diss. Abs 14 (1954):2396.
- Krug, M. M. "Bilingual Education--Let Us Clarify the Issues" Social Education 43 (Feb. 1979):113-116.
- Lambert, N. M. "Contribution of School Classification; Sex, and Ethnic Status to Adaptive Behavior Assessment" Journal of School Psychology 17 (Spr. 1979):3-16.
- Lambert, Nadine M. Legal Consequences to Testing Larry P. a Case in Point. ERIC ED 173390.
- Lambert, Wallace E. "Measurement of the Linguistic Dominance of Bilinguals" Journal of Abnormal Psycholgoy, 50 (1955):197-200.

- Lambert, W. E. "Psychological Approaches To the Study of Language, On Second Language Learning and Bilingualism" Modern Language Journal 42 (Mar. 1963):114-121.
- Lambert, W. E.; Tucker, R. G.; d'Anglajan, A. "Cognitive and Attitudinal Consequences of Bilingual Schooling: The St. Lambert Project Through Grade 5th" Journal of Educational Psychology 65 (Oct. 1973):141-159.
- Lamy, P. "Language Ethnicity: A Study of Bilingualism, Ethnic Identity and Ethnic Attitudes" Diss. Abs. Int. 38 (2-A, Aug. 1977):1056.
- Landry, Rodrigue, J. "The Effects of Between- and Within-Language Repetitions on Free-Recall and Semantic Clustering" Diss Abs. Int 37 (6-A, Dec. 1976):3522.
- Lanning, F.; Robbins, R. "Alienated Ones" Instructor 77 (Fall 1968): 196.
- Loosa, L. M. "Bilingualism in Three U. S. Hispanic Groups: Contextual Use of Language by Children and Adults in Their Families" Journal of Educational Psychology 67 (Oct. 1975): 617-627.
- Laosa, L. M. "Cognitive Styles and Learning Strategies Research: Some of the Areas in Which Psychology Can Contribute to personalized Instruction in Multicultural Education" Journal of Teacher Education 28 (May-June 1977):26-30.
- Laosa, Luis M. "Child Care and the Culturally Different Child" Child Care Quarterly 3 (Winter 1974):214-224.
- Laosa, L. M. "Viewing Bilingual Multicultural Educational Television: An Empirical Analysis of Children's Behavior During Television Viewing" Journal of Educational Psychology 68 (1976): 133-142.
- Laosa, L. M. "What Languages Do Bilingual Children Use with Whom? Research Evidence and Implications for Education" ERIC ED 116456.
- Lau v. Nichols 414 U.S. 563 (1974).
- Leach, J. N. "Cultural Factors Affecting the Adjustment of Puerto Rican Children to Schooling in Hartford, Connecticut" Ph.D. dissertation, University of Connecticut, 1971.
- Leavalt, Ruby R. "The Puerto Ricans: Culture Change and Language Deviance" Tucson Arizona: University of Arizona Press 1974.

- Leiter International Performance Scale, and Arthur Adaptation
R. Leiter; G. Arthur. C. H. Stoelting Company, 424 North Homan
Avenue, Chicago, Illinois, 60624.
- Lenaghan, R. T. "Examining the Adversary Culture" College English
28 (May 1967):586-591.
- Leonetti, R.; Muller, D. G. "The Spanish-Surnamed Child: Self-
Concept and Schools" Elementary School Journal 76 (Jan. 1976):
247-255.
- Leopold, Werner F. "Speech Development of a Bilingual Child: A
Linguistics Record Vol. II Sound-Learning in the 1st 2 Years."
Northern University Studies Humanities No. 11 (1947) 295, xii.
- Lerea, L.; Kohut, S. "Comparative Study of Bilingual and Monolinguals
in a Verbal Tasks Performance" Journal of Clinical Psychology
17 (Jan. 1961): 49-52.
- Lerman, A.; Cortez, E. "Discovering and Meeting the Needs of Hispanic
Hearing Impaired Children" ERIC ED 155292.
- Lesser, G. S.; Fifer, G.; Clark, D. H. "Mental Abilities of Children
in Different Social and Cultural Groups. Cooperative Research
Project No. 1635, Office of Education, Dept. of H.E.W., 1964.
- Levandoski, B. "The Differences in Intelligence Test Scores of
Bilingual Students on an English version As Compared to a
Spanish Version of the Test" Illinois School Research 11 (Spr.
1975):47-51.
- Levenson, S. "Language Experience Approach for Teaching Beginning
Reading in Bilingual Education Programs" Hispanio 55 (May
1972):314-319.
- Levine, H. "Bilingualism: Its Effects on Emotional and Social
Development" Journal of Secondary Education 44 (Fall 1969):
69-73.
- Levinson, F. V. "Early Identification of Educationally High Risk and
High Potential Pupils: Influences of Sex and Sociocultural
Status on Screening Techniques" Diss. Abs. Int. 32 (11-A (May
1977):7042.
- Lewis, C. "Some Puerto Rican Viewpoints" Childhood Education
43:82-4, Oct. 1966.
- Lewis, D. G. "Bilingualism and Non-Verbal Intelligence: A Further
Study of Test Results" British Journal of Educational Psychology
29 (Feb. 1929):17-22.

- Lewis, H. D. "To Train or Not to Train Teachers for Spanish Speaking Communities" Viewpoints 49 (July 1973):15-29.
- Lewis, H. P.; Lewis, E. R. "Written Language Performance of Sixth Grade Children of Low Socio-economic Status from Bilinguals and From Monolingual Background" Journal of Experimental Education 33 (Spr. 1965):237-242.
- Lewiske, Raymond L. "The Search of Fairness in Testing" ERIC ED 157936.
- Lijtman, R. M. "Bilingualism and Learning Disabilities in Spanish Speaking Children" Diss. Abs. Int. 39 (1978):3747A.
- Linares-Drama, N.; Sanders, L. J. "Evaluation in Syntax in Three Year Old Puerto Rican Children" Journal of Speech and Hearing Research 20 (June 1977):350-357.
- Lindes, C. S.; Wellman, C. R. "Puerto Rico Comes to Our Doors" Journal of Exceptional Children 13 (March 1947):180-182.
- Litell, W. M. "The WISC-Review of a Decade of Research" Psychological Bulletin 57 (1960):132-156.
- Locks, N. A. et al. "Language Assessment Instruments for Limited English-Speaking Students: A Needs Analysis ERIC ED 163062.
- Long, P. A.; Anthony, J. J. "The Measurement of Mental Retardation by A Culture-Specific Test" Psychology in the Schools 11 (1974): 310-312.
- Lopez, A. M. "Using Puerto Rican Non-Verbal Communication Through Story Telling to Enhance English Comprehension of Spanish-Speaking Puerto Rican Children" Ed.D. dissertation, Temple University, 1975.
- Lopez, M.; Young, Robert K. "The Linguistic Interdependence of Bilinguals" Journal of Experimental Psychology 102 (1974): 981-983.
- Lopez, Rincon E. "Comparison of the Culture Bias of the KIT:EXP with the WISC Using Spanish Surname Children Differing in Language Spoken" Educational and Psychological Measurement 36 (1976): 1037-1041.
- Lorg, I.; Mayans, F. "Vestible vs. Regular Classes for Puerto Rican Migrant Pupils" Teachers College Record 55 (Feb. 1954):231-237.

- Love, H. D. "Auditory Discrimination, Spelling and Reading With Bilingual and Monolingual Children" Journal of Developmental Reading 6 (Spr. 1963):212-214.
- Lowe, J. J. "Attitudes and Personality Traits of 11th Grade Puerto Rican and Michigan Students" Ph.D. dissertation, Michigan State University, 1969.
- Lucas, I. "Puertorriquenos en Chicago: El Problema del Drop-Out" Rican 1 (May 1974):5-18.
- Luciano, D. "Special Report: Legislation Affecting Hispanics--An Assessment of the 95th Congress" Agenda 9 (March/April 1929) 12-23.
- Ludovicy, Ernest "Notes sur le bilinguisme" Rev. Psychol Peuples 9 (1954):152-169.
- Lugo-Pagan de Slosser, H. T. "The Symbolism of Food Among New York Puerto Ricans: A Cultural Account" Ph.D. dissertation, Columbia University Teachers College, 1978.
- Luhman, R. "On Language Use and Social Structure" Kansas Journal of Sociology 9 (2) (Fall 1973):97-125.
- Lunemann, A. "Correlational Validity of I.Q. as a Function of Ethnicity and Desegregation" Journal of School Psychology 12 (Winter 1974) 263-268.
- Lyman, H. B. Test Scores and What They Mean 3rd Edition Englewood Cliffs, N.J.: Prentice Hall, 1978.
- McCarthy, J. J. "Language Bias in Test: Replies to Grill and Bartel" Journal of Learning Disabilities 10 (Nov. 1977):544-546.
- McGrath, G. D. et al. Investigation of Mental Retardation in Relation to Bilingual Subcultural Factors ERIC ED 002810.
- McGreevy, P. F. "A Comparative Study of the Effects of Linguistic and Non-Linguistic Variables on the Performance of Urban Puerto Rican Elementary Pupils When Tested with the WISC and De Avila's Cartoon Conservation Scales" Ed.D. dissertation, Temple University, 1977.
- McLaughlin, B. "Second Language Learning in Children" Psychological Bulletin 84 (May 1977):438-459.

- Macias, R. F. "U.S. Hispanics in 2,000 A.D." Agenda 7 (May-June 1977):13-19.
- Mackey, W. F. "Bilingual Interference: Its Analysis and Measurement" Journal of Communication 15 (Dec. 1965):239-249.
- Mahakian, C. "Measuring Intelligence and Reading Capacity of Spanish Speaking Children" Elementary School Journal 39 (June 1939): 760-768.
- Maldonado-Denis, M. Puerto Rico: Una Interpretacion Historico-Social Siglo Veintiuno-Editores S.A. 1971.
- Maldonado, Edwin. "Contract Labor and the Origins of the Puerto Rican Community in the U.S." International Migration Review 13 (Spr. 1979):103-121.
- Malzberg, B. "Mental Disease Among Puerto Ricans in New York City, 1949-1951" Journal of Nervous Mental Disease 123 (1956):262-269.
- Malzberg, Benjamin. "Mental Disease Among Puerto Ricans in New York State" Psychiatric Quarterly Supplement 22 (1948):207-218.
- Manalo, M. A. "Oral Comprehension Apprehension in Bilingual Students: A Study at 4th, 6th and 8th Grades" Diss. Abs. Int. 39 (1978): 3426A.
- Mangan, James "Piaget's Theory of Cultural Differences: The Case for Value Based Modes of Cognition" Human Development 21 (1978): 170-189.
- Manning, W. H. "The Measurement of Intellectual Capacity and Performance" Journal of Negro Education 37 (1968):258-267.
- Mannino, F. V.; Shore, M. F. "Perceptions of Social Support by Spanish Speaking Students with Implications for Program Development" Journal of School Health 46 (Oct. 1976):471-474.
- Manuel, H. T. "Spanish and English Editions of the Stanford-Binet in Relation to the Abilities of Mexican Children" University of Texas Bulletin No. 3532 1935.
- Marcos, Luis R.; Eisnea, J. E.; Geumon, Jose. "Bilingualism and Sense of Self" American Journal of Psychoanalysis 37 (Winter 1977): 285-290.
- Marcos, L. R. "Hand Movements i Relation to the Encoding Process of Bilingualism" Diss. Abs. Int. 38 (1978):5276A.

- Margolis, R. "The Losers, A Report on Puerto Ricans and the Public Schools" ASPIRA, Inc., New York, 1968. ERIC ED 023779.
- Marianne Frostig Developmental Test of Visual Perception (DTVP)
M. Frostig, W. Lefever; J. R. B. Whittlessey Consulting
Psychologists Press, Inc., 577 College Avenue, Palo Alto,
California, 94306.
- Marmorale, A. M.; Brown, F. "Comparison of Bender-Gestalt and WISC
Correlation for Puerto Rican, White and Negro Children"
Journal of Clinical Psychology, 32 (1976):362-366.
- Marquardt, W. F. (Ed.). "Purto Ricans and Inter-American Understanding
Report of the 2nd Annual Conference on Education for New
Yorkers of Puerto Rican Background" Journal of Educational
Sociology 35 (May 1962):385-433.
- Martin, F. N.; Hart, D. B. "Measuring the Speech Thresholds of
Spanish Speaking Children by Non-Spanish Speaking Clinician"
Journal of Speech and Hearing Disabilities 43 (Mah 1978):255-262.
- Martinez, A. "Literacy Through Democratization of Education"
Harvard Educational Review 40 (May 1970):280-282.
- Martinez, R. A. "Dual Ethnicity of Puerto Rican College Students in
New York" Urban Education 14 (July 1979):254-259.
- Martinez, P. "Serna v. Portales: The Plight of Bilingual Education
Four Years Later" Journal of Ethnic Studies 7 (Summer 1979):
109-114.
- Massachusetts Advocacy Center Report "Double Jeopardy: The Plight
of Minority Students in Special Education. Boston:
Massachusetts Advocacy Center, 1978.
- Massey, J. O. Scoring Supplement for the Wechsler Intelligence Scale
for Children. Palo Alto, California, Consulting Psychologist
Press, 1965.
- Mattleman, M. S.; Emaus, R. L. "Language of the Inner City Child: A
Comparison of Puerto Rican and Third Grade (Negro) Girls"
Journal of Negro Education 38 (Spring 1969):173-176.
- Mayans, Frank Jr. "Puerto Rican Migrant Pupils in New York City
Schools: A Comparison of the Effects of Two Methods of In-
structional Grouping on English Mastery and Attitudes"
Diss. Abst. 1954, 14, 68-69.
- Maza, H. "Language Differences and Political Integration" Modern
Language Journal 41 (Dec. 1957):365-372.

- Maxwell, M. W. "Comparison of Opinions of Major Urban School Problems as Viewed by Blacks and Puerto Rican and White Administrators in New York City" Ed.D. dissertation, Fordham University, 1972.
- Mecham, M. J. "Enhancing Environments for Children with Cultural-Linguistics Differences" Language, Speech and Hearing Services in the School 6(3) (July 1975):156-160.
- Mecham, M. J. "Performance of Certain Minority Children on the Utah Test of Language Development" Language, Speech and Hearing Services in the Schools. 9 (April 1978):98-102.
- Megnney, W. W. "The Black Puerto Rican: An Analysis of Racial Attitudes" Phylon 35 (March 1974):83-93.
- Melear, J. D. "Informal Language Inventory" Elementary English 51(April 1974):508-511.
- Mendoza-Friedman, M. "Spanish Bilingual Students and Intelligence Testing" Changing Education Spring 1973, 25-28.
- Mercer, J. R. "Current Assessment Procedures and the Psychological and Social Implications on the Mexican American" A Position Paper. Southwest Educational Cooperative, Albuquerque, New Mexico, April 1970.
- Mercer, J. R. "Implications of Current Assessment Procedures for Mexican American Children" Bilingual Education Paper Series 1 (August 1977).
- Mercer, Jane R. "In defense of Racially and Culturally Non-discriminatory Testing" School Psychology Digest 8 (Winter 1979): 89-115.
- Mercer, J. R. Labeling the Mentally Retarded. Berkeley: University of California Press, 1972.
- Mercer, J. R. "Sociocultural Factors in Labeling Mental Retardates" The Peabody Journal of Education 48 (1971):188-203.
- Mercer, Jane R. "Test 'Validity', 'Bias', and 'Fairness': An Analysis from the Perspective of the Sociology of Knowledge" Interchange 9 (1978-1979):1-16.
- Mercer, J. R.; Lewis, J. F. "System of Multicultural Pluralistic Assessment: Technical Manual" New York: The Psychological Corporation, 1978.
- Meriam, J. L. "Learning English Incidentally, a Study of Bilingual Children" U.S. Office of Education Bulletin No. 14 (1937):105.

- Merlos, R. L. "Effects of Bilingual Education on the Cognitive Characteristics of the Spanish Speaking Children in Chicago Public Schools" Diss. Abs. Int. 39 (3-A) Sept. 1978, 1297.
- Merz, W. R.; Grossen, N. E. "An Empirical Investigation of Six Methods for Examining Test Item Bias" ERIC ED 178566.
- Merz, W. R.; Rudner, L. M. "Bias in Testing: A Presentation of Selected Methods."
- Metropolitan Readiness Tests, J. R. Nurss; M. E. McGauvran The Psychological Corporation, 757 Third Avenue, New York, New York, 10017.
- Meyers, E. C.; Macmillan, D. L.; Yoshida, R. K. "Validity of Psychologist's Identification of EMR Students in the Perspective of the California Decertification Experience" Journal of School Psychology 16(1) 1978, 3-15.
- Meyers, E. C.; Sundstrom, P. R.; Yoshida, R. K. "The School Psychologist and Assessment in Special Education" School Psychology Monograph 2(1) Fall 1974, 57 p.
- Meyers, E. O. "Is Chile a Food A Description of Weather, or Why Black Children Do Poorly on the WISC" ERIC ED 101372.
- Michigan State Department of Education "Guidelines for Selecting Test Instruments and Procedures for Assessing the Needs of Bilingual Children and Youth. Part I: Student Eligibility for Bilingual Instruction" Lansing, Michigan, March 1976 ERIC ED 161951.
- Miele, F. "Cultural Bias in the WISC" Intelligence 3 (April-June 1979): 149-164.
- Mills, R.; Bryan, M. "A Glossary of Measurement Terms Used Most Frequently in Discussing Tests and the Results of Tests" Testing. . 1. Grouping. . . the New Segregation in Southern Schools? 1976.
- Miller, C. K.; Chausky, N. M. "Psychologist's Scoring of WISC Protocols" Psychology in the School 9 (April 1972):144-152.
- Miller, H. "New York City's Puerto Rican Pupils: A Problem of Acculturation" School and Society 76 (August 30, 1952) 129-132.
- Miller, Niklas "The Bilingual Child in the Speech Therapy Clinic" British Journal of Disorders of Communication 13 (1) April 1978: 1730.

- Mills, C. W.; Senior, C.; Goldsen, R. K. "The Puerto Rican Journey, New York's Newest Migrants" New York Harper 1950, xi.
- Mintz, S. W. "Puerto Rico. . . An Essay in the Definition of a Natural Culture, 1966." Status of Puerto Rico: Selected Background Studies. Washington, D. C.: Government Printing Office, 1966.
- Mishra, S. P. "Influence of Examiner's Ethnic Attributes on Intelligence Test Scores" Psychology in the Schools 17 (January 1980):117-122.
- Mitchell, A. J. "Effect of Bilingualism in the Measurement of Intelligence" Elementary School Journal 38 (Sept. 1937):29-37.
- Mizeo, E. "Impact of External Systems on the Puerto Rican Family" Social Casework 55 (Feb. 1974):76-83.
- Mizio, E. "Puerto Rican Social Workers and Racism" Social Casework 53 (May 1972):267-272.
- "Modular Sequence: Puerto Rican Pupils in Mainland Schools. TTP003.11. Puerto Ricans and their Mores. Teacher Corps Bilingual Project Hartford University, West Hartford, Connecticut, ERIC ED 103378.
- Moffatt, J. G. "Bilingual Teacher Training: What is Really Needed?" Education Horizon 55 (Summer 1977):205-209.
- Moll, L. C. "Bilingual and Cross-Cultural Referential Communication" Diss. Abs. Int. 39 (1978):2839A.
- Monserrat, J. "Education of Puerto Rican Children in New York City." Journal of Educational Sociology 28 (Dec. 1954):146-192.
- Montalvo, M. A.; Ogletree, E. J. "Educational Aspirations of Puerto Rican Mothers for their Children" ERIC ED 164728.
- Montag, J. "Guidance and Curriculum for Puerto Rican Children" High Points 33 (Jan. 1951):32-42.
- Montare, A.; Boone, S. "Language and Aggression: An Exploratory Study Amongst Black and Puerto Rican Youth" ERIC ED 074502.
- Montijo, J. A. "The Relationship Among Self-esteem, Group Pride, and Cultural Group Identification" Diss. Abs. Int. 35 (8-B) (Feb. 1975):4189.
- Montenegro, R. "Bilingual Education: A Bandaid for Educational Neglect" Claremont Reading Conference Yearbook 35 (1972):65-71.

- Moore, F. B.; Parr, G. D. "Models of Bilingual Education: Comparison of Effectiveness" Elementary School Journal 79 *Nov. 1978):93-97.
- Moore, F. B.; Marzano, R. J. "Common Errors of Spanish Speakers Learning English" Res. Teach English 13 (May 1979):161-167.
- Morgan, E. R. "Bilingualism and Non-verbal Intelligence: A Study of Test Results" ERIC ED 117959.
- Morgan v. Henningan 379 F. Supp. 410.
- Morris, J. "What Tests Do Schools Use With Spanish Speaking Students?" Integrated Education 15 (March 1977):21-23.
- Morrison, J. C. "Puerto Rican Study: What It Is, Where It Is Going" Journal of Educational Sociology 28 (Dec. 1954):167-173.
- Moser, R. H. "The Politics of School/Community Relations: A Puerto Rican Community" Ph.D. dissertation, University of Wisconsin, 1973.
- Mowder, B. A. "Assessing the Bilingual Handicap Student" Psychology in the Schools 16 (January 1979):43-50.
- Mowder, B. A. "Strategy for the Assessment of Bilingual Handicapped Students" Psychology in the Schools 17 (Jan. 1980):7-11.
- Munsell, P. E. "The Relationship Between Aural Discrimination and Oral Production" Diss. Abs. Int. 31 (8-A) Feb. 1971, 4144.
- Murillo-Rohde, I. "Family Life Among Mainland Puerto Ricans in New York City Slums" Perspective in Psychiatric Care 14 (Oct-Dec 1976): 174-179.
- Murray, W. R. "Ethnic Differences as Related to Student Perceptions of a University Environment" Ph.D. dissertation, New Mexico State University, 1972.
- Mycué, E. "Testing in Spanish and the Subsequent Measurement of English Fluency" Texas: Texas Women's University, 1968.
- Myers, B.; Goldstein, D. "Cognitive Development in Bilingual and Monolingual Lower Class Children" Psychology in the Schools 16 (January 1979):137-142.
- Natalicio, T. S.; Natalicio, D. S. "Educational Problems of Atypical Student Groups: The Native Speaker of Spanish" Urban Education 4 (October 1969):262-272.

- National Education Association Task Force. "Reports Presented at the 52nd Representative Assembly of the National Education Association." Washington, D.C., July 3-6, 1973.
- National Workshop to Increase Spanish-Speaking American participation in Vocational Education at all Levels ERIC ED 146440.
- Negron-DeMontalla, A. "The Public School System and the Americanization Process in Puerto Rico from 1900 to 1930" Ph.D. dissertation, New York University, 1970.
- Newburger, Wayne F.; Pettibone, Timothy, J. Disruptive Behavior in the Bilingual Child as a Function of Teacher Training ERIC ED 045259.
- Newby, R. W. "Effects of Bilingual Language System on Release from Proactive Inhibition" Perceptual and Motor Skills 43 (Dec. 1976): 1059-1064.
- Ney, J. W. "Predator or Pedagogue?: The Teacher of the Bilingual Child" ERIC ED 053602.
- Nieto, Sonia M. "Curriculum Decision Making: The Puerto Rican Family and the Bilingual Child" Ed.D. dissertation, University of Massachusetts 1979.
- Nieves- Falcon, L. Diagnostico de Puerto Rico Eio Piedras, Puerto Rico: Editorial Edil. Inc., 1972.
- Nieves, S. "A Sociolinguistic Critique of Bilingual Education Curricula and the Bilingual Education Act in Terms of Adequacy for the Puerto Rican Collectivity" Ed.D. dissertation Columbia University Teachers College, 1975.
- N.Y.C. Board of Education. "Test and Testing: Developing a Program for Testing Puerto Rican Pupils in New York City" PA 75C 59.
- North, M. J. "Films in Changing Ethnic Attitudes and Behavior in the Elementary Grades" Diss. Abs. Int 38 (4-a) Oct. 1977, 1877.
- Nunez, L.; Bahn, Charles, ASPIRA Inc. National Conference meeting, the Special Educational Needs of Urban Puerto Rican Youth Final Report ERIC ED 023778.
- Nuttall, R. L. "Do the Factors Affecting Academic Achievement Differ by the Socio-economic Status or Sex of the Student?" Catalog of Selected Documents in Psychology 2 (1972):122-123.
- Nuttall, Ronald L.; Nuttall, Ena V. "Family Size and Spacing in the United States and Puerto Rico" The Center for Population Research, National Institute of Child Health and Human Development ERIC ED 106383.

- Nuttal, Ronald L.; Nuttall, Ena V.; Sweet, P. R. "Correlates of Family Size and Expected Family Size Among Puerto Rican Youth" Catalog of Selected Documents in Psychology 2 (1972):111-112.
- Nuttall-Vazquez, E. "The Support System of Coping Patterns of the Female Puerto Rican Single Parents" Journal on Non-White Concerns 7 (Apr. 1979):128-137.
- Nystrand, M. "Politics or Rank Ordering" English Journal 64 (March 1975):42-45.
- Oakland, T. "Assessing Minority Group Children: Challenges for School Psychologists" Journal of School Psychology 11 (Winter 1973):294-303.
- Oakland, T. "Evaluation of the ABIC, Pluralistic Norms, and ELP" Journal School Psychology 18 (Spring 1980):3-11.
- Oakland, T. "Research on the ABIC and ELP: A Revisit to An Old Topic" School Psychology Digest 8(2) Spring 1979:209-213.
- Oakland, Thomas; Feigenbaum, David "Multiple Sources of Test Bias on the WISC-R and Bender Gestalt Test" Journal of Consulting and Clinical Psychology 47 (Oct. 1979):968-974.
- Oakland, T.; Laosa, L. "Professional, Legislative and Judicial Influence on Psychoeducational Assessment Practices in Schools" In Psychological and Educational Assessment of Minority Children T. Oakland (Ed.). New York: Brunner/Mazel, Inc., 1977.
- O'Brien, M. G. "Relationship of Self Perceptions of Puerto Rican and Non-Puerto Rican Parochial School Children to Selected School Related Variables" Ph.D. dissertation, Fordham University, 1970.
- Office of Civil Rights Task Force findings specifying remedies available for eliminating past educational practices ruled unlawful under *Lau v. Nichols*. Washington, D.C.: Department of Health, Education, and Welfare, 1975.
- O'Leary, T. F. "Ethnicity in Defense of Class" Diss. Abs. Int. 38 (4-A) Oct. 1977:2356.
- Olguin, L.; Michael, W. B. "Development and Preliminary Validation of the Olguin Diagnostic Test of Auditory Perception for Spanish Language Oriented Children" Educational and Psychological Measurements 39 (winter 1979):1005-1010.

- Oliveras, C. "What are the Educational Needs of Puerto Ricans Who Come to New York? In F. Cordasco and E. Bucchioni (Eds.) The Puerto Rican Community and Its Children on the Manland Metuchen, New Jersey: The Scarecrow Press, Inc., 1972.
- Oller, J. W. "Cloze Tests of Second Language Proficiency and What They Measure" Language Learning 24 (June 1973):105-118.
- Ortiz, M. N. "Bilingual Bicultural Instructional Aide Roles as perceived by Teachers, Administrators, and Instructional Aides" Diss. Abs. Int 39 (1978) 3527A.
- Ott, E. "Basic Education for Spanish Speaking Disadvantaged Students" ERIC ED 020497.
- Overall, P. M. "An Assessment of the Communicative Competence in English of Spanish-Speaking Children in the Fourth and Sixth Grade" Diss. Abs. Int 39 (1978):3428A.
- Oxman, W. G. "The Effects of Ethnic Identity of Experimenter, Language of Experimental Tasks, and Bilingual vs. Non-bilingual School Attendance on the Verbal Tasks Performance of Bilingual Children of Puerto Rican Background" Diss. Abs. Int. 33 (1-A) July 1972 195.
- Ozete, O. "Assessing Reading Comprehension in Spanish for Bilingual Children" ERIC ED 157667.
- Pacheco-Maldonado, A. M. "A Cognitive Developmental Study of Moral Judgments in Puerto Rican Children" Ph.D. dissertation, State University of New York, 1972.
- Padilla, A. et al. "I.Q. Test: A Case of Cultural Myopia" National Elementary Principal 54 (1975):53-58.
- Padin, J. "Porto Rican People" National Educational Association Proceedings 1930:130-133.
- Pallone, N. J. et al. "Further Data on Key Influences of Occupational Expectations Among Minority Youth" Journal of Counseling Psychology 20 (Spring 1973):484-486.
- Palmer, M.; Gaffney, P. D. "Effects of the Administration of the WISC in Spanish and English and Relationship of Social Class to Performance" Psychology in the Schools 9 (Jan. 1972):61-64.
- Palmer, M. B. "Effects of Categorization, Degree of Bilingualism, and Language Upon Recall of Select Monolinguals and Bilinguals" Journal of Educational Psychology 63 (April 1972):160-164.

- Palomares, Uvaldo Hill. A Critical Analysis of the Research on the Intellectual Evaluation of Mexican American Children ERIC ED 027097.
- Palomares, Uvaldo (Ed.) "Puerto Rican Youths Speak Out: Some Quotations" Personnel and Guidance Journal 50 (October 1971): 90-95.
- Pandi, G. I. "Understanding Bilingual Messages: The Concept of Language Switch" Diss. Abs. Int. 36 (11-b) May 1976:5837.
- Pantoja, A. "Puerto Rican Children in the United States" International Reading Association Conference, Respective in Reading Series, 16 (1971):20-27.
- Past, A. W. "Preschool Reading in Two Languages as a Factor in Bilingualism" Diss. Ab. Int 37 (12-A Pt. 1) June 1977):7586.
- Peabody Picture Vocabulary Test, L. M. Dunn. American Guidance Series Publishers Building, Circle Pines, MN 55014.
- Peal, E.; Lambert, W. E. "The Relation of Bilingualism to Intelligence" Psychological Monographs 76 (1962):1-23.
- Pearson, E. U.' Cordasco, F.; Castellanos, D. "Teaching the Puerto Rican Experience; With Suggested Teaching Strategies" National Council Social Studies Yearbook 43 (1973) 226-253.
- Pelman, R. "American Schools: Cultural Crossroads" Elementary School Journal 59 (Nov. 1958):82-86.
- Perales, A. M. "Audiolingual Approach and the Spanish Speaking Student" Hispania 48 (March 1965): 99-102.
- Perales, C. "Puerto Rican Problems in Integration" Integrating Education 13 (May 1975):8-10.
- Perez, F. M. "Performance of Bilingual Children on the Spanish Version of the ITPA" Exceptional Children 46 (April 1980):536-541.
- Perez-Ponce, J. M. et al. "Success and Failure. . . The Bilingual Student in Higher Education: Community Junior Colleges at the Crossroad" ERIC ED 156262.
- Perez, S. A. "How to Effectively Teach Spanish Speaking Children Even if You Are Not Bilingual" Language Arts 56 (Fall 1979):159-162.
- Perez y Mena, A. I. "Spiritualism an Adaptive Mechanism Among Puerto Ricans in the U.S." Cornell Journal of Social Relations 12(2) Fall 1977:125-136.

- Perrie, S. "They Must Think in English" Texas Outline 26 (June 1942) 13-14.
- Perrutti, L. "Help Your Puerto Rican Pupil Help Themselves" Project LEARN (Learn English and Reading Now)" English Journal 55 (Dec. 1966):1201-1206.
- Peters, C. A. "Some Communication Problems Related to Testing Minority Populations with Standardized Instruments" ERIC ED 173849.
- Peters-Perez, A. "Self-Esteem as it Relates to Reading Facility and Bilingual Schooling of Puerto Rican Students" Ed.D. dissertation Loyola University, 1979.
- Phillipus, M. J. "Test of Prediction of School Success of Bilingual Hispanoamerican Children" ERIC ED 036577.
- Phillips, B. N. (Ed.). "Assessing Minority Group Children: Symposium" School Psychology 11 (Winter 1973):294-401.
- Phillips, J. "The Effects of the Examiner and the Testing Situation Upon the Performance of Culturally Deprived Children" Final Report, Nashville, Tenn, George Peabody College for Teachers, 1966.
- Pinton, G. A. (Ed.). "El Dia y mi Libertad (The Day and My Liberty)" ERIC ED 171117.
- Poggio, J. P.; Nuttall, R. L. "Assessing the Personality Structure of the Puerto Rican Secondary School Student" ERIC ED 038669.
- Poortinga, G. H. "Limitations on Intercultural Comparison of Psychological Data" Nederlands Tijdschrift voor de Psychologie en haar Grensgebreden 30(1) Feb. 1975:23-39.
- Poplak, S. "Dialect Acquisiton Among Puerto Rican Bilinguals" Language in Society 7 (April 1978)83-103.
- Popper, D. K. "The Relationship of Self-Concept to Congruence Among Self, Ideal Self, and Occupational Self in 6th Grade Puerto Rican Girls in an Inner City Poverty Area" Ph.D. dissertation, Fordham University, 1975.
- Poster, J. B. "Bilingual-Multicultural Education: Towards Collaboration Between Bilingual Education and the Social Studies" Social Education 43 (Feb. 1979):112-115.
- Poster, J. B.; Krug, M. M. "Bilingual Education: 2 Views" Social Education 43 (Feb. 1979):112-116.

- Potlizer, R. L. "Auditory Discrimination of the Disadvantaged: Deficit of Difference" English Record 21 (April 1971):174-179.
- Potlizer, R. L. "Language Development in Two Bilingual Schools" International Review of Applied Linguistics in Language Teaching 16 (Aug. 1978):241-252.
- Potts, M. "The Effects on Second Language Instruction on the Reading Proficiency and General School Achievement of Primary Grade Children" American Educational Research Journal 4 (1967):367-374.
- Powell, D. R. "Initial Clusters and the Spanish Speaking Learner" English Language Teaching 16 (Jan. 1962):95-101.
- Pride, J. B. The Social Meaning of Language Oxford: Oxford University Press, 1971.
- Public Education Association, "Study of the Public School Education of Negro and Puerto Rican Children in New York City" Public Education Association PA 95c The Association, 20 West 40th Street, New York.
- Public Law 94-112, 94th Congress, S. 6. Education for All Handicapped Children, October of 1975, November 29, 1975.
- "Puerto Rican Studies: Related Learning Materials and Activities for Kindergarten, Grade 1 and Grade 2" ERIC ED 093729.
- Puhl, C. A. "Interlingual Cognitive Processing of Contextual Information by Bilinguals" Diss. Abs. Int 38 (1978):7237A.
- Puthoff, F. I. "The Development of Norms for Bilinguals First, Second and Third Grade Children's Responses to the Hand Test and PPVT" Diss. Abs. Int. 33 (6-A) Dec. 1972:2771.
- Quintero-Alfaro, A. G. Educacion y Cambio Social in Puerto Rico: Una Epoca Critica Universidad de Puerto Rico: Editorial Universitaria, 1974.
- Ralskin, Judith G. "Ethnic Density and Psychiatric Hospitalization: Hazards of Minority Status" American Journal of Psychiatry 136 (Dec. 1979):1562-1566.
- Rangel, D. R. "A Longitudinal Study of Special Services Experienced by 23 Post-Secondary Students from Mexican American and Puerto Rican Communities in Chicago" Ph.D. dissertation, North West University, 1974.
- Raspberry, W. "One Man's View of Testing" Proceedings of the ETS Invitational Conference, October 1976:47-52.

- Ratusnik, D. L.; Koenigsnecht, R. A. "Cross-Cultural Item Analysis of the CMMS: Potential Application by the Language Clinician" Language, Speech and Hearing Services in School 7 (July 1976): 186-190.
- Redlinger, Wendy E. "A Language Background Questionnaire for the Bilingual Child" ERIC ED 148184.
- Redmond, James F. "Puerto Rican Culture as It Affects Puerto Rican Children in Chicago Classrooms." ERIC ED 052277.
- Rehabilitation Act of 1973 (Public Law 93-112).
- Reilly, R. R. "A Note on Minority Group Test Bias Studies" Psychological Bulletin 80 (Aug. 1973):130-132.
- Reimer, G. "Almost Everything I Know About Teaching Puerto Ricans I Owe to Vicks Vaporub" National Elementary Principal 50 (Nov. 1970):72-77.
- Renzo, Titone. "Some Psychological Aspects of Multilingual Education" International Review of Education 24 (1978):309-328.
- Reschly, D. J. "Non Biased Assessment and School Psychology." Des Moines, Iowa: State Department of Public Instruction, Division of Pupil Personnel Services, August, 1978 ERIC Ed 157240.
- Reschly, D. J.; Reschly, J. E. "Validity of WISC-R Factor Scores in Predicting Achievement and Attention for 4 Socio-Cultural Groups" Journal School Psychology 17 (Winter 1979):355-361.
- Reyes, D. J. et al. "Some Qualitative Language Differences Among Selected Monolingual and Spanish-English Bilingual High School Students" ERIC ED 114234.
- Reyes, Donald J. "The Relative Development of Spanish and English as Abstract and Conceptual Languages in Bilinguals" ERIC ED 083880.
- Reyes, V. H. "Self-Concept and the Bicultural Child" Journal of the National Association of Bilingual Educators 1 (Dec. 1976):57-59.
- Rhode, R. D. "Bilingual Education for Teachers" Educational Forum 38 (Jan. 1974):203-209.
- Richardson, J. G. "The Case of Special Education and Minority Classification in California" Educational Research Quarterly 4 (Spring 1979):25-40.

- Rincon, E. L. "Comparison of the Culture Bias of the KIT:EXP with the WISC Using Spanish Surnamed Children Differing in Language Spoken" Education and Psychological Measurement 36 (Winter 1976): 1037-1041.
- Rincon, H.; Ray, R. "Bilingual Ethnic Teachers as An Answer to Illiteracy and Drop-Out Problems" Reading Improvement 11 (Spring 1974):34-46.
- Rindfuss, Ronald R. "Fertility and Migration--the Case of Puerto Ricans" ERIC ED 113412.
- Rivera, C. E. "Academic Achievement, Bicultural Attitudes and Self Concepts of Pupils in Bilingual and Monolingual Programs" Diss. Abs. Int. 34 (5-A) (Nov. 1973):2238-2239.
- Rivera, G. D. "A Process Model for the Development of Culture-Based Learning Experiences" Diss. Abs. Int. 39 (1979) 4104A.
- Rivera, Maria "Culture Conflict Among Puerto Rican College Students" New York State Personnel and Guidance Journal 8 (1973):19-24.
- Rivera-Viera, D. "A Descriptive Study of Reading Miscue of Spanish-Speaking Elementary School Children" Diss. Abs. Int. 39 (1-A) July 1978, 226.
- Robb, G.; Bernardoni, L. C.; Johnson, R. W. Assessment of Individual Mental Ability New York: Intex Educational Publishers, 1972.
- Roca, P. Escala de Inteligencia Wechsler Para Ninos New York: The Psychological Corporation, 1951.
- Roca, P. "Problems i Adapting Intelligence Tests from One Culture to Another" High School Journal 38 (1955):124-131.
- Rodgers, R.; Rangel, D. "Learning for Two Worlds: Chicago's Juan Morell Campos Bilingual Center" American Education 8 (November 1972):28-32.
- Rodriguez, A. "Are Bilingual Children Able to Think in Either Language with Equal Facility and Accuracy" Department Elementary School Principal B-10 (June 1931):98-101.
- Rodriguez, A. "Education for the Spanish-speaking: Manana in Motion" National Elementary Principal 49 (Fall 1970):52-56.
- Rodriguez, A. "The Challenge for Educators" National Elementary Principal 50 (1970):18-19.

- Rodriguez, C. "Structure of Failure: A Case in Point: Puerto Rican Children and New York City Teachers" Urban Review 7 (July 1974): 215-226.
- Rodriguez, C. "Puerto Ricans: Between Black and White" New York Affairs 1 (Spring 1974):92-101.
- Rodriguez, N. E.; Boyle, J. X. "Opportunity Classes Help Spanish-Speaking Pupils" Chicago Schools Journal 43 (Feb. 1962):228-231.
- Rodriguez, Raymond J. "Awareness of Multicultural Language and Learning Styles Research: An Urging paper presented at the annual meeting of the conference on college composition and communication" ERIC ED 147862.
- Rodriguez, R. C. "Effectiveness with Bicultural Children: Approaches for Monocultural Teachers" Contemporary Education 50 (1979): 134-138.
- Rodriguez-Santiago, R. "The Puerto Rican Rural Second Unit School: A Study of its Objectives, Program of Instruction and Administrative Organization" Ed.D. dissertation, Columbia University, 1971.
- Roeming, R. J. "Bilingualism and the National Interest" Modern Language Journal 55 (Fall 1971):73-81.
- Roeming, R. F. "Bilingualism and the Bilingual Child: Symposium with Introduction" Modern Language Journal 49 (Mar/Apr 1965):143-145; 220-239.
- Rogers, M. L. "For Puerto Rican Pupils, Crash Program in Reading" Elementary School Journal 59 (Nov. 1958): 87-89.
- Rojos, P. M. "A Critical Analysis of the Vocabulary of Three Standard Series of Pre-primers and Primers in Terms of How the Words are Used (with special reference to the language problem of the Spanish-speaking children of Puerto Rico)" Ph.D. dissertation University of Michigan, 1946.
- Rosaldo, R. "De Mayoria a Minoria" Hispania 51 (March 1968):18-28.
- Rose, R. G. "Introspective Evaluations of Bilingual Memory Processes" Journal of General Psychology 93 (1975):149-150.
- Rose, R. G.; Carroll, J. F. "Free Recall of Mixed Language List" Bulletin of the Psychonomic Society 3(4) (Apr. 1974):267-268.
- Rosenthal, A. J. "Pre-School Experience and Adjustment of Puerto Rican Children" Ph.D. dissertation, New York University, 1955.

- Rosenthal, R.; Jacobson, L. Pygmalion in the Classroom: Teachers' Expectation and Pupil's Intellectual Development New York: Holt Rinehart and Winston, 1968.
- Ross, C. S. "Identification of Cultural Characteristics of Young Puerto Rican Children in Mainland Schools: A Survey of the Reference Literature, and a Study and Analysis of Teacher's perceptions" Ed.D. dissertation, Rutgers University, 1974.
- Rotter Incomplete Sentences Blank, J. B. Rotter, The Psychological Corporation, 752 Third Avenue, New York, New York, 10017.
- Rowntree, Helen W. The Puerto Rican Child in Boston: A Background Study of Puerto Rican History and Culture and the Bilingual Education Program ERIC ED 169195.
- Rudner, Lawrence M. "Efforts Toward the Development of Unbiased Selection and Assessment Instruments" Paper presented at 3rd International Symposium for Educational Testing The Netherlands: University of Leyden, June 28, 1977 ERIC ED 148899.
- Rudner, Lawrence, et al. The Problem of Item Bias: A Comparison of Techniques ERIC ED 178583.
- Reuda, R.; Perozzi, J. A. "A Comparison of Two Spanish Tests of Receptive Language" Journal of Speech and Hearing Disorders 42 (May 1972):210-215.
- Ruskin, Francis K. "A Structural Analysis of Statements by Puerto Ricans and Americans About Family Relationships" Ed.D. dissertation, Columbia University, 1979.
- Russell, G. "The Relationship Between the Language of Instruction and the Development of Self-Concept, Classroom Climate and Achievement of Spanish Speaking Puerto Rican Children" Ed.D. dissertation, University of Maryland, 1972.
- Rustin, S. L.; Del Toro, M. "The Two Worlds of the Puerto Rican College Student" New York State Personnel and Guidance Journal 8 (1973):25-29.
- Russell, William; Snow, David "A Bilingual Study of Selected Syntactic Skills in Spanish-Speaking Children" ERIC ED 174002.
- Saavedra, Josi M. "The Interaction Between Adolescent's Perceptions of Parental Warmth and Control and the Association of these Dimensions of Parenting with Self-esteem and Self-adequacy Among Puerto Rican Males" Diss. Ab. Inst 38 (7-B) Jan. 1978, 3372.

- Sabatino, D. A.; Kelling, K.; Hayden, D. L. "Special Education and the Culturally Different Child: Implications for Assessment and Intervention" Exceptional Children 39 (Apr. 1973):563-567.
- Saegert, J.; Kazarian, S.; Young, R. K. "Part/Whole Transfer With Bilinguals" American Journal of Psychology 86 (Sept. 1973): 537-546.
- Safer-Icken, H. "An Analysis of Upward Mobility in Low Income Families: A Comparison of Family and Community Life Among Negro and Puerto Rican Poor" June 1967 ERIC ED 015226.
- Salviani, C. "A Comparison of the Acquisition of Piagetian Conservation Concepts and the Attainment of Mathematical Skills by Bilingual Educated Bilingual Education Second Grade Children and Monolingually Educated Second Grade Children" Diss. Abs. Int. 39 (1978) 2156A.
- Samora, J. "Educational Status of a Minority" TIP 2 (June 1963): 144-150.
- Samuda, R. Psychological Testing of American Minorities: Issues and Consequences New York: Dodd, Mead and Co., 1975.
- Samuda, R. J. "Racial Discrimination Through Mental Testing: A Social Critic's Point of View" ERIC ED 092648.
- Sanchez, C. H. "An Experimental Analysis of Bilingual Syntax Spontaneous Production Measures" Diss. Abs. Int. 38 (6-A) Dec. 1977, 3426.
- Sanchez, George I. "Bilingualism and Mental Measures: A Word of Caution" Journal of Applied Psychology 18 (1934):765-772.
- Sanchez, G. I. "Group Differences and Spanish Speaking Children: A Cultural Review" Journal of Applied Psychology 16 (Oct. 1932) 549-558.
- Sanchez, G. I. "Implications of a Basal Vocabulary to the Measure of the Ability of Bilingual Children" Journal of Social Psychology 5 (August 1934):395-402.
- Sanchez, George I. "Scores of Spanish-speaking Children on Repeated Tests" Journal of Genetic Psychology 40 (1932):223-231.
- Sanchez, G. I.; Putnam, H. "Materials Relating to the Education of Spanish-speaking People in the United States" ERIC ED 041680.
- Sanchez, J. R. "Non-English Speaking Children in American Classrooms: A Progress Report" Curriculum Review 18 (May 1979):93-95.

- Sanchez, R. et al. "Issues in Language Proficiency Assessment" ERIC ED 180233.
- Sandoval, Johnathan "The WISC-R and Internal Evidence of Test Bias with Minority Groups" Journal of Consulting and Clinical Psychology 47 (Oct. 1979):919-927.
- Sandoval, Johnathan; Mille, May w. "Accuracy of Judgements of WISC-R. Item Difficulty for Minority Groups" Journal of Consulting and Clinical Psychology 48 (April 1980):249-253.
- Santiago-Santiago, I. "A Community's Struggle for Equal Educational Opportunities" ERIC ED 162034.
- Sassenrath, J. M.; Maddux, R. E. "A Follow Up of Disadvantaged Kindergarten Children in Second Grade Reading" Psychology in the Schools 12 (1975):71-73.
- Sassenrath, J. M.; Maddux, R. E. "Language, Instruction, Background, and Development of Disadvantaged Kindergarten Children" California Journal of Educational Research 25 (March 1974):61-68.
- Sattler, J. M.; Kuncik, T. M. "Ethnicity, Socio-economic Status, and pattern of WISC Scores as Variables That Affect Psycholinguists Estimates of Effective Intelligence" Journal of Clinical Psychology 32 (1976):362-366.
- Schepes, E. "Puerto Rican Delinquent Boys in New York City." Social Services Review 23 (1949):51-56.
- Schawrtz, E. E. "On the Mainland: A Look at Puerto Ricans in America as Seen in Current Media" NJEA Review 52 (Nov. 1978):40-41.
- Scheuneman, J. "Ethnic Group Bias in Intelligence Test Items" ERIC ED 174627.
- Schutzengel, Tirzah G. "The Effects of Bilingualism on Concept Formation: A Comparative Study of Monolingual and Bilingual Elementary School Students" Diss. Abs. Int. 35 (6-B) (Dec. 1974):2998.
- Seda-Bonilla, E. "Cultural Pluralism and the Education of Puerto Rican Youth" Phi Delta Kappan 53 (January 1972):294-296.
- Seda-Bonilla, E. "Two Patterns of Race Relations" ERIC ED 058368.
- Seiden, E. W. "Habla Ingle's" High Points 36 (June 1954):68-70.
- Seidenstat, P. "A Labor Market Success Model of Yougn Male Hispanic Americans" ERIC ED 159439.

- Seitz, V. "Effects of Place of Testing on the PPVT Scores of Disadvantage Head Start and Non Head Start Children" Child Development 46 (Aug. 1975):481-486.
- Senior, C. O. "Migration and Economic Development in Puerto Rico" Journal of Educational Sociology 28 (Dec. 1954): 151-156.
- Senior, C. "Research on the Puerto Rican Family in the U.S." Marriage Family Living 19 (1957):32-37.
- Senior, C.; Walkins, D. O. "Toward a Balance Sheet of Puerto Rican Migration" Status of Puerto Rico Selected Background Studies for the U. S. Commission on the Status of Puerto Rico, Washington, D. C.: U. S. Government Printing Office, ERIC ED 016720.
- Seraile, E. J.; Fernandez, E. W. "Puerto Ricans in the United States 1970 Census of Population Subject Reports" ERIC ED 094064.
- Serapiglia, T. "Comparison of the Syntax and Vocabulary of Bilingual Spanish, Indian, and Mono-lingual Anglo-American Children" ERIC ED 165477.
- Serpell, Robert "Aspects of INtelligence in a Developing Country" African Social Research No. 17 (Jan. 1974): 578-596.
- Shapp, C. M. 'Our Puerto Rican Pupils, A Study in Integration" Middle State Council on Social Studies Proceedings 1955, 9-12.
- Shelibow, B. "Investigation into the Relationship Between Self-Esteem and Skin Color Among Hispanic Children" Graduate Research in Education 7 (Fall 1972): 64-82.
- Shellenberger, S. "A Cross-cultural Investigation of the Validity of the Spanish Version of the McCarthy Scales of Children's Abilities for Puerto Rican Children" Ph.D. dissertation, University of Georgia, 1977.
- Shiraeski, R. R. "Effects of a Bilingual/Bicutlural Career Guidance project on the Occupational Aspirations of Puerto Rican Adolescents" Ed.D. dissertation, Boston University School of Education, 1975.
- Short Test of Linguistic Skills, C. K. Fredrickson, J. W. Wick. Board of Education, Multilingual Unit, Department of Research and Evaluation, 2021 North Burling St., Chicago, Ill. 60614.
- Shulman, V. "An Open System Model: Mainstreaming Exceptional and Bilingual Elementary Education Children Conceptualized Along A Piagetian Developmental Continuum" Diss. Abs. Int 39 (1978): 1328A.

- Shutt, D. L.; Hannon, J. A. "The Validity of the HNTLA for Evaluation of the Abilities of Bilingual Children" Educational and Psychological Measurement 34 (Summer 1974):429-432.
- Siegel, A. I.; Orlans, H.; Greer, F. L. "Puerto Ricans in Philadelphia, Pa.: Institute for Research in Human Relations, 1954.
- Siguan, M. "Descripcion y Medida del Bilinguismo" Journal of the National Association for Bilingual Education 1 (May 1976):41-49.
- Silverman, R. J.; Russell, R. H. "Relationship Among 3 Measures of Bilingualism and Academic Achievement" Education and Urban Sociology 10 (May 1978):347-362.
- Silverman, S. H. "The Effects of Peer Group Membership on Puerto Rican English" Ph.D. dissertation, Yeshiva University, 1972.
- Sivlerstein, A. V. "Factor Structure of the WISC for 3 Ethnic Groups" Journal of Educational Psychology (1973):408-410.
- Simmons, H.; Mobus, C. [An Investigation of I.Q. Test Bias] Zeitschrift fur Entwicklungspsychologie und Padagogische Psychologie 8 (1) (Jan. 1976):1-12.
- Simms, E. G. "The Effects of Bilingualism on the Structure of the Intellect" Diss. Abs. Int. 38 (4-A, Oct. 1977):1947.
- Simon, B. Intelligence, Psychology and Education, a Marxist Critique London: Macmillan Press, 1923.
- Sill, P. K. "Relationship Between Motivational Patterns and Academic Achievement in Chinese and Puerto Rican Second-Grade and Third Grade Students" Ph.D. dissertation, Fordham University, 1972.
- Sizemore, M. "Teaching the Bilingual, Writing the Fourth Communication Skills" Arizona Teacher 54 (March 1966):21-22.
- Skoczylas, R. V. "Bilingual Education: An Alternative to the Traditional All-English Curriculum" California Journal of Educational Research 26 (1) (Jan. 1975):40-51.
- Smith, M. E. "Word Variety as a Measure of Bilingualism in Pre-School Children" Journal of Genetic Psychology 90 (June 1957):143-150.
- Smith, M. W. "Reply to A. R. Jensen's Comments on M. W. Smith's Analysis of Culture Bias in the Stanford Binet Intelligence Scale" Journal of Genetic Psychology 130 (March 1977):117-120.

- Smith, M. W. "Alfred Binet's Remarkable Questions: A Cross-national and Cross-temporal Analysis of the Cultural Biases Built Into the Stanford Binet Intelligence Scale and Other Binet Tests" Genetic Psychology Monographs 89 (2) (May 1974):307-334.
- Soffielli, J. P. "Bilingualism and Biculturalism" Journal of Educational Psychology 46 (1955):222-227.
- Solomon, A. "The Effects of Answer Sheet Format on Test Performance by Culturally Disadvantaged Fourth Grade Elementary School Pupils" Journal of Educational Measurement 8 (Winter 1971):289-290.
- Sobrino, J. F. "Group Identification and Adjustment in Puerto Rican Adolescents" Ph.D. dissertation, Yeshiva University, 1965.
- "SPMPA: A Symposium" School Psychologist Digest 8 (Winter 1979) 4-115.
- Soto-Padin, J. L. "A Language Effect in the Recall of Spanish Names: Proactive Experimentation in English and Spanish in Puerto Rico Schools" Diss. Abs. Int. 31 (11-B) 1971, 6959.
- Soy, R. H.; Sanchez, I. "The American Pressure Cooker. . . The Puerto Rican on the Mainland" ERIC ED 120310.
- Spearman, C. The Abilities of Man, Their Nature and Measurement New York: The Macmillan Press, 1927.
- Spearman, C. The Nature of Intelligence and the Principles of Cognition London: Macmillan Press, 1923.
- Special Study of Reading Grades in Selected Manhattan Neighborhoods Columbia University School of Social Work Research Center, 1961.
- Spence, A. G. et al. "Home Language and Performance on Standardized Tests" Elementary School Journal 71 (March 1971):309-313.
- Spivack, G.; Swift, M. "Classroom Behavior of Children: A Critical Review of Teacher Administered Rating Scales" Special Education 7(Spring 1973):55-89.
- Sprague, Robert O. "Factors in Student's Abilities Which Condition Effectiveness of Teaching Methods in Spanish" Diss. Abs. Int. 28 (11-A) (1968):4393.
- Springer, Judith A. "Auditory Discrimination and Reading Achievement of Puerto Rican Spanish-Speaking First Grade Students" ERIC ED 109635.

- Stallings, Clifford. "Contemporary Identification and Program Models for Gifted Third World Children" ERIC ED 122560.
- Stambles, A. "A Study of 8th Grade Puerto Rican Students at Junior High School 65 Manhattan With Implciations for Their Placement Grouping. and Orientation: Ph.D. dissertation, Columbia University, 1959.
- Stanford-Binet Intelligence Scale, L. M. Terman, M. A. Merrill
Houghton Mifflin Co., Test Department, Box 1970, Iowa City,
Iowa, 52240.
- Stanford, M. R. "Don't Discard Those I.Q. Tests" Texas Outline 43
(Oct. 1963):31.
- Stefani, Rosa L. "An Exploratory Study of Values and Practices in Child Rearing Among Urban Laboring Class Families in Puerto Rico: Diss Ab. 1956, 16:1439.
- Steiner, F.; et al. "Bilingual/Bicultural Education. . . A Privilege or a Right? Illinois State Advisory Commission to the U. S. Commission on Civil Rights 1974 ERIC ED 087167.
- Stenberg, R. I. "The Relation Between Total and Partial IQ's on the 1960 Stanford-Binet: A Cross-ethnic Comparison" Diss. Abs. Int 37 (3-B) (Sept. 1976): 1451.
- Stewart, J. H. et al. "The People of Puerto Rico" Urbana: University of Illinois Press, 1956.
- Stone, Chuck "Testing and the Educational Power Struggle" Integrated Education 9 July-August 1971):4-10.
- Sugerman, S. D.; Widess, E. G. "Equal Protection for Spanish Speaking Children: Lau v. Nichols" California Law Review 62 (Jan. 1974): 157-182.
- Sullivan, A. R. "Issues in Assessing Multicultural Youth: Its Implications for Teachers" ERIC ED 115621.
- Suraci, A. B. "Reactions of Puerto Rican and Non-Puerto Rican Parents to Their Mentally Retarded Boys" Ed.D. dissertation, New York University, 1966.
- Sutman, F. X. "Bilingual Education: Unsolved Problem on America's Agenda" Science Teacher 46 (Dec. 1979):17-19.
- Swanson, E.; DeBlassie, R. R. "Interpreters Effects on the WISC Performance of First Grade Mexican American Children" Measurement and Evaluation in Guidance 4 (1971):172-175.

- Sweet, P. R. "The Influences of Clique Characteristics on Academic Achievement of Puerto Rican Secondary School Students" Ph.D. dissertation, Boston University, 1971.
- Swerdlick, Mark E. "Comparison of WISC and WISC-R Scores of Referred Black, White and Latino Children" Journal of School Psychology 16 (Summer 1978):110-125.
- System of Multicultural Pluralistic Assessment, J. R. Mercer, J. F. Lewis. The Psychological Corporation 757 Third Avenue, New York, New York, 10017.
- Szalay, L. B.; Bryson, J. A. "Subjective Culture and Communication: A Puerto Rican--U.S. Comparison" Catalog of Selected Documents in Psychology 7 (August 1976): 68.
- Taylor, O. L. "Language Issues and Testing" Journal of Non-White Concerns 6 (Apr. 1978):125-132.
- Teitel, R. S. "Cognitive Functioning, Bilinguality, and Socioeconomic Factors Among Spanish-Speaking Children in the District of Columbia" Diss. Abs. Int. 34 (12-A, Pt. 1 (June 1974): 7598.
- Teitelbaum, H. "Unreliability of Language Background Self-ratings of Young Bilingual Children" Child Study Journal 9 (1979):51-59.
- Telegdy, G. A. "The Relationship Between Socioeconomic Status and School Readiness" Psychology in the Schools 11 (1974):351-356.
- Terry, C. E.; Cooper, R. L. "A Note on the Perception and Production of Phonological Variaton" The Modern Language Journal 53 (1969): 254-255.
- Test for Auditory Comprehension of Language, E. Carrow; Learning Concepts 2501, N. Lamas Blvd., Austin, Texas, 78705.
- The Bender Visual Motor Gestalt Test L. Bender, The American Orthopsychiatry Association, Inc., 1775 Broadway, New York, New York, 10019.
- "The Educational Disadvantaged of Language-Minority Persons in the U.S." ERIC ED 166975.
- "The Puerto Rican and Public Employment in New York State--N. Y. State Advisory Commission Report to U.S. Commission on Civil Rights, New York, April 1973. ERIC ED 102220.
- Thiel, W. L. "The Impact of Minority Status on Self Esteem and Cultural Values of Pre-Adolescents Puerto Ricans" Ph.D. dissertation, Loyola University, 1977.

- Thomas, A. "Examiner Effect in I.Q. Testing of Puerto Rican Working Class Children" American Journal of Orthopsychiatry 41 (October 1971):809-821.
- Thomas, A. "Retardation in Intellectual Development of Lower Class Puerto Rican Children in New York City" Final Report Office of Education, Department of Health, Education, and Welfare, Washington, D. C.: Bureau of Education for the Handicapped, May 1969.
- Thomas, P. H.; Chinsky, J. M.; Aronson, C. F. "A Preschool Educational Program with Puerto Rican Children: Implications as a Community Intervention" Journal of Community Psychology 1 (Jan. 1973):18-22.
- Thorndike, R. L. "Concepts of Culture-Fairness" Journal of Educational Measurement 8 (Summer 1971):62-70.
- Tilley, S. D. "The Relationship Between Self-concept and Oral English Language Production of Anglo and Hispanic Primary-grade Students in a Metropolitan Bilingual Program" Diss Abs. Int. 38 (6-A) Dec. 1977, 3346.
- Timothy, Sister Mary "Reading Problems of A Bilingual Child" Elementary English 41 (March 1964):235-237.
- Tireman, L. S.; Zintz, M. V. "Factors Influencing Learning a Second Language" Education 81 (Jan. 1961):310-313.
- Torrance, E. P. "Assessment of Disadvantage Minority Group Children" School Psychology Digest 2 (Fall 1973): 3-10.
- Torres-Matrullo, C. "Acculturation and Psychopathology Among Puerto Rican Women in Mainland U.S." American Journal of Orthopsychiatry 46 (October 1976): 710-719.
- Townsend, D. R.; Zamora, G. L. "Differing Interaction Patterns in Bilingual Classrooms" Contemporary Education 46 (Spring 1975): 196-200.
- Travelle, M. R. "An Investigation of the Acceptance of Bilingual Education Principles and the Relationship of this Acceptance to Curricular Practices of Teacher in Bilingual Education Classrooms" Diss. Abs. Int. 38 (12-A, June 1978): 7142.
- Travieso, L. "Puerto Ricans and Education" Journal of Teacher Education 26 (Summer 1975):128-130.

- Trevino, Bertha "An Analysis of the Effectiveness of a Bilingual Program in the Teaching of Mathematics in the Primary Grades" Diss. Abs. 29 (A-2) 1968, 521.
- Trevino, Bertha "Bilingual Instruction in the Primary Grades" Modern Language Journal 54 (April 1970):260-261.
- Troke, R. "Bilingual Education in the U.S.: The First Decade" International Review of Education 24 (1978) 401-405.
- Troll, Enid W. "The Barbee Doll Mentality and the Goodenough-Harris Drawing Test" ERIC ED 164546.
- Tsushima, W. T.; Hogan, T. P. "Verbal Ability and School Achievement of Bilingual and Monolingual Children of Different Ages" Journal of Educational Research 68 (1975):349-353.
- Turnbull, A.; Rutherford-Turnbull, H. Free Appropriate Public Education Denver, Colorado: Love Publishing Co., 1978.
- Turnbull, W. W. "Influence of Cultural Background on Predictive Test Scores" Proceedings 1949 Invitational Conference on Testing Problems, Educational Testing Services, 1950.
- Tuttle, H. G. "Effects of Cultural Presentations on Attitudes of Foreign Language Students" Modern Language Journal 63 (Apr. 1979): 177-182.
- Tyler, R. W. "Testing for Accountability; Criterion-reference Tests" National Schools 86 (December 1970):37-39.
- Unreleased Report on Analysis of High School Graduating Class of June, 1965. Prepared by Board of Education of the City of New York, cited in Francisco Cordasco and E. Bucchioni The Puerto Rican Experience Totowa, N.J.: Littlefield, Adams and Co., 1975.
- Urban Diversity Series ERIC/CUE "Hispanic Migration from the Caribbean and Latin America: Implications for Educational Policy, Planning and Practice" ERIC ED 179624.
- U. S. Book of Facts, U. S. Bureau of the Census, 1967.
- U. S. Bureau of the Census Persons of Spanish Origin in the United States November 1969, Series P-20, No. 213, February 1971.
- U. S. Commission on Civil Rights "Education of the Spanish Speaking" Hearings before the Civil Rights Oversight Subcommittee #4 of the Judiciary House of Representatives 92nd Congress, U.S. Commission of Civil Rights Serial No. 35 Congress of the U.S. Washington, D. D. ERIC ED 017803.

- U. S. Commission on Civil Rights "In Search of a Better Life: The Education and Housing Problems of Puerto Ricans in Philadelphia" ERIC ED 099443.
- U. S. Commission on Civil Rights "Issues of Concern to Puerto Ricans in Boston and Springfield, Mass. ERIC ED 069823.
- U. S. Commission on Civil Rights "El Boricua: The Puerto Rican Community in Bridgeport and New Haven" ERIC ED 105043.
- U. S. Commission on Civil Rights "Puerto Ricans in the United States: An Uncertain Future" October 1976.
- U. S. Commission on Civil Rights Compact "Why Some Kids Have a Right To Bilingual Education" 9 (August 1975):16-19.
- U. S. Department of Health, Education, and Welfare, Office for Civil Rights Elimination of Discrimination in the Assignment of Children to Special Education Classes for the Mentally Retarded 11-28-1972.
- U. S. Employment Service, Division of Testing Staff U. S. Department of Labor, Washington, D. C. "Ten Years of USES Research on the Disadvantaged" Vocational Guidance Quarterly 26 (June 1978):334-341.
- U.S. News "Mixed Schools Problems in New York City Too" 40 (March 30, 1956):53-56.
- U. S. Office of Education Proceedings (Elementary Education Series No. 30) "Young Spanish-Speaking Children in Our Schools".
- U. S. Office for Civil Rights "Elimination of Discrimination in the Assignment of Children to Special Education Classes for the Mentally Retarded" 11-28-72.
- U. S. Office for Civil Rights SY 1976-1977 Office for Civil Rights Elementary and Secondary Schools Civil Rights Survey Data.
- Vail, E. O. "What Will It Be? Reading or Machismo and Soul?" Clearinghouse 45 (October 1970):92-96.
- Valcourt, G. A. "The Puerto Rican Student in the American Public Junior High School Today" Ph.D. dissertation, Lehigh University, 1977.
- Valdes, D. T. "U.S. Hispanic" Social Education 33 (Apr. 1969):440-442.
- Valdes-Fallis, G. "Code Switching and the Classroom Teacher: Language in Education: Theory and Practice, No. 4 ERIC Clearinghouse on Language and Linguistics, Arlington, VA Center for Applied Linguistics, May 1978 ERIC ED 153506.

- Valenzuela, A. M. "The Relationships Between Self Concept, Intelligence, Socioeconomic Status and School Achievement Among Spanish American Children" ERIC ED 056785.
- Valdeverde, L. A.; Brown, F. "E. E. O and Bilingual Bicultural Education, A Socio-economic Perspective" Education and Urban Sociology 10 (May 1978):277-294.
- Van Duyne, J. H.; Gutierrez, G. "The Regulatory Function of Language in Bilingual Children" Journal of Educational Research 66 (Nov. 1972):122-124.
- Vann, R. "Bilingual Education Today: The Unresolved Issue" Language Arts 55 (Fall 1978):150-153.
- Vazquez, A. G.; Uhlig, G. E. "The Spanish-Speaking of Chicago: Educational Issues" Journal of Instructional Psychology 2 (1975):2-8.
- Vazquez, H. I. "Puerto Rican Americans" National Elementary Principal 50 (Nov. 1970):65-71.
- Vazquez de Rodriguez, L. "Social Work Practice in Puerto Rico" Social Work 18 (March 1973):32-48.
- Vazquez, James "Measurement of Intelligence and Language Difference" Aztlan 3 (Spring 1972):153-163.
- Vellon-Rios, W. "The Sequential Differences in General Ability of a Sample of Puerto Rican Students" Diss. Abs. Int. 34 (5-B) (Nov. 1973):2291.
- Vereshchagin, E. M. "Psikhologicheskaya i metodicheskaya kharakteristika drueyazychiya (bilinguizma). [The psychological and methods aspects of bilingualism] Moscow, USSR: Moscow University 1969.
- Vigil, D. "An Exploratory Bilingual Program" High/Hope Annual Report 1976-1975-1976:13-17.
- Vingoe, F. J.; Burney, D. S.; Kordinak, T. S. "Note on Psychological Screening of Pre-School Children" Perceptual Motor Skills 29 (Oct. 1969):661-662.
- "Violations of Human and Civil Rights: Tests and Use of Tests" ERIC ED 144983.
- Vivo, P. "The Puerto Ricans 2 Communities, One Culture" Agenda 10 (Jan.-Feb. 1980):28-31.
- Vuygotsky, L. S. Thought and Language. Edited and Translated by Eugenia Hanfmann and Gertrude Vakar, Cambridge: The MIT Press, 1962

- Wagner, D. A. "Bilingualism and Cognition: A Bibliography" Catalog of Selected Documents in Psychology 46 (May 1978):1697.
- Wagner, R. F. "Bilingualism, Multiple Dyslexia and Polyglot Aphasia" Academic Therapy 12 (Fall 1976):91-97.
- Walden, T. A. "The Classification Skills of Five, Six and Seven Year Old Children Who Are Bilingual Biliterate or Monolingual" ERIC ED 100529.
- Walker, M. P.; Ogletree, E. J. "Puerto Rican Parents Knowledge of and Attitudes Toward Bilingual Education" ERIC ED 164727.
- Walker-Palmer J. "Competency Based Bilingual Teacher Training: A Sample Program" Hispania 58 (Dec. 1975): 905-909.
- Wallace, A. "Bilingualism and Retardation: Elementary English 33 (May 1956):303-304.
- Walsh, J. F.; D'Angelo, R. "IQ's of Puerto Rican Head Start Children on the Vane Kindergarten Test" Journal of School Psychology 9 (1971):172-176.
- Watson, B.; Van Etten, C. (Eds. "Bilingualism and Special Education" Journal of Learning Disabilities 10 (Jun-July 1977):331-381.
- Watson, G. A. "Training for Cross-cultural Teaching" A.V. Instructor 14 (Jan 1969): 50.
- Wechsler Intelligence Scale for Children-Revised, D. Wechsler, The Psychological Corporation, 757 Third Avenue, New York, New York, 10017.
- Weigel, R. H.; Quinn, T. E. "Ethnic Differences in Cooperative Behavior: A Non-Confirmation" Psychological Reports 40 (1977): 666.
- Weiminger, J. G. "Communicative Competence Among Children in a Bilingual School Environment" Diss. Abs. Int. 38 (12-A June 1978):7306.
- Weinberg, Meyer (Editor) "Puerto Ricans" Research Review of Equal Education 1 (Spring 1977):1-32.
- Weinreich, U. Language in Contact New York: Linguistic Circle of New York, 1953.
- Westfield, A. H. "Transformations in Puerto Rican Identity: The Emergence of a New Generation" Ph.D. dissertation, Syracuse University, 1978.

- White, M. J.; Snyder, J.; Lira, F. T. "Some Sociocultural Determinants of Academic Performance Among Behaviorally Disturbed Adolescents" Journal of Genetic Psychology 133 (Sept. 1978):145-146.
- White, W. F. "Intelligence, Symposium" Journal of Research and Developmental Education 12 (Winter 1979):3-117.
- Whitmer, J. A. "A Psycholinguistic Description of the Total Miscue Responses to Third Grade Linguistically Different Spanish-surnamed and Anglo Children" Diss Abs. Int. 39 (1979) 4607A.
- Wide Range Achievement Test, J. F. Jastak; S. R. Jastak, S. W. Bijou Guidance Associates of Delaware, Inc. Gilpin Ave., Wilmington, Delaware, 19806.
- Wijnstra, J. M. ["The Use of the Cloze Procedure as a Measure of Written Language Procedure"] Tydschrift voor Ondervijds Research 2(6) No. 1977, 262-269.
- Williams, E.; Adams, J. "Learning by the Discovery and Verbal Perception Methods in Bilingual and Unilingual Children" Journal of Educational Research 69 (1975):142-145.
- Williams, F.; Van Wart, G. "On the Relationship of Language Dominance and the Effects of Viewing Carrascalendas" ERIC ED 066058.
- Williams, G. "Some Errors in English by Spanish Speaking Puerto Rican Children" ERIC ED 061850.
- Willis, R. M. "An Analysis of the Adjustment and Scholastic Achievement of 40 Puerto Rican Boys Who Attended Transition Classes in New York City" Ed.D. dissertation, New York University, 1961.
- Wojcieka, Sharff; Jagna, P. "Patterns of Authority in Two Urban Puerto Rican Households" Ph.D. dissertation, Columbia University 1979.
- Wolff, Max "Patterns of Change in the Cities of New Jersey: Minorities Negroes and Puerto Ricans, Affected by and Affecting this Change" ERIC ED 022795.
- Wolfran, W. "Overlapping Influence and Linguistic Assimilation in Second Generation Puerto Rican English" ERIC ED 057665.
- Wolfram, W. "Sociolinguistic Aspects of Assimilation: Puerto Rican English in New York City" ERIC ED 091933.
- Woolsey, A. W. "What Are We Doing for the Spanish Speaking Student?" Hispania 44 (Mar 1961):119-123.

- Wyszewianski-Langdon, H. "Determining a Language Disorder in a Bilingual Spanish-English Populations" Diss Abs. Int. 38 (9-A) March 1978, 5399.
- Yaukey, T. D.; Villareal, B. "Language Learning Through Pretend Play In Young Bilingual/Bicultural Children" ERIC ED 179298.
- Young, B. "The New England Farmworkers Council: Case Study of a Community Service Organization" Ed.D. dissertation, University of Massachusetts, 1975.
- Young, R. K.; Navan, M. I. "Retroactive Inhibition with Bilinguals" Journal of Experimental Psychology 77 (1968):109-115.
- Young, T. W. "Relationship of Certain Teacher Characteristics and the Achievement of Secondary Spanish Surname Students" American Secondary Education 9 (Dec. 1979):60-64.
- York, M. E. "An Exploratory Study of the Effect of Teacher-Child Verbal Interaction in Two Languages on Selected Language Competencies" Diss. Abs. Int. Vol. 34 (2-A) (Aug. 1973):674-675.
- Zamora, G. I. "A Comparison of the Non-Verbal Communication Patterns of Bilingual Early Childhood Teachers" Diss. Abs. Int. 35 (8-A) (Feb. 1975):5208.
- Zappert, L. T.; Cruz, B. R. (Report) Experimentation Extrapolation, exaggeration: they name is research; Bilingual Education: an Appraisal of Empirical Research" Phi Delta Kappan 61 (Dec. 1979):260-261.
- Zentella, A. C. "Code Switching and Interactions Among Puerto Rican Children" ERIC ED 1965493.
- Zigler, E. "Motivational Factors in the Performance of Economically Disadvantaged Children on the PPVT" Child Development 44 (June 1973):294-303.
- Zigler, E.; Butterfield, E. C. "Motivational Aspects of Changes in I.Q. Test Performance of Culturally Deprived Nursery School Children" Child Development 29 (1968):153-159.
- Zintz, M. V. "Language Differences and Reading" ERIC ED 122265.
- Zikel, P. A. "A Method for Determining and Depicting Language Dominance" Paper presented at the 7th Annual TESOL Convention, San Juan, Puerto Rico, May 12, 1973 ERIC ED 082567.
- Zirkel, P. A. "A Sociolinguistic Survey of Puerto Rican Parents in Connecticut" ERIC ED 074191.

- Zirkel, P. A. "An Evaluation of the Effectiveness of Selected Experimental Bilingual Education Programs in Connecticut" Diss. Abs. Int. 33 (6-A): 2680, Dec. 1972.
- Zirkel, P. A. "Puerto Rican Parents and Mainland Schools" ERIC ED 062473.
- Zirkel, P. A. "Spanish speaking Students and Standardized Tests" New York State Department of Education, November 1972. ERIC ED 080594.
- Zirkel, P. A. "Why's and Ways of Testing Bilinguality Before Teaching Bilingually" Elementary School Journal 76 (March 1976): 323-330.
- Zerkel, P. A.; Gable, R. K. "The Reliability and Validity of Various Measures of Self-Concept Among Ethnically Different Adolescents" Measurement and Evaluation in Guidance 10 (Apr. 1977):48-54.
- Zirkel, P. A.; Greene, J. F. "The Academic Achievement of Spanish Speaking First Graders in Connecticut" ERIC ED 054275.
- Zirkel, P. A.; Greene, J. F. "The Family Background of Puerto Rican Studnets: An Analysis of Educationally Relevant Variables" ERIC ED 073189.
- Zirkel, P. A.; Greene, J. "The Validation of Parallel Testing of Aural Ability as an Indicator of Bilingual Dominance" Psychology in the Schools 11 (Apr. 1974): 153-157.

