LEVEL OF ACCULTURATION/BICULTURATION AND RORSCHACH PROTOCOLS OF HISPANIC AMERICANS AND ANGLO AMERICANS

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CHAPTER I

STATEMENT OF PROBLEM

Research examining personality assessment of Hispanic Americans has historically been sparse. Padilla and Ruiz (1975) note that a frequency count by Buros in 1970 indicated that 18,300 references related to personality assessment had appeared since 1938. A search of this literature by Padilla and Ruiz indicated that only twelve of these articles described the performance of Hispanic American subjects on personality tests. It would appear that the interpretation of personality test responses from Hispanic American subjects have been based on the assumption that this group is somehow "no different" from the majority group. Another way of presenting the same assumption is to assert that cultural differences exert minimal influence upon personality test responses; and therefore, "unique", "unusual", or "atypical" response patterns obtained from these subjects have the same meaning as they would among subjects who are not of Hispanic origin. In other words, such patterns would be interpreted as representing some form of individual deviance (e.g., psychopathology). However, after reviewing the literature relative to psychological disorders of Mexican American psychiatric patients, Stoker (1966) reached the conclusion that this population showed clear and consistent differences in personality structure. He indicated the need for better understanding of the

cultural bases of the personality of Hispanics and the use of such information in the treatment of personal and social problems.

There is a substantial literature indicating that Hispanics, the second largest minority in the United States, are not a homogeneous cultural group (Martinez, 1977; Hawkes & Taylor, 1975; Keefe, 1980; Olmedo, Martinez, & Martinez, 1978; Olmedo & Padilla, 1978; Padilla, 1980). They exhibit instead a wide range of variability in sociocultural characteristics. Thus, Hispanic-Anglo dichotomies are of little value in understanding the role of cultural background in personality assessment. What is needed instead is the definition of a continuum of acculturation/biculturation based on the degree to which individual Hispanics living in the United States have assimilated mainstream sociocultural characteristics while simultaneously retaining those attributes of their culture of origin. Information derived from a quantitative measure of this process would then provide a more meaningful bases for investigating issues of personality assessment involving Hispanic Americans.

The measurement of acculturation/biculturation in Hispanic Americans has been gaining increased interest among social scientists in recent years (Satterfield, 1966; Tharp, Meadow, Lennhoff, & Satterfield, 1968; Padilla, 1980; Keefe, 1980; Torres-Matrullo, 1980; Szapocznik & Kurtines, 1980; Szapocznik, Kurtines, & Fernandez, 1980; Olmedo, 1979; Olmedo et al., 1978; Olmedo & Padilla, 1978). A common theme found in these studies is the idea of heterogeneity of the Hispanic population in the United States. Hispanic Americans do indeed exhibit a wide range of variability in cultural characteristics. These data provide strong evidence that members of this ethnic group cannot

be meaningfully described in terms of single category variables. In other words, it appears that Hispanic Americans can be placed somewhere along a continuum of acculturation/biculturation. The traditional view of acculturation as a unidimensional process is due in part to melting-pot pressures that cause individuals to adopt host-culture behavior and values while simultaneously discarding those attributes of their culture of origin. However, with the growing acceptance of the concept of cultural pluralism, acculturation has increasingly become a more multi-dimensional process with adaptation to a host culture no longer requiring rejection of the culture of origin. For those individuals who live in bicultural worlds, effective adjustment requires an acceptance of both worlds as well as skills to live among and interact with both cultural groups. If the degree or level of acculturation/biculturation has a relationship with sociocultural characteristics of the Hispanic American then it would seem that acculturation would also have a relationship with the personality configuration of the Hispanic American. Only two studies (Kaplan, 1955; Kaplan, Rickers-Ovsiankina, & Joseph, 1956) were found in the literature that have explored the potential relationship between acculturation and personality variables of Hispanics living in the United States.

The purpose of the present investigation is to study the relationship between acculturation/biculturation and personality variables of Hispanics living in the United States. More specifically, the study will compare Rorschach protocols of Anglo Americans with those of Hispanic Americans. The study will also examine Rorschach protocols of Hispanic Americans as they relate to acculturation/biculturation. Through investigating the effects of acculturation on certain

personality variables and by providing "reference data" for the Hispanic American population, knowledge will be gained regarding the proper personality assessment of Hispanic Americans.

CHAPTER II

REVIEW OF THE LITERATURE

The study of psychological phenomena and personality across cultures had its beginning in early anthropological studies that attempted to understand the nature of people through the study of different cultures (Billig, Gillin, & Davidson, 1947, 1948; Mead, 1949; Lewis, 1951; Hallowell, 1955). Interest in determining if certain aspects of personality development were universal led to the cross-cultural investigation of child-rearing practices and their influence upon adult personality. Early cross-cultural psychological research also focused upon providing practical knowledge about the people in the culture under study through the investigation of the modal personality and the national character structure. More recently, cross-cultural and ethnic minority research have included attempts at testing hypotheses from psychological theories across cultures and ethnic groups as a way of verifying the possible universality and generality of psychological concepts.

The investigation of personality assessment in ethnic minority groups is plagued by numerous methodological problems. The question of whether or not personality characteristics of people from different ethnic groups are similar is frequently encountered in ethnic minority research. Concrete examples of this problem are found in such questions as are the traits to be measured found in the people of the target

ethnic group, and are clinical diagnostic groups universal? The problem of equivalence of psychological constructs and instruments used to measure them is an area of concern in ethnic minority research since it is unknown if the structure and content of personality are the same in all ethnic groups. Another source of difficulty is understanding behavior studied in an ethnic minority group. The imposition of research procedures and behavioral framework on an ethnic group often results in error and misinterpretation. It is very important to view the behavior in the cultural framework in which it occurs.

The above-mentioned methodological problems have all been encountered in studies concerning personality assessment and Hispanics. Although few in number, the studies involving Hispanic Americans can provide valuable information about methodological problems which are unique to this ethnic group. Since different methods of personality assessment pose different types of problems and yield different types of data, it will be helpful to review the methods of assessment employed and the results found in the investigation of personality of Hispanics.

Objective Tests

In considering the use of objective psychological inventories, there is evidence that Mexican American subjects ranging in age from 13 to 80 years, respond differently to objective inventories than one might predict from normative data. A unique response pattern among Mexican Americans was found by Mason (1967) in a study employing the California Psychological Inventory (CPI), an objective personality inventory. Subjects were 13- and 14-year old American Indian, Caucasian, and Mexican American disadvantaged junior high students participating

in a summer educational enrichment program. It would not be pertinent to cite all the significant findings which emerged from the statistical analyses at present. Suffice to state that Mexican American males and females manifested response patterns which were different from each other, as well as being different from the performance of the other two groups. Of perhaps even greater relevance here is the observation that:

> the limited verbal facility of the present population necessitated modification of the usual administration . . . and . . . the test was administered in six separate sessions, allowing time for completion and opportunity for assistance with unfamiliar vocabulary (p. 146).

To enable one to decide the validity of this type of test for the Mexican American consider Mason's statement that: "one Mexican girl initially responded to the item 'I think Lincoln was greater than Washington', by stating that she could not answer because she had never been there" (p. 153)!

In a study of social adjustment required by certain specified life-change events Komaroff, Masuda, and Holmes (1968) compared the responses of Black, Mexican American, and Caucasian Americans on the Social Readjustment Rating Scale. Subjects were instructed to rate a total of 43 "life-change events" (e.g., "death of spouse", "divorce", etc.). Although all three groups ranked the items in a similar fashion, the Black and Mexican American groups were more alike than the Caucasian American middle-income group. Examination of content indicates that both Blacks and Mexican Americans rated items relating to labor and income as much more stressful (i.e., requiring greater readjustment) than did the white majority group. Another finding is that Mexican Americans rate items such as "death of a close family member", or "major personal injury or illness" as <u>less</u> stressful than do

Anglos or Blacks. The interpretation offered by Komaroff et al. is that the Mexican tradition of the extended family offers solace upon which Anglos and Blacks cannot rely.

A final and in some ways the most relevant comment about this study involves language fluency. Obviously referring to ethnic minority group subjects, Komaroff et al. (1968) state that their questionnaire:

> as originally worded, contained some language which, in trial runs, was not understood by many of those asked to read and complete it. For this reason, the wording was simplified on certain items (p. 122).

Furthermore, subjects were:

> given a verbal synopsis of the instructions . . . rather than the written instructions such as had been given to the white American group . . . because many subjects balked at having to read detailed instructions (p. 123).

Once again, these points lead to questioning the validity of a paper-and-pencil questionnaire for Mexican Americans and other Hispanics. Since some Hispanics are only monolingual in Spanish or only partially bilingual, the translation of tests or substitution of oral instructions for written ones may seem necessary to the investigator. However, such practices are hardly advisable in the absence of normative data on translated tests or on tests with unstandardized procedures.

In a recent study, Reilley and Knight (1970) used the Minnesota Multiphasic Personality Inventory (MMPI) to investigate personality differences between freshmen with Spanish surnames and those without, at a Southwestern American university. Of 36 comparisons, several showed significant differences between the two groups. The Mexican American group scored higher on the L (lie) scale of the MMPI which was interpreted as suggestive of more strict moral principles or overly conventional attitudes. Similarly, the non-Spanish surnamed group

scored higher on the Pa (paranoia) scale which was taken to be indicative that they were more subjective, sensitive, concerned with self, and less trusting.

It was also found that Mexican American males and Anglo American females scored higher than their counterparts on:

(a) Pt (psychasthenia), indicating worry and anxiety;

(b) Sc (schizophrenia), reflecting social alienation, sensitivity, worry and the tendency to avoid reality by use of fantasy; and

(c) Si (social introversion), tendency toward introversion, modesty, and shyness.

Again caution should be exercised in the acceptance of these personality differences since Reilley and Knight (1970) themselves conclude that:

> a sophisticated interpretation of individual profiles should include consideration of the total pattern of scales within the context of other pertinent information about the individual . . . particularly . . . college students (p. 422).

In a similar study conducted by McCreary and Padilla (1977), MMPI scores of Black, Mexican American, and Anglo American male offenders were compared in order to investigate whether cultural and/or socio-economic factors affect this personality inventory. Comparisons were performed on unmatched and matched (education and occupation) groups that utilized all profiles or valid ones only and examined both trait (individual scales) and type (Goldberg indices) differences. Cultural factors seemed to be related to differences between Mexican Americans and Anglo Americans on the L, K, and overcontrolled hostility scales, while socioeconomic factors appeared to explain differences on the Hs scale. Type differences were not apparent except for Mexican Americans

who were classifed more often as psychiatric, while Anglos and Blacks scored well into the sociopathic range. McCreary and Padilla (1977) comment that:

> An explanation of this finding is highly speculative; however, it may reflect some aspect of the referral process such that Mexican Americans have to appear much more 'psychiatric' in order to be referred for a legal-psychiatric evaluation (p. 177).

The authors express caution in the interpretation of the overall results:

> Because this study utilized offenders as S's, there are obvious limitations on generalization of conclusions. More research is needed that contrasts different minority groups with whites and that utilizes a variety of other populations such as students and medical patients . . . in order to assess how a variety of cultural and socio-economic factors may be influencing their MMPI scores (p. 177).

Two very significant conclusions emerge from these studies that employ objective psychological inventories. First, note that Komaroff et al. (1968) and Mason (1967) modified test instructions in order to create motivation and enhance communication. It is clear that instructions standardized on college sophomores or middle-class subjects are not appropriate for use with the Hispanic American. This observation is particularly critical because these tests are designed for use with "normal" subjects and were, in fact, used in this way. In other words, one may not argue that excessive stress associated with psychological or emotional problems disrupted test performance. Translations from English into Spanish may, or may not be, effective. Only additional research can answer this question.

A second conclusion is that there is strong evidence that Hispanic Americans respond differently to objective inventories than one might predict from the standardly used normative data. Interpretation of the

MMPI typically utilizes an actuarial approach such as "code type". Yet there are no actuarial norms specific to the Hispanic American population. Perhaps if Hispanic norms had been available, the results of the Reilley and Knight (1970) and McCreary and Padilla (1977) studies would have been more substantive and meaningful. The overall thrust of these observations is to emphasize the need for normative studies of personality assessment instruments using Hispanic Americans as subjects.

Projective Tests

Projective techniques, by origin as well as by convention, are tools of the clinician. They are used primarily by the person who is assessing individual personalities, usually with a therapeutic or diagnostic intent. However, during the middle part of this century they were employed extensively to provide insight into a variety of problems that had traditionally been the concern of the anthropologist, sociologist, and social psychologist. Of all the instruments for assessing personality the psychologist has devised, it is only projective techniques that have aroused much interest on the part of the anthropologist, and the study of personality in cross-cultural settings has proceeded with extensive utilization of results provided by these instruments.

In recent years the Thematic Apperception Test (TAT) has become, next to the Rorschach, the most widely used of all projective techniques. Application of the TAT in cross-cultural studies has been initiated with such populations as Hopi and Navaho children (Henry, 1947), Ojibwa Indians (Caudill, 1949), Wisconsin Chippewa (Barnouw, 1950), Navaho veterans (Vogt, 1951), and Japanese (Caudill, 1952). A

common theme running throughout these studies is that in cross-cultural settings, TAT results can be psychologically and culturally meaningful. In a more recent study, Johnson and Sikes (1965) compared Rorschach and TAT responses of Anglo, Black, and Mexican American patients on the psychiatric unit of a Veterans Administration Hospital. The TAT revealed differences between the Mexican Americans and the other two groups in themes of family unit, and in their characterization, but more particularly of father-son and mother-son relationships. This TAT finding possibly demonstrates the persistence of Mexican American cultural values regarding interpersonal relationships with the family. The major point from this investigation is the finding that Mexican American patients manifest a unique pattern of responses to projective devices.

The TAT appears to be sensitive to depth or unconscious factors, but at the same time it clearly reflects conscious factors and situational determinants, so that under appropriate circumstances it may provide information concerning all of these types of variables. The test activity is a relatively natural one for almost all subjects, and thus it is usually easy to explain and to elicit cooperation. On the other hand, the data collected by the instrument are ponderous and difficult to subject to analysis. Furthermore, the absence of a simple, objective scoring system means that the individual employing the instrument often spends dozens of hours in analysis for every hour spent in the collection of data. The fact that the instrument is responsive to dispositional, situational, and fleeting personal determinants means that it is difficult for the interpreter to be certain whether a given test characteristic reflects an enduring personal characteristic or a

transient state. Also, when individuals from a different culture or ethnic group are studied, it is difficult to interpret their stories with confidence because of the differences in the language which they employ. And finally, the standard pictures of the TAT involve content specific to Western European culture and consequently cannot be used confidently in many other cultural settings.

Perhaps no psychological instrument has piqued the public's interest more than Hermann Rorschach's set of ink blots. In the minds of many people, this esoteric and somewhat mysterious instrument has come to typify the kind of activity in which the modern psychologist engages. Although administering and interpreting the Rorschach is far from typical of the daily activities of all psychologists, this instrument has become remarkably widespread in its application. There is little doubt that for better or worse this test has had a profound impact upon developments within psychology during the past fifty years.

It seems safe to say that if social scientists had not been intrigued with the concept of national character (modal personality, basic personality type, etc.) there never would have been any fever over the use of the Rorschach in anthropological research. One of the most highly regarded of modern anthropological monographs is the community study of the Tepoztlan conducted by Lewis (1951). Included in the study was an extensive program of Rorschach testing, and the results of this effort are summarized in a chapter entitled "The People as Seen from Their Rorschach Tests" written by Theodora Abel and Renata Calabresi (1951).

In presenting the results of their analysis, Abel and Calabresi (1951) first consider the group as a whole, then compare their findings

in this group with the findings of other investigators, and finally focus their attention upon comparisons within the Tepoztlan group itself. In describing the group as a whole, Abel and Calabresi point to the subjects' concrete rather than abstract approach to the blots (D>W) and the relative balance between inner and outer life, as reflected in the roughly equal frequency of Movement and Color responses. Their responses show more interest in animals than in people or human relations and little evidence of overt aggression or hostility. Their contact with the external world is realistic as reflected in F%, and yet they are not so dominated by reality perception as to be incapable of impulse (FC) or fantasy (M).

The authors compare the frequency of response (R) of the Tepoztecans to that of the Anglo and Black subjects in our own culture, Guatemalan subjects (Billig et al., 1947, 1948), and American Indian subjects (Hallowell, 1942), noting that only in comparison to the Guatemalan subjects do the Tepoztecans appear more productive. The Guatemalan subjects were divided into an Indian group and a Ladinos group (higher status group of Spanish desc nt), and the authors suggest that the quality of response of the Tepoztecans resembles the Ladinos in the incidence of Human Movement and Color responses. This result may be partially a consequence of the fact that unlike the Guatemalan Indians, the Tepoztecans do not live adjacent to a higher status group from whom they must withdraw or submit. When compared to Hallowell's Ojibwa Indians, the Mexican subjects showed a much lower incidence of Human Movement responses which suggested to the authors a more constricted inner life.

The remaining portion of the chapter is devoted to a discussion of age and sex differences in Rorschach performance in Tepoztlan with the chief conclusion of the authors concerning:

> . . . the opposite course taken by the life cycle of men and women. Women appear to be initiated early in their role of life and are consistently expected to avoid sex as a source of pleasure. They follow a well-defined line of development with conscious control over their feelings and impulses, but in later years they assume the dominant role in society. Men experience more discontinuity and inconsistency in behavior; they are likely to be more exuberant than women but also more anxious and insecure. As they grow older, they lose their dominant position, and the older adults appear disturbed, impulsive, and anxious. They seem to be losing the grip on society that the older women are taking over (Abel & Calabresi, 1951, p. 318).

One of the traditional meeting grounds for psychologists and anthropologists is the area of culture change and acculturation. It is precisely where cultural modes are displaced or altered that the role of individual psychological factors is likely to be most apparent and to seem most important. An adequate account of these cultural processes, their determinants and their concomitants, demands an understanding of associated psychological processes. An extensive investigation of a Guatemalan community by Billig et al. (1947, 1948) utilized the Rorschach test in an effort to reveal differences between the Indians and Ladinos of the village of San Luis. The Indians maintained a predominantly Mayan culture, whereas the Ladino culture was largely European. The authors describe the Indian culture as more "folklore" and more localized, whereas the Ladinos are described as oriented toward the outside world and as having a somewhat less stable culture. The two groups existed in an ordered relationship, with the Ladinos looked upon as superior and the Indians as inferior.

In a section concerned with acculturation Billig et al. (1947, 1948) compare the performance of the Ladinos and Indians and suggest that the

personality differences observed are a product of the different degrees of acculturation of the two groups. They conclude that both groups manifest an intense concern with primitive, unacculturated drives as manifested by a very high incidence of Form-Movement responses. They are also similar in their tendency toward a balance between Movement and Color but with a tendency toward constriction. The Ladinos are somewhat more extratensive and the Indians somewhat introversive. Stereotyped responses are more frequent among the Indians than among the Ladinos, and the Indians generally seem somewhat less well-prepared to meet the demands of daily living. There is somewhat more rigidity (high F%) and a higher incidence of oppositional tendencies (Space reponses) among the Ladinos than among the Indians. An example of Rorschachs of the adolescents in the two groups reveals a high degree of similarity and suggests to the authors that the effect of the process of socialization is to produce selective differences in these groups as adults. The Ladino adolescents appear to be more emotionally responsive, more closely related to external reality, and better able to think in conventional terms. Both groups seem to be intellectually rigid, as suggested by their high F%, and both groups seem superior to the adults in creative capacity, as suggested by the incidence of Movement reponses.

In a study concerning the psychological aspects of acculturation in the Ojibwa (Salteaux) American Indian, Hallowell (1955) investigated three Ojibwa settlements: two Berens River groups (Inland and Lakeside) and the Lac du Flambeau group. All three groups share original Algonkian culture, but they show marked differences in the extent to which they have become acculturated to the white culture, with the

Flambeau the most heavily acculturated and the Inland Ojibwa the least acculturated.

The author begins his analysis with a general description of the Ojibwa modal personality, which he sees as congruent with the aboriginal Algonkian culture and thus a kind of generic personality type for these people. In his description he emphasizes surface friendliness, latent aggression, and hostility, shallow human relations, introversion, and frequent use of the mechanism of projection. A qualitative examination of the Rorschach protocols of the least acculturated group (Inland) provides a concordant impression, and Hallowell cites a number of group averages on Rorschach indices to support his generalization. A comparison of this personality portrait with the findings for the Lakeside and Lac du Flambeau groups reveals:

> the continuity of the same basic psychological pattern through these stages of acculturation. There is a persistent core of generic traits which can be identified as Ojibwa (p. 351).

In spite of these important similarities, Hallowell feels there are significant differences among the settlements, the most striking of which have to do with the Lac du Flambeau, where the author feels there are definite signs of psychological malfunction. "It is at Flambeau where we can see reflected in the Rorschach data an introversive personality structure being pushed to the limits of its functional adequacy" (pp. 351-352).

These impressions are strengthened by comparison of the three groups in incidence of signs of adjustment. There is no difference between the two Berens River groups, but significant differences appear between both of these groups and the Flambeau group, with the latter group displaying inferior adjustment. Hallowell feels that the absence

of any appreciable difference in adjustment between the Inland and Lakeside group, in spite of their differences in acculturation, implies that in assessing the relationship between adjustment and acculturation one must take into consideration such factors as the speed with which the acculturation is carried out and the extent to which the equivalents of aboriginal institutions can be found in the newly acquired culture. The hypothesized association between personality and acculturation is, thus, highly complex.

A frequently cited investigation, making use of Rorschach data to assist in understanding the acculturation process, is Barnouw's (1950) study of the Wisconsin Chippewa (Ojibwa). In this study, the author attempts to relate the personality of the Chippewa to their culture and culture change over a span of centuries. In a discussion of fear and isolation among the Chippewa, the author indicates that Rorschach findings generally suggest greater insecurity on the part of male subjects than female subjects. In support of this interpretation, the author cites longer response time, higher rate of card rejection, and lower incidence of Human Movement responses by the male subjects. Consistent findings of this sort are reported for a number of groups varying in age and acculturation. Also singled out for emphasis is the very low incidence of Color responses. Out of 107 records there were 53 that gave no evidence of any Color response whatsoever. This is interpreted as indicative of the emotional isolation of the subjects. The investigator reports:

> Dr. Klopfer believes that the rarity of Color responses among the Chippewa implies that the individual is under pressure to become as emotionally independent of his environment as possible, and to expect very little from others. This assessment, of course, is essentially in agreement

> with the personality picture which has been described in the preceeding pages (p. 27).

The author notes some inconsistency between his findings in regard to Color responses, and those reported by Hallowell for subjects from the same and culturally similar tribes.

In two related studies, Kaplan (1955) and Kaplan et al. (1956) investigated Rorschach data from Zuni, Navaho, Mormons, and Mexican American subjects. In both studies, Rorschach performance was compared between two subcultural groups which possess more "cultural integrity" than two other groups who were more acculturated to the larger society (i.e., Navaho and Zuni versus Mormons and Mexican Americans). On the assumption that veterans will have had greater exposure to the majority group culture than nonveterans (i.e., are more acculturated), these four groups were also subdivided on the basis of military experience.

Several reservations should be stated concerning the first study before looking at the conclusions. Many users of the Rorschach have assumed that the instrument is "culture-free", in the sense that it could presumably provide insight into an individual's personality structure which was "uncontaminated" by culture or ethnic group membership. Kaplan (1955) correctly rejects this assumption and uses the instrument in an effort to detect precisely these kinds of differences. The problem comes in interpretation. If and when differences appear, there may be some difficulty in determining whether they are due to individual personality, culture-group membership, personal experiences with the majority group, or the interaction of all these factors.

Despite these reservations, the data suggest that more acculturation through military exposure influences Rorschach performance.

Specifically, veterans perceived "human movement" with greater frequency and relied more often upon "color" to explain their percepts. It is suggested, with appropriate caution, that these differences may reflect more creativity and extroversion among veterans from these culture groups.

The second study (Kaplan et al., 1956) provides additional important information. From the pool of multicultural Rorschach protocols described above, Kaplan et al. selected records of six veterans from each of the four cultural groups. Two judges performed a series of sorting tasks with the 24 records. One judge, who knew which cultures were represented and who had personal experiences with all four, achieved considerable success in sorting Rorschach records into the correct cultural groups. The second judge, who was only informed that the Rorschach protocols could be sorted into distinct categories without knowledge of the groups involved, was unable to sort the records into meaningful groups. On the basis of this finding Kaplan et al. conclude that they have provided modest support for the idea that cultures manifest "modal personality" patterns since Rorschach responses from the Mexican American group were "unique" and "homogeneous" enough to be discriminated from one Anglo American and two Indian groups. One should be cautioned against unequivocally accepting these findings since Kaplan et al. state in their discussion of the results:

> the only systematic difference that is striking to us is the apparent lack of involvement and motivation for outstanding performance on the part of many (Mexican) Americans . . . the (Mexican) American subjects appeared not to be more than superficially involved, and were not attempting to give more than a minimum number of responses to the test (p. 179).

This "lack of involvement and motivation" raises additional problems of interpretation. To what extent was the Mexican American culture

correctly identified on the basis of decreased frequency of percepts? Any why were these Mexican American subjects motivated to respond in this fashion? One possibility is decreased verbal fluency, another is lack of interest in the task, and there are doubtless other possible explanations. The problem is that evaluation cannot be made as to whether fewer Rorschach responses in this case reflect a common cultural trait, individual personality differences, or just indifference toward an examination procedure perceived as meaningless.

In a study previously mentioned, Johnson and Sikes (1965) compared Rorschach and TAT responses of Anglo, Black, and Mexican American patients on the psychiatric unit of a VA hosptial. Numerous statistically significant differences appeared between groups. The most distinct differences on the Rorschach appeared on the measure of hostility. The Mexican American group was high on Potential Hostility and low on Victim Hostility. They gave few Anatomy responses, showed relatively high Form Level, and they gave a relatively low number of Color responses. In addition, they tended to be high on Form responses (F) and to give more detailed (d) responses, both Human and Animal. The Anglos gave more Mild Movement responses, more Populars, a higher number of Whole (W) responses, and more often gave several Form-Color responses.

Differences between the three groups were most impressive on the hostility scoring measures and, in a sense, overall patterns may be seen as variations in handling hostility. The Mexican American subjects evidenced little of the feeling that they are vulnerable victims, but see much latent hostility in the world. Other scoring tendencies suggest that the Mexican American group does appear to be more concrete and constricted, and to handle conflict by formalizing and compulsively

dealing with details or the particulars of life while the other groups deal more with the generalities.

The near absence of research on the personality assessment of Hispanic Americans should not be taken to imply that inferences cannot be made concerning the performance of Hispanic Americans on such tests. To begin, it appears that no projective test can be considered "culture-free" and that it is possible that Hispanic Americans will respond differently on these instruments. This should not be misinterpreted, however, as implying that projective test protocols from this subject population are grossly different from those obtained from majority group members. Rather, subtle differences probably exist -- perhaps in content, style, latency, frequency or other response variables which can conceivably lead to misinterpretation -- and these cultural differences can be misconstrued as individual "assets" or "liabilities". It seems clear that well-controlled studies employing Hispanic American subjects on projective tests are needed.

Acculturation and Hispanic Heterogeneity

Investigators are in general agreement that Hispanics living in the United States have neither fully maintained their traditional Hispanic culture nor fully embraced the Anglo American values and cultural orientations (Carrillo-Beron, 1974; Satterfield, 1966). For this reason Hispanic Americans must not only be viewed in relation to Hispanic and Anglo cultures, but must be analyzed and understood as separate, unique entities.

Previous reserach indicates a number of psychological differences between Hispanic American males and females. In a multiethnic study

investigating self-esteem, Larkin (1972) found that Mexican American girls from homes that gave boys higher status had lower self-esteem than their brothers. In another multiethnic study, Ramirez and Price-Williams (1974) found female Mexican American school children to be more field dependent than their male counterparts. The Chicana's awareness of her physical self as manifested in dreams was investigated by Roll and Brenneis (1975). In this study, Mexican American females were found to have a higher incidence of dreams of death than Mexican American males. The latter did not differ from Anglo American males and females. The researchers explain these findings as the result of a greater tendency of Chicanas to carry the influence of the traditional culture. In another study, Chicanas were found to exhibit a greater incidence of depression than Chicanos. The latter exhibited more aggression (Stoker & Meadow, 1974). The researchers conclude that Mexican American males suffering from psychological stress are more likely to divert it outward while females are more likely to turn it inward. Thus, these differences in personality traits will most assuredly arise in the personality assessment of Hispanic Americans. Also, these psychological differences between Hispanic American males and females will undoubtedly influence their changing attitudes and life-styles.

In focusing upon changing aspects of the Hispanic American in her/his exposure to the majority culture, one is addressing the phenomenon of acculturation. But what is meant by acculturation? Olmedo (1979) states that the term acculturation has been used during the 20th century in reference to what may be considered one of the more elusive, albeit ubiquitous, constructs in the behavioral sciences. He continues

by noting that most research on acculturation has been anthropological in nature and has focused on the acculturation of third world nations to industrialized western societies. Acculturation research has been approached from the perspective of not only anthropology, but also sociology, and more recently, psychiatry and psychology. Anthropologists and sociologists tend to view acculturation as a group process and in terms of its relationship to socialization, social interaction, and mobility (Olmedo, 1979). On the other hand, Chance (1965) points out that psychologists and psychiatrists tend to view acculturation in terms of intrapsychic mechanisms, that is, as change in the individual's perception, attitudes, and cognitions. Understanding the individual's experiences in role conflict, interpersonal relationships, and adaptation strategies are essential in our understanding of acculturative change. With the growing acceptance of the concept of cultural pluralism, acculturation has increasingly become a more multidimensional process with adaptation to the host culture no longer requiring rejection of the culture of origin. For those individuals who live in bicultural worlds, effective adjustment requires an acceptance of both worlds as well as skills to live among and interact with both cultural groups. To learn about the host culture is clearly adaptive, but to simultaneously discard those skills which effectively allow them to interact with the culture of origin, such as language and relationship style, is not adaptive. Thus, in bicultural settings, when adaptation to a host culture occurs in the way that acculturation has been traditionally conceptualized - i.e., adopting host culture and rejecting culture of origin - then it inherently leads to psychological

maladjustment. Given a primary focus upon the individual, we know very little about how he/she adapts and/or copes with the pressures to acculturate.

Olmedo et al. (1978) developed a measure of acculturation that can not only discriminate between Anglos and Hispanics, but also provides for quantitative differentiation across generations within the Hispanic American ethnic group. In a study employing the Olmedo et al. acculturation measure, Kranau, Green, and Valencia-Weber (1982) found that for Hispanic American women greater acculturation was positively correlated with more liberal attitudes toward women, less feminine household behaviors, single status, more education, and younger age. Thus, Hispanic American women exhibit a wide range of individual differences in the extent to which they have assimilated the sociocultural and psychological characteristics of the Anglo society. However, this acculturation measure assumes that Hispanic Americans adopt host-culture behavior and values while simultaneously discarding those attributes of their culture of origin. In most cases, Hispanic Americans reside in bicultural communities and therefore participate in both communities.

In order to minimize the detrimental effects of adaptation to a new culture, individuals living in bicultural communities must become bicultural themselves. The process of becoming bicultural involves learning communication and negotiation skills in two different cultural contexts, each with a separate set of rules. A basic premise of this orientation is that in bicultural settings, biculturalism leads to adjustment whereas monoculturalism may lead to maladjustment. In regard to this Szapocznik et al. (1980) have developed the Bicultural

Involvement Questionnaire that measures biculturalism and cultural involvement. The dimension of biculturalism ranges from monoculturalism to biculturalism while the dimension of cultural involvement ranges from cultural marginality to cultural involvement. The dimension of monoculturalism-biculturalism, as its name indicates, assesses the degree to which a person is involved in only one culture (either Hispanic American or Anglo American) or in both cultures simultaneously. However, the method of computing scores on this dimension might result in identical scores for an individual who is "equally noninvolved in either culture" and an individual who is "equally and fully involved in both cultures." In order to distinguish the true bicultural individual from the "mock bicultural" individual, a second dimension was developed and was labeled "Cultural Marginality - Cultural Involvement." The possible relationship between both dimensions has strong implications for the proper personality assessment of Hispanic Americans and for their psychological adjustment.

Exner's Comprehensive System

It has been more than sixty years since the Rorschach test was first introduced in the monograph Psychodiagnostic (Rorschach, 1921). Since that time the test has stimulated great interest, extensive use, and considerable research. While flourishing as an important tool of the practitioner, the technique often proved baffling to the researcher and irritating to those with strong allegiance to stringent measurement methodology. Criticism of the test, both real and unreal, has been widespread. Unfortunately, most of the discussions concerning the Rorschach, whether pro or con, give the impression that there is a

single Rorschach orientation or system about which the controversy is centered. This is not exactly true. In fact, it is probably more false than true. It is true that there are the 10 Swiss inkblots about which Rorschach published his original treatise, and it is also true that many of Rorschach's postulates have formed the basis on which specific systems have been developed. But it is not true that the various Rorschach systems are highly congruent. Quite the contrary, they are substantially different. In the United States alone there have been at least five methods or systems developed. These five systems, Beck, Hertz, Klopfer, Piotrowski, and Rapaport-Schafer, differe enormously - not so much that each is completely discrete from each of the others, but enough so that five different Rorschach tests have been created. They differ in basic administrative procedure, scoring method, and interpretive hypotheses. Where agreement between two or more of the systems does exist, it is usually because each has incorporated something from the original Rorschach (Exner, 1969). All of the systems are impressive, and each carries strong arguments for endorsement. Yet none are truly all inclusive, and none have accomplished the task of maximizing the full potential which the test presents.

Exner (1974) has attempted to incorporate the best of each into a comprehensive Rorschach system. The methodological format from which the comprehensive Rorschach system has been developed draws heavily from five sources (Exner, 1974). The first is a comparative analysis of the five major Rorschach systems. Second, in conjunction with the comparative analysis of the systems, many interviews and conversations occurred with the systematiziers, providing information about their

positions and attitudes toward different features of their respective systems. Third, there are the results of three surveys conducted especially for the purpose of gathering information about the practices and opinions of clinicians who use the Rorschach (Exner, 1974). The fourth source from which the comprehensive system has been developed is a pool of 835 Rorschach protocols. This does not provide a discrete normative base for the comprehensive system, for normative data are also available from other sources. Instead, these records, which include more than 200 from nonpsychiatric subjects, provide information useful in the study and cross-referencing of various normative baselines. Finally, the data bank of published Rorschach research has contributed in no insignificant way to the development of the comprehensive system.

In summary, the previously cited literature indicates that there is a paucity of data concerning the performance of Hispanic Americans on personality tests. However, there is evidence of clear and consistent differences in personality structure of Hispanic and Anglo Americans. Furthermore, there is evidence indicating male-female differences in Hispanic Americans and also that this population is not a homogeneous cultural group. Thus, there is a need for a better understanding and the use of such information in the treatment of personal and social problems. The present study will endeavor to provide information to allow for the proper personality assessment of Hispanic Americans. First, Hispanic Americans will be compared to Anglo Americans on Rorschach protocols and male-female differences, both within and between groups, will be investigated. Also, since Hispanic Americans are not a homogeneous cultural group, the effects of the acculturation process on Hispanic Americans will be determined through the examination of

Hispanic American Rorschach protocols as a function of degree of acculturation/biculturation. Measures to be used are the Rorschach Inkblot Test and the Szapocznik et al.(1980) Bicultural Involvement Questionnaire. Thus, it is hypothesized that there are differences in personality structure, as measured by the Rorschach, between Anglo Americans and Hispanic Americans and that the degree of acculturation/biculturation will have an effect on the personality structure of the Hispanic American. The following variables may be important indicators of differences in personality:

R -number of response.

W -responses using the whole blot.

D -responses using common details of the blot.

Dd -responses using unusual details of the blot.

S -responses using white space area of the blot.

M -responses clearly involving a kinesthetic perception, the content of which involves behavior restricted to humans, or, in animals, is human-like.

FM -responses involving a kinesthetically marked movement involving animals.

m -responses involving the movement of an inanimate, inorganic, or insensate object.

F -responses based exclusively on the form features of the blot.

FC -responses which are formulated because of the form of the blot area, and in which color is used secondarily for purposes of clarification and/or elaboration.

CF+C-responses which are formulated because of the color features of the blot or blot area and the form involved is of

secondary importance plus responses based exclusively on the chromatic featues of the blot with no form involved.

F+% -the proportion of pure form responses manifesting an appropriate use of the form characteristics of the blot. It is calculated as Sum (F+)+(Fo)/Sum pure F responses. This percentage includes only pure form responses.

X+% -(Extended +%) the proportion of good form usage throughout the record. It is calculated as Sum (+)+(o)R's/R.

3r+(2)/R-(Egocentricity Index) represents the proportion of reflection and pair answers in the total record.

EA -the sum of human movement responses plus the weighted sum of the chromatic color responses with FC assigned a value of .5, CF a value of 1.0, and C or Cn assigned a value of 1.5.

ep -the sum of FM plus m responses plus the sum of all shading and achromatic color responses.

P -popular responses as defined in the Comprehensive System.

H+Hd-responses involving human contact.

A+Ad-responses involving animal content.

H+A -responses involving whole human or whole animal content.

Hd+Ad-responses involving incomplete human form or incomplete animal form.

CHAPTER III

METHOD

Subjects

Thirty Hispanic Americans and thirty Anglo Americans served as subjects. All subjects were adults and there were equal numbers of males and females in each group. Hispanic American and Anglo American subjects were matched according to level of education. Subjects were asked to volunteer their participation in the study and were contacted individually through an Hispanic cultural center in a large southwestern city, a clothing manufacturer in a different southwestern city, and a state university in the southwestern United States. All subjects were guaranteed anonymity.

Instruments

All subjects were administered the Szapocznik et al. (1980) Bicultural Involvement Questionnaire and the Rorschach Inkblot Tests.

The Szapocznik et al. (1980) Bicultural Involvement Questionnaire is a 33 item instrument which was constructed by modifying or adopting some of the items from an Acculturation Scale developed by Szapocznik, Scopetta, Kurtines, and Arnalde (1978). The original items in the Acculturation Scale were designed to assess the degree to which a person feels comfortable in one or the other culture in such a way that this scale measures involvement in one culture to the exclusion of the other.

In contrast to the Acculturation Scale, most of the items constructed for the Bicultural Involvement Questionnaire were designed to assess the degree to which a person feels comfortable in each culture independent of the other.

The Bicultural Involvement Questionnaire measures two conceptually independent bipolar dimensions: (1) a dimension of biculturalism which ranges from monoculturalism to biculturalism, and (2) a dimension of cultural involvement which ranges from cultural marginality to cultural involvement. Scores for each of these dimensions are computed on the basis of two subscales, one measuring Americanism and the other Hispanicism. Americanism scores are obtained by summing all of the items reflecting an involvement in American culture and Hispanicism scores are obtained by summing all of the items reflecting an involvement in Hispanic culture.

Scores on the Biculturalism Scale are obtained by calculating the following difference score: Biculturalism score = Hispanicism score-Americanism score, with scores close to zero (0) indicating biculturalism; scores deviating from zero indicating monoculturalism. A positive difference score reveals monoculturalism in the Hispanic direction, whereas a negative difference score reveals monoculturalism in an American direction.

Scores on the Cultural Involvement Scale are obtained by calculating the following sum score: Cultural Involvement score = Hispanicism score + Americanism score, with a high score indicating a greater degree of cultural involvement, and a low score indicating cultural marginality, i.e., a lack of involvement in either culture.

The Alpha internal consistency coefficients for two junior high school samples combined yielded .93 and .89 for the Hispanicism and Americanism scales, respectively. The reliability of the difference scores (Biculturalism Scale) was .94, and of the composite scores (Cultural Involvement Scale) was .79. Test-retest reliability was obtained for junior high school subjects over a six-week interval. These reliabilities were .50, $p<.05$; .54, $p<.01$; .79, $p<.001$; and .14, ns., respectively for Hispanicism, Americanism, Biculturalism, and Cultural Involvement Scales.

Criterion-related validational evidence for the Biculturalism Scale was obtained using biculturalism ratings as an external criterion. Students who had bicultural classroom teachers were rated for level of biculturation by their teachers on a standardized form. The correlation between the Biculturalism Scale scores and teacher ratings for biculturalism of Cuban American youths was significant, $r = .42$, $p<.001$, $n = 53$. Cultural Involvement scores were also correlated with teacher ratings for biculturalism and this relationship was significant, $r = .22$, $p<.05$, $n = 53$.

The Rorschach Inkblot Test was introduced in the monograph Psychodiagnostic (Rorschach, 1921). It consists of 10 individual plates, 5 achromatic and 5 chromatic. Administration and scoring, or coding, of responses was done according to the Exner Comprehensive System (1974). Interscorer reliability using the Comprehensive System has been found to be .85 (Exner, 1978). A judge trained in the use of the Comprehensive System scored each Rorschach record. In order to assess reliability of scoring in the present study, records of ten subjects were randomly selected and scored independently by a second

judge trained in the use of the Comprehensive System. Each response was examined to determine agreement in scoring. A point biserial correlation was determined for each of four categories for each response. The correlations were then averaged and the overall interscorer reliability was found to be .89.

Procedure

Each subject was administered the Bicultural Involvement Questionnaire and the Rorschach Inkblot Test by a male examiner. A brief explanation of the study was given verbally to each subject. No time constraints were placed upon the subjects and the amount of time for completion was approximately two hours. All testing was done individually in the subject's home, at the subject's school or college, or at the examiner's office. Upon completion of the study, the results were made available to all participants and all were given the opportunity to discuss the results with the researcher.

CHAPTER IV

RESULTS

The average subject was approximately 25 years old (SD=6.14) and was a high school graduate with some college or business school experience. For purposes of defining the Hispanic sample for comparisons to other research populations, the average Hispanic subject was approximately 26 years old (SD=5.69) and was also a high school graduate with some college or business school experience.

Bicultural Involvement Questionnaire

Initially, the validity of the Bicultural Involvement Questionnaire was investigated through the use of multiple regression techniques. First the relationship of Biculturalism Scale scores and Cultural Involvement scores to ethnic group was determined. The squared multiple correlation obtained was .7836, $F(2,57) = 103.21$, $p=.0001$, indicating that Biculturalism Scale scores and Cultural Involvement scores accounted for approximately 78% of the variance in ethnicity. Second, the relationship of Biculturalism Scale scores and Cultural Involvement scores to education level and age within the Hispanic group was determined. Biculturalism Scale scores and Cultural Involvement scores did not significantly predict or discriminate age or education within the Hispanic group. However, for Hispanics, Biculturalism Scale scores did have significant zero-order correlations with sex of

subject, $r(30) = 0.55$, $p=.0016$, and Cultural Involvement scores, $r(30) = 0.54$, $p=.0020$, indicating that Hispanic women had higher Biculturalism Scale scores than Hispanic men and that Cultural Involvement scores increased as Biculturalism Scale scores increased. Also, within the Hispanic group, level of education had significant zero-order correlations with age, $r(30) = 0.52$, $p=.0029$, and Cultural Involvement scores, $r(30) = -0.42$, $p=.0208$, suggesting that level of education increased with age and that Cultural Involvement scores decreased as level of education increased.

Ethnic Group Comparisons

To assess differences between the Anglo American group and the Hispanic American group, 2 x 2 analyses of variance (ANOVAS) were utilized for Biculturalism Scale scores, Cultural Involvement scores, and selected variables of the Rorschach records. Table I presents a summary of the means and standard deviations of the above-mentioned variables and Table II summarizes the significant 2 x 2 analyses. The main effects for ethnic group and sex were significant for the variable Biculturalism Scale scores, $F(1,56) = 255.96$, $p=.0001$; $F(1,56) = 12.93$, $p=.0007$, respectively. Hispanic Americans had higher Biculturalism Scale scores than Anglo Americans and women had higher Biculturalism Scale scores than men. Also, there was a significant interaction effect between ethnic group and sex, $F(1,56) = 8.40$, $p=.0053$. Sex differences were much greater for Hispanics than Anglos with Hispanic women having much higher Biculturalism Scale scores than Hispanic men. The main effect for ethnic group was significant for the variable Cultural Involvement scores, $F(1,56) = 106.71$, $p=.0001$, with Hispanics having higher Cultural Involvement scores than Anglos.

TABLE I

MEANS AND STANDARD DEVIATIONS FOR BICULUTURALISM SCALE SCORES, CULTURAL INVOLVEMENT SCORES, AND SELECTED RORSCHACH VARIABLES

VARIABLE	ANGLO GROUP $\bar{X}$ (S.D.)	HISPANIC GROUP $\bar{X}$ (S.D.)
Biculturalism Scale	-78.90 (9.73)	-0.90 (29.26)
Cultural Involvement	125.67 (2.12)	146.83 (10.93)
Rorschach Variables		
Response Total (R)	26.53 (9.22)	26.43 (9.79)
Location		
Whole (W)	7.80 (4.46)	7.80 (5.96)
Common Detail (D)	13.97 (6.17)	14.37 (8.31)
Unusual Detail (Dd)	3.80 (3.27)	3.00 (3.27)
Space Response (S)	1.30 (1.12)	1.27 (0.98)
Determinants		
Human Movement (M)	3.97 (3.61)	3.40 (2.71)
Animal Movement (FM)	3.53 (2.25)	4.97 (2.79)
Inanimate Movement (m)	1.57 (1.43)	1.83 (1.34)
Form - Color (FC)	2.17 (2.10)	2.27 (1.86)
Color - Form + Pure Color (CF+C)	2.37 (2.11)	2.70 (1.97)
Form (F)	11.20 (6.08)	7.70 (4.24)
Ratios and Deviations		
F+%	73.33 (21.07)	71.70 (21.23)
X+%	74.40 (15.48)	81.70 (9.09)
3r+(2)/R	0.37 (0.17)	0.44 (0.18)
EA	7.52 (4.27)	7.27 (3.86)
ep	10.40 (5.89)	15.37 (6.22)

TABLE I (Continued)

VARIABLE	ANGLO GROUP $\bar{X}$ (S.D.)	HISPANIC GROUP $\bar{X}$ (S.D.)
Content		
H+Hd	4.93 (4.65)	4.20 (3.13)
A+Ad	10.43 (3.36)	11.47 (4.35)
H+A	12.00 (4.10)	12.07 (3.82)
Hd+Ad	3.53 (3.27)	3.63 (3.80)
P	5.33 (2.20)	5.50 (1.81)

TABLE II

2x2 ANALYSES OF VARIANCE FOR
SIGNIFICANT VARIABLES

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
Biculturalism Score				
Group	98867.53	3	32955.84	92.43***
Ethnic group	91260.00	1		255.96***
Sex	4611.27	1		12.93***
E*S	2996.27	1		8.40**
Residual	19965.87	56	356.53	
Cultural Involvement				
Group	6790.58	3	2263.53	35.94***
Ethnic group	6720.42	1		106.71***
Sex	58.02	1		0.92
E*S	12.15	1		0.19
Residual	3526.67	56	62.98	
Common Detail (D)				
Group	749.93	3	249.98	5.93**
Ethnic group	2.40	1		0.06
Sex	448.27	1		10.63**
E*S	299.27	1		7.09**
Residual	2362.40	56	42.19	
Unusual Detail (Dd)				
Group	78.13	3	26.04	2.64
Ethnic group	9.60	1		0.97
Sex	0.27	1		0.03
E*S	68.27	1		6.92*
Residual	552.27	56	9.86	

*$p < .05$
**$p < .01$
***$p < .001$

TABLE II (Continued)

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
Space Response (S)				
Group	4.85	3	1.62	1.53
Ethnic group	0.02	1		0.02
Sex	0.02	1		0.02
E*S	4.8	1		4.55*
Residual	59.33	56	1.06	
Human Movement (M)				
Group	52.05	3	17.35	1.79
Ethnic group	4.82	1		0.50
Sex	0.42	1		0.04
E*S	46.82	1		4.83*
Residual	542.93	56	9.69	
Animal Movement (FM)				
Group	57.38	3	19.13	3.08*
Ethnic group	30.82	1		4.96*
Sex	22.82	1		3.67
E*S	3.75	1		0.60
Residual	347.87	56	6.21	
X+%				
Group	1242.98	3	414.33	2.60
Ethnic group	799.35	1		5.02*
Sex	442.82	1		2.78
E*S	0.82	1		0.01
Residual	8909.87	56	159.10	

*p < .05
**p < .01
***p < .001

TABLE II (Continued)

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
3r+(2)/R				
Group	0.52	3	0.17	7.53***
Ethnic group	0.07	1		3.08
Sex	0.05	1		2.31
E*S	0.39	1		17.21***
Residual	1.29	56	0.02	
ep				
Group	489.65	3	163.22	4.56**
Ethnic group	370.02	1		10.33**
Sex	114.82	1		3.20
E*S	4.82	1		0.13
Residual	2006.53	56	35.83	
H+Hd				
Group	77.67	3	25.89	1.72
Ethnic group	8.07	1		0.54
Sex	9.60	1		0.64
E*S	60.00	1		3.99*
Residual	841.07	56	15.02	
A+Ad				
Group	145.78	3	48.59	3.64*
Ethnic group	16.02	1		1.20
Sex	109.35	1		8.20**
E*S	20.42	1		1.53
Residual	747.07	56	13.34	

*$p < .05$
**$p < .01$
***$p < .001$

TABLE II (Continued)

SOURCE	SUM OF SQUARES	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
Hd+Ad				
Group	158.85	3	52.95	5.20**
Ethnic group	0.15	1		0.01
Sex	79.35	1		7.80**
E*S	79.35	1		7.80**
Residual	569.73	56	10.17	
F				
Group	294.45	3	98.15	3.71*
Ethnic group	183.75	1		6.95*
Sex	1.35	1		0.05
E*S	109.35	1		4.14*
Residual	1480.40	56	26.44	

*$p < .05$
**$p < .01$
***$p < .001$

The main effect for sex and the interaction effect for ethnic group and sex were significant for the variable common detail (D), $F(1,56) = 10.63$, $p=.0019$; $F(1,56) = 7.08$, $p=.0101$, respectively. Men had more common detail (D) responses than women and sex differences were much greater for Hispanics with Hispanic men having many more common detail (D) responses than Hispanic women. For the variable uncommon detail (Dd), there was a significant reversal interaction effect, $F(1,56) = 6.92$, $p=.0110$, with women having more uncommon detail (Dd) responses than men in the Anglo group but men having more uncommon detail (Dd) responses than women in the Hispanic group. There was also a significant reversal interaction effect for the variable white space response (S), $F(1,56) = 4.55$, $p=.0374$, with men producing more white space responses than women in the Anglo group but women producing more white space responses than men in the Hispanic group. Another significant reversal interaction effect was found for the variable human movement response (M), $F(1,56) = 4.83$, $p=.0321$. Males had fewer human movement reponses than females in the Anglo group but females had fewer human movement reponses than males in the Hispanic group. The main effect for ethnic group was significant for the variable animal movement (FM), $F(1,56) = 4.96$, $p=.0300$, indicating that Anglos had less animal movement responses than did Hispanics. The main effect for ethnic group was significant for the variable overall form level (X+%), $F(1,56) = 5.02$, $p=.0290$, suggesting that Hispanics had higher overall form level than did Anglos. For the variable Egocentricity Index (3r+(2)/R), there was a significant reversal interaction effect, $F(1,56) = 17.21$, $p=.0001$, with men having a lower Egocentricity Index than women in the Anglo group but women having a lower Egocentricity

Index than men in the Hispanic group. The main effect for ethnic group was significant for the variable experience potential (ep), $F(1,56) = 10.33$, $p=.0022$, with Anglos having lower ep ratios than did Hispanics. For the variable human content (H+Hd), there was a signficiant reversal interaction effect, $F(1,56) = 3.99$, $p=.0498$, indicating that women had more human content responses than men in the Anglo group but men had more human content responses than women in the Hispanic group. The main effect for sex was significant for the variable animal content (A+Ad), $F(1,56) = 8.20$, $p=.0059$, suggesting that females had less animal content responses than did males. The main effect for sex and interaction effect were significant for the variable human detail plus animal detail (Hd+Ad), $F(1,56) = 7.80$, $p=.0071$; $F(1,56) = 7.80$, $p=.0071$, respectively. Although there was no significant sex difference in the Anglo group, the large sex difference in the Hispanic group, with Hispanic women having less human detail plus animal detail responses than Hispanic men, accounted for both the significant main effect and significant interaction effect. For the variable pure form response (F), there was a significant main effect for ethnic group and a significant reversal interaction effect, $F(1,56) = 6.95$, $p=.0108$; $F(1,56) = 4.14$, $p=.0467$, respectively. Hispanics had less pure form responses than Anglos and women had less pure form responses than men in the Hispanic group while men had less pure form responses than women in the Anglo group. In the comparison of the Anglo and Hispanic groups, the main effects and interaction effects were nonsignificant for the variables number of responses (R), whole responses (W), inanimate movement responses (m), form-color responses (FC), color-form plus pure color responses (CF+C),

pure form responses with good form level (F+%), EA ratio, whole human plus whole animal responses (H+A), and number of popular responses (P).

Sex Differences in Hispanics

To assess sex differences within the Hispanic group, t-tests were utilized for Biculturalism Scale scores, Cultural Involvement scores, and selected variables of the Rorschach. Table III presents a summary of the means, standard deviations, and t-tests of the above-mentioned variables for Hispanic males and females. Results for the Biculturalism Scale scores indicate that Hispanic women had significantly higher scores than Hispanic men, $t(28) = -3.49$, $p=.0016$. Hispanic women also produced significantly more whole responses (W) than Hispanic men, $t(28) = -2.07$, $p=.0480$. On the other hand, Hispanic men produced significantly more total responses (R) and significantly more common detail responses (D), $t(28) = 2.11$, $p=.0437$; $t(28) = 4.05$, $p=.0004$, respectively. Hispanic men also had significantly more pure form responses (F) and a significantly higher Egocentricity Index (3r+(2)/R) than did Hispanic women, $t(28) = 2.04$, $p=.0497$; $t(28) = 4.26$, $p=.0002$, respectively. With regard to content, Hispanic men produced significantly more human responses (H+Hd), $t(28) = 2.69$, $p=.0117$, more animal responses (A+Ad), $t(28) = 2.68$, $p=.0122$, and more human detail plus animal detail responses (Hd+Ad), $t(28) = 4.13$, $p=.0003$ than did Hispanic women.

TABLE III

HISPANIC MEANS, STANDARD DEVIATIONS, AND T-TESTS FOR BICULTURALISM SCALE SCORES, CULTURAL INVOLVEMENT SCORES, AND SELECTED RORSCHACH VARIABLES

VARIABLE	MALES $\bar{X}$ (S.D.)	FEMALES $\bar{X}$ (S.D.)	t
Biculturalism Scale	-16.73 (32.14)	14.93 (14.26)	-3.49**
Cultural Involvement	145.40 (12.74)	148.27 (8.99)	-0.71
Rorschach Variables			
Response Total (R)	30.00 (11.22)	22.87 (6.73)	2.11*
Location			
Whole (W)	5.67 (2.61)	9.93 (7.55)	-2.07*
Common Detail (D)	19.33 (8.69)	9.40 (3.83)	4.05***
Unusual Detail (Dd)	4.00 (3.87)	2.00 (2.24)	1.73
Space Response (S)	1.00 (0.85)	1.53 (1.06)	-1.52
Determinants			
Human Movement (M)	4.20 (3.41)	2.60 (1.50)	1.66
Animal Movement (FM)	5.33 (3.58)	4.60 (1.76)	0.71
Inanimate Movement (m)	1.93 (1.33)	1.73 (1.39)	0.40
Form-Color (FC)	2.60 (2.06)	1.93 (1.62)	0.98
Color-Form + Pure Color (CF+C)	2.67 (1.54)	2.73 (2.37)	-0.91
Form (F)	9.20 (5.05)	6.20 (2.62)	2.04*

*$p < .05$
**$p < .01$
***$p < .001$

TABLE III (Continued)

VARIABLE	MALES $\bar{X}$ (S.D.)	FEMALES $\bar{X}$ (S.D.)	t
Ratios and Deviations			
F+%	74.87 (14.55)	68.53 (26.46)	0.81
X+%	84.53 (8.31)	78.87 (9.23)	1.77
3r+(2)/R	0.55 (0.16)	0.32 (0.13)	4.26***
EA	8.27 (5.08)	6.27 (1.69)	1.45
ep	16.47 (7.01)	14.27 (5.32)	0.97
Content			
H+Hd	5.60 (3.56)	2.80 (1.86)	2.69*
A+Ad	13.40 (4.48)	9.53 (3.34)	2.68*
H+A	13.13 (4.21)	11.00 (3.18)	1.57
Hd+Ad	5.93 (3.81)	1.33 (2.02)	4.13***
P	6.00 (1.73)	5.00 (1.81)	1.55

*$p < .05$
**$p < .01$
***$p < .001$

Regression Analysis on Hispanics

Multiple regression techniques were utilized to determine the amount of variance in Rorschach variables that could be attributed to sex of subject, Biculturalism Scale scores, and Cultural Involvement scores with the Hispanic group. General linear models procedures were performed using SAS PROC GLM (Helwig & Council, 1979). First, it was determined how well the model as a whole, i.e., sex of subject, Biculturalism Scale scores, and Cultural Involvement scores, accounted for the variance in the criterion, or Rorschach, variable. Next, the amount of criterion variance attributable to each variable when added last in the model was determined. In other words, when all else was accounted for, the amount of criterion variance that could be attributed to each variable, or predictor, individually. The significance level for inclusion or removal of a variable, or predictor, was set at .05. Table IV summarizes the multiple regression analyses for significant variables for Hispanics.

For the criterion variable number of responses (R), the squared multiple correlation obtained was .4343, $F(3.26) = 6.65$, $p=.0018$, indicating that the model as a whole, sex of subject, Biculturalism Scale scores, and Cultural Involvement scores, accounted for approximately 43% of the criterion variance. Although the model as a whole could not significantly predict the criterion variable whole responses (W), when added last to the model, sex of subject accounted for approximately 16% of the criterion variance, $R^2 = .1572$, $F(1,26) = 4.88$, $p=.0362$.

TABLE IV

MULTIPLE REGRESSION ANALYSES FOR SIGNIFICANT VARIABLES FOR HISPANICS

SOURCE	SUM OF SQUARES	MEAN SQUARE	TYPE VI SUM OF SQUARES	DEGREES OF FREEDOM	F RATIO	R^2
Response Total (R)						
Model	1206.16	402.05		3	6.65**	.4343
Sex			35.92	1	0.59	
BS			149.94	1	2.48	
CI			210.37	1	3.48	
Residual	1571.21	60.43		26		
Whole Response (W)						
Model	167.43	55.81		3	1.68	
Sex			162.03	1	4.88*	.1572
BS			29.39	1	0.89	
CI			4.20	1	0.13	
Residual	863.37	33.21		26		
Common Detail (D)						
Model	1118.48	372.83		3	10.93***	.5578
Sex			311.57	1	9.14**	
BS			16.81	1	0.49	
CI			178.77	1	5.24*	.0892
Residual	886.49	34.09		26		
Human Movement (M)						
Model	88.86	29.62		3	6.19**	.4168
Sex			0.01	1	0.00	
BS			24.38	1	5.10*	.1144
CI			7.61	1	1.59	
Residual	124.34	4.78		26		

*$p < .05$
**$p < .01$
***$p < .001$

TABLE VI (Continued)

SOURCE	SUM OF SQUARES	MEAN SQUARE	TYPE VI SUM OF SQUARES	DEGREES OF FREEDOM	F RATIO	R^2
Inanimate Movement (m)						
Model	21.19	7.06		3	5.93**	.4063
Sex			4.85	1	4.07	
BS			20.82	1	17.48***	.3992
CI			5.57	1	4.67*	.1067
Residual	30.97	1.19		26		
Form-Color (FC)						
Model	56.43	18.81		3	11.26***	.5650
Sex			2.95	1	1.76	
BS			20.07	1	12.01**	.2009
CI			4.88	1	2.92	
Residual	43.44	1.67		26		
X+%						
Model	456.05	152.02		3	2.03	
Sex			444.01	1	5.94*	.1849
BS			191.80	1	2.56	
CI			14.72	1	0.20	
Residual	1944.25	74.78		26		
3r+(2)/R						
Model	0.37	0.12		3	5.67**	.3954
Sex			0.24	1	10.92**	.2540
BS			0.01	1	0.01	
CI			0.01	1	0.09	
Residual	0.57	0.02		26		

*p $<$ .05
**p $<$ .01
***p $<$ .001

TABLE VI (Continued)

SOURCE	SUM OF SQUARES	MEAN SQUARE	TYPE VI SUM OF SQUARES	DEGREES OF FREEDOM	F RATIO	R^2
EA						
Model	190.73	63.58		3	6.85**	.4416
Sex			1.19	1	0.13	
BS			59.98	1	6.47*	.1389
CI			15.23	1	1.64	
Residual	241.14	9.27		26		
ep						
Model	486.17	162.06		3	6.64**	.4337
Sex			37.46	1	1.53	
BS			278.93	1	11.42**	.2488
CI			1.81	1	0.07	
Residual	634.80	24.42		26		
H+Hd						
Model	93.93	31.31		3	4.26*	.3298
Sex			24.56	1	3.35	
BS			1.21	1	0.17	
CI			17.48	1	2.38	
Residual	190.87	7.34		26		
A+Ad						
Model	168.80	56.27		3	3.84*	.3072
Sex			51.14	1	3.49	
BS			1.21	1	0.08	
CI			30.49	1	2.08	
Residual	380.66	14.64		26		

*$p < .05$
**$p < .01$
***$p < .001$

TABLE VI (Continued)

SOURCE	SUM OF SQUARES	MEAN SQUARE	TYPE VI SUM OF SQUARES	DEGREES OF FREEDOM	F RATIO	R^2
Hd+Ad						
Model	194.23	64.74		3	7.49***	.4636
Sex			105.35	1	12.19**	.2515
BS			1.39	1	0.16	
CI			30.11	1	3.48	
Residual	224.73	8.64		26		
F						
Model	179.04	59.68		3	4.55**	.3441
Sex			86.59	1	6.60*	.1664
BS			38.69	1	2.95	
CI			111.44	1	8.49**	.2142
Residual	83.69	3.22		26		

*$p < .05$
**$p < .01$
***$p < .001$

For the criterion variable common detail responses (D), the squared multiple correlation obtained was .5578, $F(3,26) = 10.93$, $p=.0001$, indicating that the model as a whole accounted for approximately 56% of the criterion variance. When added last to the model, sex of subject accounted for approximately 16% of the criterion (D) variance, $R^2 = .1553$, $F(1,26) = 9.14$, $p=.0056$, and Cultural Involvement scores accounted for approximately 9% of the criterion (D) variance, $R^2 = .0892$, $F(1,26) = 5.24$, $p=.0304$. The squared multiple correlation obtained for the criterion variable human movement (M) was .4168, $F(3,26) = 6.19$, $p=.0026$, suggesting that the model as a whole accounted for approximately 42% of the criterion variance. When added last to the model, Biculturalism Scale scores accounted for approximately 11% of the criterion (M) variance, $R^2 = .1144$, $F(1,26) = 5.10$, $p=.0326$. For the criterion variable inanimate movement (m), the squared multiple correlation obtained was .4063, $F(3,26) = 5.93$, $p=.0032$, indicating that the model as a whole accounted for approximatley 41% of the criterion variance. When added last to the model, Biculturalism Scale scores accounted for approximately 40% of the criterion (m) variance, $R^2 = .3992$, $F(1,26) = 17.48$, $p=.0003$, and Cultural Involvement scores accounted for approximately 10% of the criterion (m) variance, $R^2 = .1047$, $F(1,26) = 4.67$, $p=.0400$. The criterion variable form-color (FC) had a squared multiple correlation of .5650, $F(3,26) = 11.26$, $p=.0001$, suggesting that sex of subject, Biculturalism Scale scores, and Cultural Involvement scores combined accounted for approximately 56% of the criterion variance. When all else was accounted for, Biculturalism Scale scores accounted for approximately 20% of the criterion (FC) variance, $R^2 = .2009$, $F(1,26) = 12.01$, $p=.0019$. Although the model as a

whole could not significantly account for variance in the criterion variable overall form level (X+%), when added last to the model, sex of subject made up for approximately 18% of the criterion variance, R^2 = .1849, $F(1,26) = 5.94$, $p=.0220$. For the criterion variable Egocentricity Index (3r+(2)/R), the squared multiple correlation obtained was .3954, $F(3,26) = 5.67$, $p=.0040$, indicating that the model as a whole accounted for approximately 40% of the criterion variance. When added last to the model, sex of subject accounted for approximately 25% of the criterion (3r+(2)/R) variance, R^2 = .2540, $F(1,26) = 10.92$, $p=.0028$. The squared multiple correlation obtained for the criterion variable experience actual (EA) ratio was .4416, $F(3,26) = 6.85$, $p=.0015$, suggesting that the model as a whole accounted for approximately 44% of the criterion variance. When added last to the model, Biculturalism Scale scores accounted for approximately 14% of the criterion (EA) variance, R^2 = .1389, $F(1,26) = 6.47$, $p=.0173$. For the criterion variable experience potential (ep), the squared multiple correlation obtained was .4337, $F(3.26) = 6.64$, $p=.0018$, indicating that the model as a whole accounted for approximately 43% of the criterion variance. When the other variables were accounted for, Biculturalism Scale scores accounted for approximately 25% of the criterion (ep) variance, R^2 = .2488, $F(1,26)$ = 11.42, $p=.0023$. The criterion variable human content (H+Hd) had a squared multiple correlation of .3298, $F(3,26) = 4.26$, $p=.0141$, suggesting that the model as a whole accounted for approximately 33% of the criterion variance. For the criterion variable animal content (A+Ad), the squared multiple correlation obtained was .3072, $F(3,26) = 3.84$, $p=.0211$, showing that the model as a whole accounted for roughly 31% of the criterion variance. The squared multiple correlation gotten for criterion

variable human detail plus animal detail (Hd+Ad) was .4636, $F(3,26) = 7.49$, $p=.0009$, suggesting that the model as a whole accounted for approximately 46% of the criterion variance. When added last to the model, sex of subject accounted for approximately 25% of the criterion (Hd+Ad) variance, $R^2 = .2515$, $F(1,26) = 12.19$, $p=.0017$. The criterion variable pure form responses (F) had a squared multiple correlation of .3441, $F(3,26) = 4.55$, $p=.0100$, suggesting that sex of subject, Biculturalism Scale scores, and Cultural Involvement scores combined accounted for approximately 34% of the criterion variance. When added last to the model, sex of subject accounted for approximately 17% of the criterion (F) variance, $R^2 = .1664$, $F(1,26) = 6.60$, $p=.0163$, and Cultural Involvement scores accounted for approximately 21% of the criterion (F) variance, $R^2 = .2142$, $F(1,26) = 8.49$, $p=.0073$.

Zero-order Correlations

Finally, zero-order correlations were utilized to determine the linear relationships between selected Rorschach variables and Biculturalism Scale scores plus Cultural Involvement scores within the Hispanic group. Table V presents the zero-order correlations for the Hispanic group. All significant correlations between selected Rorschach variables and Biculturalism Scale scores were in the negative direction. As Biculturalism Scale scores increased, the number of responses (R) decreased, $r(30) = -0.60$, $p=.0005$. In examining location used, as Biculturalism Scale scores increased, the use of common detail (D) decreased, $r(30) = -0.60$, $p=.0005$, as did the use of unusual detail (Dd), $r(30) = -0.37$, $p=.0447$. In examining determinants used, as Biculturalism Scale scores increased, human movement (M) responses

decreased, $r(30) = -0.62$, $p=.0003$, animal movement responses (FM) decreased, $r(30) = -0.45$, $p=.0135$, inanimate movement responses (m) decreased, $r(30) = -0.49$, $p=.0055$, and the use of form-color responses (FC) decreased, $r(30) = -0.68$, $p=.0001$. EA and ep ratios both decreased as Biculturalism Scale scores increased, $r(30) = -0.63$, $p=.0002$; $r(30) = -0.63$, $p=.0002$, respectively. In looking at content of responses, as Biculturalism Scale scores increased, human content responses (H+Hd) decreased, $r(30) = -0.46$, $p=.0109$, animal content responses (A+Ad) decreased, $r(30) = -0.43$, $p=.0175$, whole human plus whole animal responses (H+A) decreased, $r(30) = -0.43$, $p=.0165$, and human detail plus animal detail responses (Hd+Ad) decreased, $r(30) = -0.43$, $p=.0166$. All significant correlations between selected Rorschach variables and Cultural Involvement scores were also in the negative direction. As Cultural Involvement scores increased, the number of responses (R) decreased, $r(30) = -0.54$, $p=.0022$. By way of location used, as Cultural Involvement scores increased, the use of common detail (D) decreased, $r(30) = -0.50$, $p=.0047$. In examining determinants used, as Cultural Involvement scores increased, human movement (M) responses decreased, $r(30) = -0.50$, $p=.0052$, animal movement responses (FM) decreased, $r(30) = -0.42$, $p=.0222$, the use of form-color (FC) decreased, $r(30) = -0.59$, $p=.0005$, and the use of pure form (F) decreased $r(30) = -0.42$, $p=.0212$. EA and ep ratios both decreased as Cultural Involvement scores increased, $r(30) = -0.51$, $p=.0037$; $r(30) = -0.41$, $p=.0240$, respectively. In examining content of responses, as Cultural Involvement scores increased, human content responses (H+Hd) decreased, $r(30) = -0.40$, $p=.0274$, animal content responses

(A+Ad) decreased, $r(30) = -0.37$, $p=.0411$, whole human plus whole animal responses (H+A) decreased, $r(30) = -0.38$, $p=.0388$, and human detail plus animal detail responses (Hd+Ad) decreased, $r(30) = -0.36$, $p=.0473$.

TABLE V

ZERO-ORDER CORRELATIONS BETWEEN SELECTED RORSCHACH VARIABLES AND BICULTURALISM SCALE SCORES PLUS CULTURAL INVOLVEMENT SCORES FOR HISPANICS

VARIABLE	BICULTURALISM SCALE SCORE	CULTURAL INVOLVEMENT SCORE
Response Total (R)	-.60***	-.54**
Whole (W)	.07	.01
Common Detail (D)	-.60***	-.50**
Unusual Detail (Dd)	-.37*	-.34
Space Response (S)	-.05	-.05
Human Movement (M)	-.62***	-.50**
Animal Movement (FM)	-.45*	-.42*
Inanimate Movement (m)	-.49**	-.05
Form-Color (FC)	-.68***	-.59***
Color-Form + Pure Color (CF+C)	-.06	-.04
Form (F)	-.19	-.42*
F+%	.12	.08
X+%	.07	.06
3r+(2)/R	-.34	-.04
EA	-.63***	-.51**
ep	-.63***	-.41*
H+Hd	-.46*	-.40*
A+Ad	-.43*	-.37*
H+A	-.43*	-.38*

*p $<$ .05
**p $<$ .01
***p $<$ .001

TABLE V (Continued)

VARIABLE	BICULTURALISM SCALE SCORE	CULTURAL INVOLVEMENT SCORE
Hd+Ad	-.43*	-.36*
P	-.25	-.25

*$p < .05$
**$p < .01$
***$p < .001$

CHAPTER V

DISCUSSION

Bicultural Involvement Questionnaire

The results of this study provided evidence that the Bicultural Involvement Questionnaire developed by Szapocznik et al. (1980) is a reliable and valid instrument in discriminating Hispanic Americans from Anglo Americans. This study also demonstrates that the questionnaire is suitable for Hispanic populations that differ widely from that of the original sample in terms of age and geographical location, thus increasing its utility. The multiple regression analysis revealed that approximately 78% of the variance in ethnicity could be accounted for by Biculturalism Scale scores and Cultural Involvement scores. The mean Biculturalism Scale score for the Anglo American group was strongly monocultural in the American direction whereas the Biculturalism Scale score mean for the Hispanic American group was, to a large degree, bicultural. The mean Cultural Involvement score for both groups was quite high indicating that both groups evidenced a high degree of involvement in their respective cultures. Perhaps, since the Bicultural Involvement Questionnaire required that the subject read English, a strongly bicultural Hispanic sample was drawn. Even so, the Hispanic American group was, on the average, greatly culturally involved.

Within the Hispanic group, women had significantly higher Biculturalism Scale scores than men but their Cultural Involvement scores, both men's and women's scores being relatively high, did not differ significantly. Biculturalism Scale scores for Hispanic men were bicultural but slightly on the American side, whereas Hispanic women's Biculturalism Scale scores were also bicultural, but slightly on the Hispanic side. Thus, for this Hispanic sample, the women were slightly more "Hispanic" than their male counterparts as measured by this instrument. Biculturalism Scale scores and Cultural Involvement scores did not have a signficant multiple correlation with age or education within the Hispanic group. However, Cultural Involvement scores did have a significant linear relationship with level of education suggesting that as Hispanics increase their level of education, their cultural involvement decreases. Also, the older Hispanic subjects tended to have a higher level of education which may be partly attributable to the restricted range of the sample and the need to match Anglo and Hispanic subjects according to education level. Biculturalism Scale scores had a significant positive correlation with Cultural Involvement scores which is not surprising since positive Biculturalism Scale scores indicate monoculturalism in the Hispanic direction which would most likely be concomitant with greater involvement in the Hispanic culture. These results provide evidence indicating that there are behavioral differences between men and women in the Hispanic American population and that this population is not a homogeneous cultural group that can be described in terms of a single category variable. The results also suggest that as the Hispanic American acculturates to the mainstream society, he/she does not

always reject the culture of origin. Thus, for individuals who live in bicultural settings, an acceptance of both cultures as well as skills to live among and interact with both cultures may enhance her/his life.

Rorschach

The study demonstrated that there are differences in some personality indices, as measured by the Rorschach, between Anglo Americans and Hispanic Americans. Also, the study showed that for Hispanic Americans there were not only some male-female differences, but the degree of acculturation/biculturation did make a difference in some aspects of personality structure as measured by the Rorschach.

Response Total

The study was unable to demonstrate a relationship between ethnic group and total number of responses produced on the Rorschach. This finding does not agree with that of Kaplan et al. (1956) in which they found Mexican Americans to produce relatively few responses which they attributed to a "lack of involvement and motivation" and to the Mexican American subjects as appearing "not to be more than superficially involved" in the task. In fact, the present study found Hispanics to produce a relatively high number of responses. Therefore, one cannot infer that Hispanics, as a culture, demonstrate a lack of motivation or involvement in such tasks. Although the overall average number of responses was in the "normal range" as defined by Exner (1974), they fell toward the upper end of the range. This might be explained by the fact that the sample used for the study was well-educated and it has

been shown that well-educated subjects tend to produce a relatively high number of responses (Exner, 1978).

Within the Hispanic group, men did produce a higher average response total than women. Since education did not relate to sex of subject, this difference could not be explained by differences in education. Perhaps Hispanic men felt more at ease during the testing session than did Hispanic women, but this is purely speculative. A relationship was found between response total and both Biculturalism Scale scores and Cultural Involvement scores. As response total increased, both Biculturalism Scale scores and Cultural Involvement scores decreased. Thus, the more bicultural and less culturally involved Hispanics tended to produced more responses on the Rorschach. One might speculate that the more bicultural and less culturally involved Hispanic subjects were more familiar, and therefore, more comfortable with this type of examination procedure.

Location

The locations used in responding to the Rorschach tend to reveal the manner in which a person approaches her/his world, and particularly, the ambiguities of it. They do not reveal why this approach is used, but simply indicate the manner of approach that has been employed. The use of whole responses (W), common detail responses (D), unusual detail responses (Dd), and white space responses (S), was investigated in the present study.

The study was unable to demonstrate a relationship between ethnic group and number of whole responses. However, Hispanic men produced significantly less whole responses than Hispanic women. Rorschach (1921)

postulated that number of whole responses has a direct relationship to intellectual operations and to the ability to organize the components of one's environment into a meaningful whole. Thus, the results show some indication of the differences in psychological willingness of Hispanics to approach more complex stimuli in a global manner, with Hispanic men demonstrating less psychological willingness than Hispanic women.

The study demonstrated relationships among ethnic group, sex of subject, and common detail responses. Not only did men produce more common detail responses than women, but the sex differences were much greater for Hispanics with Hispanic men having many more common detail responses, almost twice the amount, than Hispanic women. Within the Hispanic group, a relationship was found between number of common detail responses and both Biculturalism Scale scores and Cultural Involvement scores. As number of common detail responses increased, Biculturalism Scale scores and Cultural Involvement scores decreased. Rorschach (1921) hypothesized that the common detail response represents the ability to perceive and react to the "obvious" characteristics of the environment. Exner (1974) goes further in stating that common detail responses appear easier to give than either whole or uncommon detail responses and represent a psychological conservativism or efficiency. Thus, it would appear that Hispanic men, and men in general, tend to respond to the "obvious" characteristics of a situation much more than do women. Viewed another way, it could be said that men, and especially Hispanic men, tend to "take the easy way out" of a perceptual situation. The results concerning the relationship between common detail responses and both Biculturalism Scale scores and Cultural Involvement scores do

not seem to mesh with previous research. Results of the Abel and Calabresi study (1951) suggest that more traditional Hispanics, in this case Mexican villagers, tend to give a high number of concrete, or common detail, responses. The present study found that the more bicultural and the less culturally involved Hispanics tended to produce more common detail responses. Perhaps the high number of common detail responses is a corollary of the overall high number of responses.

The results of the study revealed that women had more uncommon detail responses than men in the Anglo group but men had more uncommon detail responses than women in the Hispanic group. Also, for Hispanics, as number of uncommon detail responses increased, Biculturalism Scale scores decreased. Generally, the uncommon detail response might best be interpreted as a form of respite from the ambiguities of the larger or more common blot areas (Exner, 1974). Thus, Anglo women, Hispanic men, and bicultural Hispanics may demonstrate greater initiative and capacity to withdraw through the use of uncommon detail than their counterparts.

Men produced significantly more white space responses than women in the Anglo group but women produced significantly more white space responses than men in the Hispanic group. Rorschach postulated that the use of white space represents some form of oppositional or negative tendency. Both Beck (1945) and Rapaport (1946) tend to endorse this postulate. Piotrowski (1957) and Klopfer (1954) tend to view the use of white space as representing a strive for independence or a constructive self-assertiveness if it does not occur disproportionately in the record. Thus, it seems appropriate to state that Anglo men and Hispanic women tend to be more oppositional or independent, which may

be considered healthy, than their counterparts. One might speculate that the proportionate use of white space may be one index of ego strength.

Determinants

While location scores illustrate some features of the perceptual-cognitive activity, the determinants specify that activity more precisely, and render a greater appreciation for the idiography of the subject (Exner, 1974). The determinants reflect the psychological action which has occurred during the formation of the response. The use of the determinants human movement (M), animal movement (FM), inanimate movement (m), pure form (F), form-color (FC), and color-form plus pure color (CF+C) was investigated in the present study. Women produced more human movement responses (M) than men in the Anglo group but men produced more human movement responses in the Hispanic group. Also for Hispanics, as number of human movement responses increased, both Biculturalism Scale scores and Cultural Involvement scores decreased. Rorschach (1921) postulated that the human movement response represents an internalization phenomenon. He implies that M somehow manifests the more deliberate inner experience in a manner which is also affectively adaptive. Beck (1945) identifies M as reflecting emotions which are in some way concealed from an overt display. Klopfer (1954) and Hertz (1951) have both suggested that M should be interpreted as a psychological process in which a functional relationship exists between the fantasy life of the individual and her/his external orientations to reality and object relations. Thus Rorschach, Beck, Klopfer, and Hertz all tend to agree that M does represent some form of internalization.

In this light, it would appear that Anglo women and Hispanic men have a greater tendency to internalize and utilize fantasy than their counterparts. The results concerning the relationship between human movement responses and both Biculturalism Scale scores and Cultural Involvement scores concur with the results of the Kaplan study (1955). The more "acculturated" Hispanics tend to produce more M responses than "nonacculturated" Hispanics suggesting that the "acculturated" Hispanics may internalize and use fantasy more than her/his "nonacculturated" counterpart.

The study demonstrated a relationship between ethnic group and animal movement responses (FM) with Hispanics producing more animal movement responses than Anglos. There was also a relationship between animal movement responses and both Biculturalism Scale scores and Cultural Involvement scores in the Hispanic group. As number of animal movement responses increased, Biculturalism Scale scores and Cultural Involvement scores decreased. Although Rorschach did not include animal movement in his scoring system, Klopfer (1954), Hertz (1951), Piotrowski (1957), and Exner (1974) all felt that since it represented a discrete kind of response, different than either pure form or human movement, it should be included. The basic interpretation of FM offered by the four systematizers using it is that it represents a more "primitive" operation than is reflected in the human movement response. It is purported to manifest a sense of urgency, in which the subject becomes psychologically aware of impulses striving for a more immediate gratification (Exner, 1974). Thus, a proponderence of FM responses may represent the individual who is more accustomed to being "ruled" by needs for immediate gain than by longer term goals. It

appears that the results concerning animal movement suggest that Hispanics may be motivated more by immediate gratification needs rather than by longer term goals as compared to their Anglo counterparts. However, Haan (1964) reports that FM responses seem to be related to defensiveness, which would suggest that Hispanics may be more defensive than Anglos. Also, this would imply that bicultural and less culturally involved Hispanics may tend toward defensiveness. Clearly, more research is needed focusing on animal movement in the Rorschach.

No relationship was found between ethnic group and inanimate movement (m) responses. However, in the Hispanic group, there was a relationship between inanimate movement responses and sex of subject, Biculturalism Scale scores, and Cultural Involvement scores. Together, sex of subject, Biculturalism Scale scores, and Cultural Involvement scores, accounted for approximately 41% of the variance in m. When all else was accounted for, Biculturalism Scale scores could account for approximately 40% of the variance in m, with m decreasing as Biculturalism Scale scores increased. Cultural Involvement scores could account for approximately 10% of the remaining variance in m when all else was accounted for, with m increasing as Cultural Involvement scores increased. Klopfer, Hertz, and Piotrowski suggest that inanimate movement is most likely associated with the experience of frustration, especially with regard to interpersonal activities (Exner, 1974). Thus, bicultural Hispanics may experience more interpersonal frustration than their monocultural counterparts. On the other hand, it appears that the more culturally involved Hispanics also experience interpersonal frustration. It should be kept in mind, however, that the variance in m accounted for by Cultural Involvement scores is that variance over and above the

variance accounted for by Biculturalism Scale scores. Since Biculturalism Scale scores account for such a large part of the variance in m, the amount of variance accounted for by Cultural Involvement scores is actually quite small. Therefore, the results concerning Cultural Involvement scores and m could be misleading.

No relationship was found between ethnic group and the use of form-color (FC), color-form (CF), or pure color (C). There is a relationship between the use of form-color and both Biculturalism Scale scores and Cultural Involvement scores in the Hispanic group. As the use of form-color increased, Biculturalism Scale scores and Cultural Involvement scores decreased. Rorschach (1921) proposed that responses involving the chromatic colors of the blots relate directly to affect. He argues that color reponses represent an index of emotional excitability or lability, and thus the extent to which the use of color is avoided or controlled reflects the "degree of stabilization" of affective urges (Exner, 1974). In this context, the FC response illustrates the process of affective adaptability, whereas the CF responses manifest affectivity which has little or no capability for adaptiveness, and pure C responses are a produce of the impulsive, labile discharge with no regard for adaptiveness. As evidenced by the use of color, Hispanics are not significantly different from Anglos in the manner in which affectivity is manifested. This result does not concur with the results of previous research (Johnson & Sikes, 1965) which found Hispanics to use less color responses than Anglos. Thus, there is no evidence to support the notion, or myth, that Hispanics are emotionally excitable or "hot-blooded". The findings that increased use of form-color correlates with biculturalism and less cultural involvement agrees with previous research (Kaplan, 1955). One might speculate that

bicultural and less culturally involved Hispanics feel relatively comfortable in "letting their emotions show".

The study demonstrated a relationship between ethnic group and the use of pure form (F) with Hispanics producing fewer pure form responses than Anglos. Also, Hispanic women had significantly fewer pure form responses than Hispanic men and Cultural Involvement scores increased as the use of pure form decreased in the Hispanic group. The pure form response has generally been regarded as being formed under reasonably "affect-free" conditions or interference. This hypothesis is a derivative of Rorschach's (1921) suggestion that the use of pure form is a good index of the attention-concentration features of the subject's thinking operations. Most of the systematizers have generalized from Rorschach's original postulate to describe the pure form response as representing a form of affective delay or control (Exner, 1974). Thus, the results of the present study suggest that Anglos may tend toward more affective delay or control than Hispanics. However, this finding does not agree with the results of the Johnson and Sikes study (1965) in which Mexican American veterans produced more pure form responses than their Anglo counterparts. Perhaps the divergent findings can be attributed to the difference in samples utilized, i.e. male subjects only in the Johnson and Sikes study. The results of the present study further suggest that Hispanic men have a greater capacity for affective delay or control than Hispanic women and that as cultural involvement decreases for Hispanics, there is a greater tendency to delay or control affect. Perhaps Hispanic men and less culturally involved Hispanics feel a need to control their affect. However, these findings do not seem to agree with the results concerning color usage which suggest that

more culturally involved Hispanics may feel a need to control their affect. Clearly, further research is needed focusing on modulation of affect in Hispanics.

Ratios and Derivatives

There have been many ratios and derivatives formulated using Rorschach determinants. By utilizing these ratios and derivatives, a further understanding of the person can be gleaned through the use of the Rorschach. The present study examined the following ratios and derivatives: pure form responses with good form level (F+%), overall form level (X+%), Egocentricity Index (3r+(2)/R), experience actual ratio (EA), and experience potential ratio (ep).

No relationship was found between ethnic group and the percentage of pure form responses with good form level (F+%). Furthermore, there were no sex differences in the Hispanic group nor was there a relationship between good form level responses and either Biculturalism Scale scores or Cultural Involvement scores. Rorschach (1921) postulated that the manner or quality in which form is used reflects the subject's ability to perceive things conventionally, or realistically. All of the systematizers have agreed with this proposition, and a substantial literature supports this notion (Exner, 1974). Thus, the findings of the present study suggest that Hispanics and Anglos do not differ in their ability to perceive conventionally or realistically nor does this ability consistently vary according to sex, degree of biculturalism, or extent of cultural involvement in Hispanics. The overall mean of the sample studied suggests that, in general, the subjects were not unduly

preoccupied with reality and that they were capable of "bending" reality in a healthy, adaptive manner.

The study demonstrated a significant relationship between ethnic group and overall form level (X+%) in that Hispanics had a higher overall form level than Anglos. Also in the Hispanic group, when all else was accounted for, sex of subject could account for approximately 18% of the variance in overall form level with Hispanic males having slightly higher overall form level than Hispanic females. The overall form level (X+%) is an extension of F+% in that it includes the form level of all responses and not just those responses in which pure form is used, as does F+%. Weiner (1966) states that this kind of index may be a more reliable representation of the reality testing of the subject in that it reflects a larger number of responses than does the F+%. Weiner also mentions that, for the brief record, or those containing few pure form responses, it may be the only useful data concerning perceptual accuracy. The general interpretive approach to the X+% should be essentially the same as that used with the F+% data, that is, as an index of reality testing (Exner, 1974). When X+% is low, less than the 70% level, consideration must be given to the limitations in perceptual accuracy or reality testing operations. When the X+% appears to be very high, say near 100%, one should consider the possibility of an undue preoccupation with reality that may cause the subject some sacrifice of his own uniqueness. Thus the results suggest that Hispanics may be more rigid or preoccupied with reality than are Anglos. Perhaps Hispanics, and especially Hispanic men, feel a need to stay close to reality or be rigid in their approach so that they can adequately deal with the stresses of life.

The study could not establish a clear relationship between ethnic group and Egocentricity Index (3r+(2)/R) nor could a relationship be found between Egocentricity Index and either Biculturalism Scale scores or Cultural Involvement scores. However, men had a lower Egocentricity Index than men in the Hispanic group. This ratio represents the proportion of reflection and pair responses in the total record. The Egocentricity Index is essentially related to "self-focusing" and, the issue of "self-esteem" is probably also manifested in it (Exner, 1978). This hypothesis is derived from the very large number of depressed subjects who give a low index, and from the relatively high frequency of low indices among suicide prone subjects (Exner, 1978). Therefore, the results of the present study suggest that Anglo women and Hispanic men may engage in more "self-focusing" or may have relatively higher "self-esteem" than their counterparts. If a lower Egocentricity Index relates to depression, then the results found for the Hispanic group support previous research (Stoker & Meadow, 1974) which found Hispanic women to exhibit a greater incidence of depression than Hispanic men.

No relationship was found between ethnic group and the experience actual ratio (EA) but for the Hispanic group, there was a relationship between EA and both Biculturalism Scale scores and Cultural Involvement scores. As the experience actual ratio increased, Biculturalism Scale scores and Cultural Involvement scores decreased. The experience actual (EA) represents the sum of the human movement responses (M) plus the sum of the weighted chromatic color responses, using weights of 0.5 for FC, 1.0 for CF, and 1.5 for pure C and Cn. Beck (1960) first described the experience actual (EA) and he postulated that this ratio could convey information concerning the breadth of the dynamically organized

affective experiences of the individual. It is important to emphasize that the sort of experience or activity expressed in the EA is organized, that is, available to the individual. The painful affects and the more unorganized needs, as represented in the responses to the grey-black features of the blots and in FM and m answers, are not "organized". On the contrary, they work on the individual rather than for him (Exner, 1978). The results of the present study would suggest that the more bicultural and less culturally involved Hispanics may be more aware of what motivates them in a given situation than highly culturally involved, monocultural Hispanics.

The study demonstrated a relationship between ethnic group and experience potential ratio (ep) with Hispanics having larger experience potential ratios than Anglos. Also, for Hispanics, as Biculturalism Scale scores and Cultural Involvement scores increased, experience potential ratios decreased. The experience potential ratio represents the summation of FM, m, and all of the responses including the grey-black features of the blots. These are response features illustrating needs and affects which act on the individual rather than being more controlled psychological activities (Exner, 1974). In other words, they represent actions which are not "organized" in the sense of human movement and color responses. Thus, the results of the present study suggest that Hispanics have more unorganized needs and affective experiences which act on the individual than do Anglos. This finding is somewhat in agreement with previous research (Billig et al., 1947, 1948) which found people from traditional Hispanic cultures to be "concerned with primitive, unacculturated drives". Findings concerning Biculturalism Scale scores and Cultural Involvement scores indicate that

higher ep ratios correlate with more biculturalism and less cultural involvement for Hispanics. It was mentioned previously that more biculturalism and less cultural involvement also correlated with higher EA ratios. Thus, it would seem that bicultural and less culturally involved Hispanics have more organized affective experiences and more unorganized needs and affects than do highly culturally involved monocultural Hispanics. These findings would intuitively seem discrepant but this may not be the case. Perhaps further research focusing on EA and ep ratios in Hispanics would shed more light on this issue.

Content

Content of Rorschach responses can provide important input into the understanding of an individual. The content scorings offer information about needs, interests, and social interactions, and, at times, give clues regarding various preoccupations. The present study examined human content (H+Hd), animal content (A+Ad), whole human plus whole animal responses (H+A), human detail plus animal detail responses (Hd+Ad) and number of popular responses (P). No relationship was found between any of these content variables and ethnic group which would suggest that Hispanics do not differ from Anglos in the major content classifications used in the Rorschach. Results concerning human detail plus animal detail responses and number of popular responses do not agree with previous research (Johnson & Sikes, 1965) which found Hispanics to have more Hd+Ad responses and less popular responses than Anglos. The fact that the Johnson and Sikes (1965) study used only males may account for the discrepant findings. However, the findings

concerning Hd+Ad make some sense when the sex differences are examined in the Hispanic group. Hispanic men had more human responses (H+Hd), animal responses (A+Ad), and human detail plus animal detail responses (Hd+Ad) than did Hispanic women. The differences in all three categories could be a function of the number of human detail and animal detail responses since one or both are included in all three categories. The differences could also be a function of the greater number of responses given by Hispanic men.

The study demonstrated a relationship between both Biculturalism Scale scores and Cultural Involvement scores and human content (H+Hd), animal content (A+Ad), whole human plus whole animal responses (H+A), and human detail plus animal detail responses (Hd+Ad) in the Hispanic group. More bicultural and less culturally involved Hispanics tended to have more H+Hd, A+Ad, H+A, and Hd+Ad responses than their monocultural, highly culturally involved counterparts. Draguns, Haley, and Phillips (1967) state that human content responses relate with the potential for social relations and that animal content responses relate to a relatively high number of human and animal detail responses may be indicative of an excessive concern for detail, which is possibly a critical or constrictive style. Thus, the results of the present study would suggest that, for Hispanics, biculturalism and less cultural involvement relates to the tendency to react in a routine, predictable manner, a capacity for social relations, and a critical attitude. However, the interrelatedness of the content classifications may have resulted in spurious findings. Also, it should be noted that biculturalism and less cultural involvement also correlated with greater number of Rorschach responses. Thus, if there were more responses, the

likelihood of increased numbers in all content categories would be greater. Therefore, the results concerning major content categories, Biculturalism Scale scores, and Cultural Involvement scores should be viewed with caution.

In summary, the results of this study demonstrated that the Szapocznik, Kurtines, and Fernandez Bicultural Involvement Questionnaire (1980) is suitable for differentiating Hispanic Americans from Anglo Americans. Evidence was also provided showing that the Hispanic American population is not a homogeneous cultural group that can be described in terms of a single category variable. Moreover, the findings suggest that as the Hispanic American acculturates to the mainstream society, she/he does not always reject the culture of origin. Although Cultural Involvement scores for the Hispanic Americans were quite high, their Biculturalism Scale scores indicated that the sample was very bicultural. Perhaps since the questionnaire was in English only and the Rorschach was administered in English, a truncated sample was drawn. It is suggested that for future research purposes, the questionnaire be made available in English or Spanish and that a bilingual examiner administer the Rorschach.

With regard to ethnic group differences, the study revealed that out of twenty-one Rorschach variables examined, there were clear differences in only four variables: animal movement responses (FM), Anglo Americans having less than Hispanic Americans; pure form responses (F), Anglo Americans having more than Hispanic Americans; overall form level (X+%), Anglo Americans having less than Hispanic Americans; and experience potential ratio (ep), Anglo Americans having less than Hispanic Americans. Although the differences in these four variables

are important to keep in mind when administering the Rorschach to Hispanic Americans, in general, the "normal" Hispanic American will not appreciably differ in the use of locations, determinants, and contents from the "normal" Anglo American. Perhaps if the Rorschach was administered by a bilingual examiner there might be more "exactness" in recording the response which could allow for finer discriminations. The reader should be cautioned that even though the Hispanic American does not differ from the Anglo American on a given Rorschach variable, the interpretation that corresponds to that variable may not be the same for the Hispanic American as for the Anglo American. It is true that the present study did utilize traditional interpretations concerning Rorschach variables. However, these interpretations have not all been empirically validated on Hispanic Americans and they were used for lack of anything else. Much further research is needed focusing on Rorshach variables and their interpretations for Hispanic Americans.

Within the Hispanic American group, there were sex differences on several of the variables examined. Although both men and women were bicultural, the women were bicultural in the Hispanic direction whereas the men were bicultural in the American direction. On all Rorschach variables except one, whole responses, in which there was a significant difference, Hispanic men had higher numbers than Hispanic women. Perhaps this was a function of the men producing a higher number of responses overall than the women. Or, since the men were more "American" in their biculturalism, maybe they felt more at ease during the Rorschach administration. Future research in which the number of responses is controlled for may help to resolve this issue.

The analysis of the data revealed several interactions between ethnic group and sex of subject that did not coincide with sex differences found within the Hispanic American group. This discrepancy can be attributed to the differences in sensitivity of the different statistical procedures and to the differences in sample size.

All significant correlations between selected Rorschach variables and both Biculturalism Scale scores and Cultural Involvement scores were in the negative direction in the Hispanic American group. In other words, as biculturalism increased and cultural involvement decreased, there were greater numbers of all significant Rorschach variables. However, it should be kept in mind that biculturalism and less cultural involvement were strongly related to greater number of responses. Thus, if there were more responses, the likelihood of increased numbers of all Rorschach variables would be greater. Again, future research in which the number of responses is controlled may help to clarify this issue.

This study has taken another step in better understanding the Hispanic American through his/her Rorschach record. It is hoped that the information concerning the effects of biculturalism and cultural involvement on certain personality variables can be used to further our understanding of Hispanic Americans. By providing "reference data" concerning the Rorschach, proper personality assessment may be enhanced for the Hispanic American population. Through the use of such "reference data" the clinician's ability to arrive at a proper diagnosis and to formulate an appropriate treatment plan will be greatly facilitated when he/she is confronted with an Hispanic American.

REFERENCES

Abel, T. M., & Calabresi, R. A. The people (Tepoztecans) from their Rorschach tests. In O. Lewis, Life in a Mexican village: Tepoztlan restudied. Urbana: University of Illinois Press, 1951.

Barnouw, V. Acculturation and personality among the Wisconsin Chippewa. American Anthropological Association Memoir, 1950, 72, 1-152.

Beck, S. J. Rorschach's test. II: A variety of personality pictures. New York: Grune and Stratton, 1945.

Beck, S. J. The Rorschach experiment: Ventures in blind diagnosis. New York: Grune and Stratton, 1960.

Billig, O., Gillin, J., & Davidson, W. Aspects of personality and culture in a Guatemalan community: Ethnological and Rorschach approaches. Part I. Journal of Personality, 1947, 16, 153-187.

Billig, O., Gillin, J., & Davidson, W. Aspects of personality and culture in a Guatemalan community: Ethnological and Rorschach approaches. Part II. Journal of Personality, 1948, 16, 326-368.

Carrillo-Beron, C. Traditional family ideology in relation to locus of control: A comparison of Chicano and Anglo women. San Francisco: R and E Research Associates, 1974.

Caudill, W. Psychological characteristics of acculturated Wisconsin Ojibwa children. American Anthropologist, 1949, 51, 409-427.

Caudill, W. Japanese-American personality and acculturation. Genetic Psychology Monograph, 1952, 45, 3-102.

Chance, N. A. Acculturation, self-identification, and personality adjustment. American Anthropologist, 1965, 67, 372-393.

Draguns, J. G., Haley, E. M., & Phillips, L. Studies of Rorschach content: A review of the research literature. Part 1: Traditional content categories. Journal of Projective Techniques and Personality Assessment, 1967, 31, 3-32.

Exner, J. E. The Rorschach systems. New York: Grune and Stratton, 1969.

Exner, J. E. The Rorschach: A comprehensive system. New York: John Wiley and Sons, 1974.

Exner, J. E. The Rorschach: A comprehensive system, Volume 2, Current research and advanced interpretation. New York: John Wiley, 1974.

Haan, N. An investigation of the relationships of Rorschach scores, patterns and behaviors to coping and defense mechanisms. Journal of Projective Techniques and Personality Assessment, 1964, 28, 429-441.

Hallowell, A. I. Acculturation processes and personality changes as indicated by the Rorschach techniques. Rorschach Research Exchange, 1942, 6, 42-50.

Hallowell, A. I. Culture and experience. Philadelphia: University of Pennsylvania Press, 1955.

Hawkes, G. R., & Taylor, M. Power structure in Mexican and Mexican American farm labor families. Journal of Marriage and the Family, 1975, 34, 807-811.

Helwig, J. T., & Council, K. A. (Eds.). SAS users guide, 1979 edition. Raleigh, N.C.: SAS Institute Inc., 1979.

Henry, W. E. The Thematic Apperception Technique in the study of culture-personality relations. Genetic Psychology Monographs, 1947, 35, 3-135.

Hertz, M. R. Current problems in Rorschach theory and technique. Journal of Projective Techniques, 1951, 15, 307-338.

Johnson, D. L., & Sikes, M. P. Rorschach and TAT response of Negro, Mexican American, and Anglo psychiatric patients. Journal of Projective Techniques, 1965, 29, 183-188.

Kaplan, B. Reflections of the acculturation process in the Rorschach test. Journal of Projective Techniques, 1955, 19, 30-35.

Kaplan, B., Rickers-Ovsiankina, M. A., & Joseph, A. An attempt to sort Rorschach records from four cultures. Journal of Projective Techniques, 1956, 20, 172-180.

Keefe, S. E. Acculturation and the extended family among urban Mexican Americans. In A. M. Padilla (Ed.), Acculturation: Theory, models, and some new findings. Boulder, Co.: Westview Press, 1980.

Klopfer, B., Ainsworth, M. D., Klopfer, W. G., & Holt, R. R. Developments in the Rorschach technique. I: Theory and technique. Yonkers-on-Hudson, N.Y.: World Book Company, 1954.

Komaroff, A. L., Masuda, M., & Holmes, T. The Social Readjustment Rating Scale: A comparative study of Negro, Mexican, and White Americans. Journal of Psychosomatic Research, 1968, 12, 121-128.

Kranau, E. J., Green, V., & Valencia-Weber, G. Acculturation and the Hispanic woman: Attitudes toward women, sex-role attribution, sex-role behavior, and demographics. Hispanic Journal of Behavioral Sciences, 1982, 4, 21-40.

Larkin, R. W. Class, race, sex and preadolescent attitudes. California Journal of Educational Research, 1972, 23, 213-223.

Lewis, O. Life in a Mexican village: Tepoztalan restudied. Urbana: University of Illinois Press, 1951.

Martinez, J. L., Jr. Cross cultural comparison of Chicanos and Anglos on the Semantic Differential: Implications for psychology. In J. L. Martinez, Jr. (Ed.), Chicano psychology. New York: Academic Press, 1977.

Mason, E. P. Comparison of personality characteristics of junior high students from American Indian, Mexican, and Caucasian ethnic backgrounds. Journal of Social Psychology, 1967, 73, 145-155.

McCreary, C., & Padilla, E. MMPI differences among Black, Mexican American, and White male offenders. Journal of Clinical Psychology, 1977, 33, 171-177.

Mead, M. The Mountain Arapesh V: The record of Unabelin with Rorschach analysis. Anthropological Papers American Museum Natural History, 1949.

Olmedo, E. L. Acculturation: A psychometric perspective. American Psychologist, 1979, 34, 1061-1070.

Olmedo, E. L., Martinez, J. L., & Martinez, S. R. Measure of acculturation for Chicano adolescents. Psychological Reports, 1978, 42, 159-170.

Olmedo, E. L., & Padilla, A. M. Empirical and construct validation of a measure of acculturation for Mexican Americans. Journal of Social Psychology, 1978, 105, 179-187.

Padilla, A. M. The role of cultural awareness and ethnic loyalty in acculturation. In A. M. Padilla (Ed.), Acculturation: Theory, models, and some new findings. Boulder, Co.: Westview Press, 1980.

Padilla, A. M. & Ruiz, R. A. Personality assessment and test interpretation of Mexican Americans: A critique. Journal of Personality Assessment, 1975, 39, 103-109.

Park, C. N., & Dudycha, A. L. A cross-validation approach to sample size determination for regression models. Journal of the American Statistical Association, 1974, 69, 214-218.

Piotrowski, Z. Perceptanalysis. New York: MacMillan, 1957.

Ramirez, M., & Price-Williams, D. R. Cognitive styles of children of three ethnic groups in the United States. Journal of Cross-Cultural Psychology, June 1974, 5, 212-219.

Rapaport, D., Gill, M., & Schafer, R. Psychological diagnostic testing (Vol. 2). Chicago: Yearbook Publishers, 1946.

Reilley, R. R., & Knight, G. E. MMPI scores of Mexican-American college students. Journal of College Student Personnel, 1970, 11, 419-422.

Roll, S., & Brenneis, C. Chicano and Anglo dreams of death: A replication. Journal of Cross-Cultural Psychology, 1975, 6, 377-383.

Rorschach, H. Psychodiagnostics: A diagnostic test based on perception (5th ed.). New York: Grune & Stratton, 1942. (Originally published, 1921.)

Satterfield, D. M. Acculturation and marriage role patterns: A comparative study of Mexican-American women. Unpublished doctoral dissertation, University of Arizona, 1966.

Stoker, D. H. Mexicans in the United States. Pennsylvania Psychiatric Quarterly, 1966, 6, 30-37.

Stoker, D. H., & Meadow, A. Cultural differences in child guidance clinic patients. International Journal of Social Psychiatry, 1974, 20, 186-202.

Szapocznik, J., & Kurtines, W. Acculturation, biculturation, and adjustment among Cuban Americans. In A. M. Padilla (Ed.), Acculturation: Theory, models, and some new findings. Boulder, Co.: Westview Press, 1980.

Szapocznik, J., Kurtines, W., & Fernandez, T. Bicultural involvement and adjustment in Hispanic-American youths. International Journal of Intercultural Relations, 1980, 4, 353-365.

Szapocznik, J., Sopetta, M., Kurtines, W., & Arnalde, M.A. Theory and measurement of acculturation. Interamerican Journal of Psychology, 1978, 12, 113-130.

Tharp, R. G., Meadow, A., Lennhoff, S. G., & Satterfield, D. M. Changes in marriage roles accompanying the acculturation of the Mexican-American wife. Journal of Marriage and the Family, 1968, 30, 404-412.

Torres-Matrullo, C. M. Acculturation, sex-role values and mental health among mainland Puerto Ricans. In A. M. Padilla (Eds.), Acculturation: Theory, models, and some new findings. Boulder, Co.: Westview Press, 1980.

Vogt, E. Z. Navaho veterans: A study of changing values. Peabody Museum of Harvard University Papers, 41(1), 1-223.

Weiner, I. B. Psychodiagnosis in schizophrenia. New York: Wiley, 1966.

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