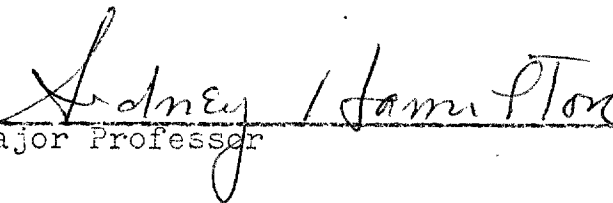



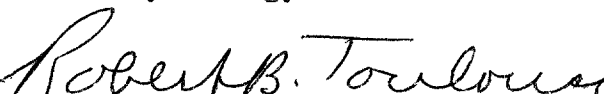
ETHNOPHENOMENOLOGICAL INFLUENCE AND LEVELS
OF PSYCHOLOGICAL DIFFERENTIATION

APPROVED


Major Professor


Minor Professor


Director of the Department of Education
and Psychology


Dean of the Graduate School

ETHNOPHENOMENOLOGICAL INFLUENCE AND LEVELS
OF PSYCHOLOGICAL DIFFERENTIATION

THESIS

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

By

Gloria R. Litman, B. A.

Denton, Texas

August, 1967

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
Chapter	
I. INTRODUCTION.	1
Culture and Perception	
Subculture	
Field Dependence	
American Core Culture and the	
Protestant Ethic	
Traditional Jewish Culture	
Purpose of the Study	
Hypotheses	
Definition of Terms	
Limitations of the Study	
II. METHODOLOGY	26
Subjects	
Description of the Instruments	
Procedure	
Statistical Treatment	
III. RESULTS	37
Discussion	
IV. SUMMARY AND CONCLUSIONS	50
Summary	
Conclusions	
BIBLIOGRAPHY	56

LIST OF TABLES

Table	Page
I. Summary of Analysis of Variance for the Block Design Subtest of the <u>Wechsler Intelligence Scale for Children</u>	37
II. Summary of Analysis of Variance for the Children's Embedded Figures Test.	38
III. Summary of Analysis of Variance for the Otis Mental Abilities Test (Alpha).	38
IV. Summary of Analysis of Variance for the Vocabulary Subtest of the <u>Wechsler Intelligence Scale for Children</u>	39
V. Summary of Analysis of Variance on Chronological Age	40
VI. Level of Significance of the Difference Between the Relatively Acculturated Jewish Group (Group I) and the Relatively Assimilated Jewish Group (Group II) on the Block Design and the <u>Children's Embedded Figures Test</u>	41
VII. Level of Significance of the Difference Between the Relatively Acculturated Jewish Group (Group I) and the Protestant Group (Group III) on the Block Design and the Children's Embedded Figures Test.	41
VIII. Level of Significance of the Difference Between the Relatively Assimilated Jewish Group (Group II) and the Protestant Group (Group III) on the Block Design and the Children's Embedded Figures Test	42
IX. Means and Standard Deviations for the Relatively Acculturated Jewish Group (Group I), the Relatively Assimilated Jewish Group (Group II) and the Protestant Group (Group III) on the Vocabulary Subtest of the <u>Wechsler Intelligence Scale for Children</u>	45

Table	Page
X. Residualized Means and Standard Deviations on the Vocabulary Subtest of the <u>Wechsler Intelligence Scale for Children</u>	46
XI. Intercorrelations Between the Vocabulary Subtest, the Block Design Subtest and the Children's Embedded Figures Test for the Relatively Acculturated Jewish Group.	46
XII. Intercorrelations Between the Vocabulary Subtest, the Block Design Subtest and the Children's Embedded Figures Test for the Relatively Assimilated Jewish Group.	47
XIII. Intercorrelations Between the Vocabulary Subtest, the Block Design Subtest and the Children's Embedded Figures Test for the Protestant Group	48

CHAPTER I

INTRODUCTION

Culture and Perception

The influence of culture on personality has long been a subject of investigation in the behavioral sciences. Within the framework of individual differences, there are consistencies which obtain by virtue of the individual's membership in an ethnic or cultural group. "The massive impact of different designs for living upon individuals is indicated by the cultural molding of their perception, memory and attitudes" (3, p. 645).

Cross cultural studies have amply demonstrated the influence of culture on perception, or "ethnophenomenology" (5, p. 123). In a study on preference for designs using West African and English subjects, the investigator concluded that there was no general agreement between the two groups "which extends beyond the cultural boundaries" (23, p. 692). Segall, Campbell and Herskovits (33), in their analysis of data from fifteen societies, indicated that there were differences in susceptibility to geometric optical illusions which suggest the existence of different habits of perceptual inference which relate to cultural and ecological factors in the environment (33, p. 771).

In a study of the performance of Dutch and Zulu subjects on certain perceptual tasks, including the location of the Gottschaldt embedded figures, Schwitzgebel (32) found that there were significant differences between the two groups, most notably the relative inability of the Zulu to locate embedded figures. The results of this investigation were interpreted as indicating that "certain perceptual organizations are characteristic of cultural groups, that even relatively 'simple' processes may be affected by environmental conditions" (32, p. 77).

There have been many studies employing the Rorschach which have revealed striking cultural differences in modes of perceiving. In an investigation of Rorschach percepts of normal Chinese adults, Yank, Tzou, and Wu (49) determined ten popular responses (Bech (2) lists twenty-one responses as "popular" for the normal American adult population) including one, Card VI Turtle, which is considered as unique to the normal Chinese adult.

In a study on Rorschach responses of desert Moroccans, Bleuler and Bleuler (4) found that there were a greater number of fine detail responses than among Europeans. In a similar study on Samoans, Cook (7) found that this group tends to give whole responses, a great many more white space responses, and many fewer fine detail responses than do Europeans and Americans.

In commenting upon the latter two studies, Kretch, Krutchfield, et al. (21) state

These differences in modes of perceiving suggest the influence of cultural factors. In Moroccan art and religion, great importance is attached to fine detail; among the Samoans, white is a highly valued symbolic color. These cultural differences in modes of perceiving do not necessarily mean that the Moroccan is compulsive or mentally disorganized; nor do they mean that the Samoan is intelligent and creative and negativistic . . . Should the Rorschach prove to be valid for Europeans and Americans, it may not be equally valid in other cultures (21, p. 341).

Dennis (9) reiterates the cultural aspect of Rorschach's percepts in his statement that "there may be direct influences in perception which are not necessarily accompanied by changes in anxiety, emotionality, etc. . . . Among the variables affecting the Rorschach, certainly culture must be included" (9, p. 154).

Cultural differences have also been found in studies of the Goodenough Draw A Man Test (14), the California Mental Maturity Scale (35) and the Bender Gestalt Motor Test (29) among others. Even aural perceptions may be different depending upon the cultural background of the perceiver (12).

Subculture

The preceding material strongly indicates that cultural differences in perception do exist. The present study is concerned with the question as to whether within our own broad American culture subcultural differences in perception would obtain.

Berelson and Steiner define subcultures as "the ways of behaving peculiar to a particular group within a larger one. An individual can simultaneously live in and be affected by more than one culture" (3, p. 645).

Although the Melting Pot concept is part of American tradition, there is much evidence that

The many ethnic groups in the United States . . . have patterns of thought which vary more or less widely from the dominant American pattern. The "melting pot" ideology is based upon a recognition of such variation. But it has not been equally well recognized, either ideologically or behaviorally, that the several groups often vary tremendously from one another (19, pp. 25 26).

In their analysis, Glazer and Moynihan (13) take the position that the melting pot has not occurred:

The assimilating power of American society and culture operated on immigrant groups in different ways to make them . . . something they had not been but still some thing distinct and identifiable (13, pp. 13 14).

.
The ethnic group in American society became not a survival from the age of mass immigration but a new social form (13, p. 16).

Dennis (9) emphasizes the fact that, while there seems to be little doubt that subcultural influences strongly affect perception, these influences are seldom taken into account in systematic investigations of personality:

There are variations within our population which will almost certainly make their influences felt in perceptual tasks. Interesting comparisons of occupational and religious groups . . . await the investigator (9, p. 156).

Field Dependence

The perceptual mode with which this present study is concerned is that of field dependence. As the result of a large scale research program, Witkin and his associates have concluded that not only do individuals differ in the way they orient themselves in space but that the individual's way of orienting himself in space is "an expression of a more general mode of perceiving which, in turn is linked to a broad and varied array of personality characteristics involving a great many areas of psychological functioning" (44, p. 1).

A standard battery of tests was designed to evaluate the extent to which the subject adhered to the visual field or resisted the visual field through awareness of body positions. This initial battery included the Rod and Frame Test (RFT) in which the subject was placed in a completely darkened room and was required to bring a luminous rod within a luminous frame to a position he perceived as upright while the surrounding frame was tilted at various angles (43).

The Tilting Room Tilting Chair Test evaluated the subject's perception of the position of his body and the whole field in relation to the upright. In this test, the subject was actually placed within the visual field rather than required to view it from a distance (42).

The third test used in these initial studies was the Rotating Room Test where, the subjects were rotated around a circular track. Subjects who were more aware of their bodies and the sensations caused by the force acting thereupon tended to tilt both body and room in the direction of the force. Subjects who adhered to the visual field tended to perceive themselves and the room straight in their original positions (40).

In an otherwise severe critique of Witkin's work, Postman (30) states

A great deal of ingenuity and skill was shown in the construction of the test situations; precise and reliable measurements were obtained under well controlled conditions of administration (30, p. 80).

The dimension which Witkin and his associates succeeded in defining and measuring was the field dependence independence continuum. The ability to overcome an embedding context is central to this dimension:

The person with a more field independent way of perceiving tends to experience his surroundings analytically with objects experienced as discrete from their backgrounds. The person with a more field dependent way of perceiving tends to experience his surroundings in a relatively global fashion, passively conforming to the influence of the prevailing field or context (44, p. 35).

That field dependence is a stable and consistent characteristic is indicated by odd-even reliability coefficients on the various tests, which ranged from .69 to .91 (45, p. 73). Test-retest correlations, after a one year interval, were of approximately the same magnitude. Bauman's (1) study of the

test retest performances of subjects after a three year interval showed coefficients ranging from .77 to .89 for males and .66 to .89 for females.

This characteristic perceptual mode is not limited to situations requiring bodily orientations. The Embedded Figures Test (41), a paper and pencil test, was also administered. This test requires the subject to locate a simple figure within a larger, more complex design. The simple figure is embedded "by being incorporated into the pattern of the larger figure . . . The complex figure is colored in such a way as to reinforce a given pattern and its subpatterns" (45, p. 84). The scores on the Embedded Figures Test correlated significantly with the scores on the orientation tests described above (45).

In a later, intensive study on ten year old boys, Witkin et al. (44) advanced the Differentiation Hypothesis which,

Proposes an association among the characteristics of greater or more limited differentiation . . . in each of several psychological areas: degree of articulation of experience of the world; degree of articulation of experience of the self, reflected particularly in nature of the body concept and extent of development of a sense of separate identity; and extent of development of specialized, structured controls and defenses (44, p. 16).

Levels of psychological differentiation were identified in terms of the field dependent independent continuum. The achievement of a high level of differentiation, manifested principally in an individual's articulated way of

experiencing the world and himself, would be characteristic of the relatively field independent. A more limited, global level of differentiation would be characteristic of the relatively field dependent (44).

In Witkin's study, the standard perceptual battery consisted of the Body Adjustment Test, the Rod and Frame Test and the Embedded Figures Test. The weighted composite score of these three tests constituted the "perceptual index" (44).

The relationship between perceptual field dependence and performance on standard tests of intelligence was explored. A significant relationship between scores on the perceptual index and scores on the WISC was reported by Woerner and Levine (46). Those children having a relatively analytical field approach (field independent) scored significantly higher on this instrument than children whose field approach was more global. The perceptual measures were, however, found to be more highly related to the WISC performance scores than to the WISC verbal scores. A significant relationship between the perceptual index and scores on the Stanford Binet was found (44).

In a study on concept formation and field dependence, Elkind, Koegler and Go (11) reported a significant relationship between scores on the Embedded Figures Test and scores on the Shipley Hartford Scale. Their results further indicated that field independent men and women scored significantly higher than the field dependent on the Shipley

Abstraction Scale but not on the Shipley Verbal Scale.

Their findings were interpreted as supporting the hypothesis that field independence is an asset on measures requiring perceptual concept formation, but is not related to measures requiring verbal concept formation.

In an analysis of the relationship between field dependence and intelligence, Witkin stated,

The many significant relations reported between perceptual measures and full scale intelligence scores cannot be interpreted to mean that field independent children are of generally superior intelligence. The finding of striking differences in the extent to which various I.Q. subtests contribute to these relations rules out such an interpretation (44, p. 70).

.
There is a general cognitive style which runs through perceptual and intellectual functioning and this common cognitive style underlies the observed relation between the extent of field dependence and performance on standard tests of intelligence (44, p. 69).

The relationship between mode of perceiving and verbal ability is not clearly defined in Witkin's studies. The evidence strongly indicates that field dependent children will tend to perform better on verbal than on performance portions of the standard tests of intelligence. In specific regard to the relative verbal ability of field dependent versus field independent children, there are contradictory statements in Witkin's work. In his general analysis of field dependence, Witkin has stated that field dependent children "may even do better [than field independent children] on portions concerned with vocabulary" (44, p. 2) but in a later section on verbal skills maintains that "there are no

clear grounds for anticipating differences between more differentiated and less differentiated children in fund of words (Vocabulary)" (44, p. 27).

The cognation between field dependence and personality was investigated. Ratings of field dependence were made using data obtained by means of interview, Rorschach, Figure Drawing, etc. These were then correlated with the perceptual index scores. Success on the perceptual tasks (relative field independence) was found to be associated with the following personality clusters: activity in dealing with one's environment, self awareness and good control over impulses, self esteem and self acceptance, independence and the ability to function with a fair degree of autonomy from others. Field dependence, while not polar opposite in personality clusters, was found to be associated with relative passivity in dealing with the environment, relative dependence on others and a more limited sense of separate identity.

Independent investigations have tended to confirm Witkin's findings in regard to field dependence and personality. Wertheim and Mednich (37) found a significant correlation between field independence and the need for achievement. Marlow's (26) findings indicate that field independence is associated with the need to be analytical in regard to the behavior and motives of one's self and others (Intracception) and with a relative absence of passive-dependent needs

(Succorance). In a study on field dependence and external directedness, Konstadt and Forman (20) found that field dependent children were more sensitive to their human environment and significantly more dependent on outside (experimentally interjected) approval than their field independent peers. In a study on 100 Air Force officers, Crutchfield, Woodworth, and Albrecht scored each subject on 600 personality variables. The number of significant correlations between the Embedded Figures and scores on these personality variables was unusually high and in the direction expected within Witkin's theoretical framework (8).

Witkin's interpretation of the causal factors in levels of differentiation was in terms of mother-child interaction. Each mother was interviewed and classified as either IFD (interaction fostering differentiation) or IID (interaction inhibiting differentiation). The interviewer was not aware of the children's perceptual indices. Point biserial correlations between mother's classification and the child's perceptual index ranged from .65 to .82. Mother's self-realization and self-assurance were related to children's perceptual scores. Mothers of field dependent children used more coercive procedures, placed more stress on conformity, and their children were consistently pushed towards goals and standards set by parents (44).

That field dependence may also have a cultural basis was first set forth (in somewhat oblique fashion) in Witkin's

discussion of sex differences in perceptual mode. In relation to the consistent findings that females are consistently and significantly more field dependent than males, he writes,

Considering first of all the roles typically assigned to men and women in our culture, we find many influences contributing to sex differences in degree of active relationship to the environment (45, p. 487).

Dershowitz (10) has advanced the hypothesis that cultural influences in the home and community are a significant factor in the development of the pattern of field dependence independence. It is Dershowitz's contention that a high degree of Jewish acculturation fosters field dependence, particularly in the Jewish male, while the Protestant tradition would encourage field independence. The specific results of his study will be discussed in a later section. We will proceed first to an analysis consideration of the Protestant ethic as it applies to American culture and then to an analysis of traditional Jewish culture.

American Core Culture and the Protestant Ethic

Wherever cultural standardization exists, there needs be someone who creates that standard and has an interest in its perpetuation. In the United States, the role of Procrustes has been played by the Anglo-Saxon Protestant elements (34, p. 13).

The role of the Protestant Ethic in shaping American values and beliefs has been an important one (6). Weber's classic study (38) stressed individualism, asceticism, activity and work as a calling productive of rational

economic behavior. It has been referred to as the "paradigm of an achievement ethic" (36, p. 138).

American middle class norms are, in effect, "a tempered version of the Protestant Ethic" (6, p. 87). Gustafson (16), in his analysis of the Protestant family, maintains that the best insight into this group will most likely emerge from studies of middle class American society.

The norms and values of American middle class society have been outlined by Cohen (6) as follows:

Ambition is a virtue . . . / and / means a high level of aspiration . . . for goals difficult of achievement.

.
The middle class is an ethic of individual responsibility. It applauds resourcefulness and self-reliance, a reluctance to turn to others for help.

.
Middle class norms place a high evaluation on the cultivation and possession of skills and on the tangible achievements which are presumed to witness to the possession of skills and the application of effort (6, pp. 88 89).

This emphasis on independence, activity, self-reliance, utility, and achievement is reiterated in much of the literature (27, 36, 37).

Child rearing practices tend to implement these values:

Parenthood in America has become a very special thing and parents see themselves not as giving their children final status and place, rooting them firmly for life in a dependable social structure, but merely as training them for a race they will run alone (28, p. 75).

In her discussion of recent American child training literature, Wolfenstein (47) points out that the emphasis has been on the motor and exploratory aspects of the infant

and stresses "his tendency at a very early age to get going and master the environment" (47, p. 123).

Traditional Jewish Culture

Whereas American core culture values are derived from the Protestant Ethic, traditional Jewish values stem from the shtetl culture of Eastern Europe. That this influence is still manifest in American Jewish values is stressed by Zobrowski (51) and reiterated by Glazer and Moynihan (13).

In contrast to the American tradition with its stress on self-reliance and independence, the "ideal center of gravity [for the Jew] is not in himself, but in the whole of which he is an essential part" (51, p. 124). The worth of the individual, as well as his rights and responsibilities, is recognized, but this characteristic "has always been tempered by the consideration that the individual is a member of his community and that his own well being is bound with it" (17, p. 118).

The emphasis of Jewish culture on learning and the acquisition of knowledge is well known. In the traditional shtetl culture, learning gave status and respect and was, in principle, the basis for social stratification. The process of study did not aim at any concrete utilitarian product but was an end in itself. Studying was the exclusive province of the male. The role of the female was that of providing an atmosphere conducive to her husband's

studies and, in many cases, it was the female who earned the family living. Activity and work, so highly prized in contemporary American culture, were looked down upon as the mark of the common or vulgar man (50).

In blending the American success pattern with this shtetl emphasis on book learning, something of the early veneration appears to have remained. It is not merely that to work with the head carries more status than to work with the hands. There is also a feeling that intellectual activity is better than manual activity in the sense of being . . . morally superior (50, p. 141).

Mandelbaum (25) has made the point that the mother-child relationship of the shtetl culture appears to carry over to contemporary Jewish family life in America. The traditional familial interaction has been described by Landes and Zobrowski (22) as follows:

To some extent neither the boy nor the girl will ever stop being a baby to the mother. She will never stop feeding, hovering, worrying about his health, warmth, safety. . . . The man is always "a child" with regard to his physical needs and domestic arrangements, dependent upon mother, sister, wife for the arranging if not for the supplying of proper food, warmth, clothing, health care, and for the alleviation of, or sympathy with, any physical or mental suffering. From the time he starts to study, however, he is adult with regard to matters of the intellect, religious rituals and community affairs (22, p. 451).

This dependency relationship is hyperbolized in a recent popular account (15). Like all successful parodies, this seems to be based on recognition of underlying, if exaggerated, representation of existent truths:

Properly practiced, Jewish motherhood is an art--a complex network of subtle and highly sophisticated techniques.

.

Fail to master these techniques and you hasten the black day you discover your children can get along without you (15, p. 11).

Wolfenstein (48), in her analysis of the traditional Jewish mother versus her assimilated American counterpart, stresses the emphasis on different phases of child development as the basic difference in the conception of the mother role. In the traditional Jewish culture, the image of the helpless baby seems to predominate through all phases of the child's development and into certain areas of manhood. The assimilated American-Jewish mother, on the other hand, has incorporated the core culture emphasis on acquisition of skills. Thus, the mother role is conceived of more in terms of being an educator and independence in the child is encouraged.

Using Witkin's terminology (44), the mother-child relationship in traditional Jewish culture could certainly be characterized as IID, whereas American core culture interaction, manifest in the Protestant mother and in the highly assimilated Jewish-American mother, could be characterized as IFD.

Dershowitz's (10) study strongly indicates that highly acculturated Jewish children are relatively more field dependent than their white Anglo-Saxon Protestant peers. Moreover, when Witkin's normative group (of less acculturated, more assimilated Jewish children) was compared with the two groups, they were intermediary on the field-dependence-

independence continuum. Specifically, there were significant differences between the groups on the BAT, the Block Design and, Object Assembly subtests of the WISC and Figure Drawing. Differences between the groups on the EFT did not reach significance, although the results were in the direction hypothesized. Contrary to hypotheses derived from the emphasis on verbal ability in Jewish culture, Dershowitz found that his Protestant subjects scored higher on the verbal portions of the WISC, although this difference did not reach statistical significance. These results may have been due, in part, to the bilingualism (and in some cases, trilingualism) of his Jewish subjects. Levinson (24) has reported significant differences between monolingual and bilingual children on some of the Wechsler verbal subtests.

Among the questions raised at the conclusion of this study is one pertaining to geographical differences; *i. e.*, would these results obtain outside of New York City? This question is a particularly valid and pertinent one. The Jewish population of New York City is unique with respect to the rest of the United States in that it constitutes one-third of the total white, non-Puerto Rican population of this area (13). If the surrounding suburban areas are included, New York City and its environs contain approximately one-half of the total Jewish population in the United States (12). Perpetuation of cultural values and strong communal

ties are more pronounced in this large urban center than would be the case in medium-sized cities or small towns (31).

Purpose of the Study

The purpose of this study was to investigate the relative levels of psychological differentiation in Jewish and Protestant children.

Hypotheses

The following hypotheses were examined.

1. Differences among mean scores of the three groups would be significant on the Block Design subtest of the Wechsler Intelligence Scale for Children, with the Protestant group outstanding in terms of the highest score.

2. Differences among mean scores of the three groups would be significant on the Children's Embedded Figures Test, with the Protestant children outstanding in terms of the highest score.

3. Differences among mean scores of the three groups would be significant on a standard test of intelligence, the Otis Quick-Scoring Mental Ability Test (Alpha), with the Protestant children outstanding in terms of the highest score. This hypotheses is contingent upon the amount of variance in the Otis, which can be accounted for by an analytical field approach.

The following sub-hypotheses were proposed:

1. There would be no significant difference in the mean ages of the three groups.

2. Differences between mean scores of the groups would be significant on the Vocabulary subtest of the Wechsler Intelligence Scale for Children, with the relatively acculturated Jewish group outstanding in terms of highest score.

Definition of Terms

Monolingual, refers specifically to the home environment and indicates that the subjects came from homes where English is the only language spoken.

Relatively acculturated Jewish refers to

1. Familial membership in the Orthodox or Conservative synagogue;

2. Attendance at the Hebrew Day School. Referring to the Hebrew Day School, Kaminetsky (18) has stated,

We feel that our pupils do know--and will know--more about Jewish values and ideals than the products of any other type of Jewish school. Knowledge brings with it familiarity and even loyalty; and our children are getting more Jewish facts and are studying more of our basic sacred texts.

Our pupils, too, are being inspired to live Jewishly-- in every sense of that term (18, p. 41).

Relatively assimilated Jewish, as used herein, refers to

1. Familial membership in the reformed Temple;

2. Attendance at a non-sectarian school.

Protestant, as used herein, refers to familial membership in a Protestant church, particularly Episcopalian or Presbyterian.

Limitations of the Study

1. Because the definition of relative Jewish acculturation was made in terms of attendance at a Hebrew Day School and because the other two groups were selected from a private school, generalizations of the findings of this study can be made only to a private school population.

2. While no attempt could be made to determine the exact socio-economic status of the groups, attendance at a private school, combined with the relatively homogeneous geographic area in which the children in all three groups live, limits generalizations of the findings of this study to a middle-middle and upper-middle class population.

CHAPTER BIBLIOGRAPHY

1. Bauman, G., "The Stability of the Individual's Mode of Perceiving and of Perception--Personality Relationships," unpublished doctoral dissertation, Department of Psychology, New York University, New York, New York, 1951.
2. Beck, Samuel J. and others, Rorschach's Test: I Basic Processes, New York, Grune & Stratton, Inc., 1961.
3. Berelson, B. and G. A. Steiner, Human Behavior, New York Harcourt, Brace & World, 1964.
4. Bleuler, M. and R. Bleuler, "Rorschach Ink-Blot Tests and Social Psychology," Character and Personality, IV (June, 1935), 99-114.
5. Bruner, J., "Personality Dynamics and the Process of Perceiving," Perception: An Approach to Personality, edited by R. B. Blake and G. V. Ramsey, New York, Ronald Press, 1951.
6. Cohen, Albert K., Delinquent Boys, Glencoe, Illinois, The Free Press, 1951.
7. Cook, T. H., "The Application of the Rorschach Test to a Samoan Group," Rorschach Research Exchange, VI (September, 1942), 51-60.
8. Crutchfield, R. S., D. G. Woodworth and R. E. Albrecht, "Perceptual Performance and the Effective Person," Lackland AFB, Texas Personnel Laboratory Report, 1958, WADC-TN-58-60, ASTIA Document #AD 151-039.
9. Dennis, W., "Cultural and Developmental Factors in Perception," Perception: An Approach to Personality, edited by R. B. Blake and G. V. Ramsey, New York, Ronald Press, 1951.
10. Dershowitz, Zachary, "Influence of Cultural Patterns on the Thinking of Children in Certain Ethnic Groups," unpublished doctoral dissertation, Department of Education, New York University, New York, 1966.

11. Elkind, D., R. Kogler and E. Go, "Field Dependence and Concept Formation," Perceptual and Motor Skills, XVII (January, 1963), 383-386.
12. Frymer, J. R., "Aural Perceptions of Authoritarians in Different Cultural Situations," Journal of Experimental Education, XXVIII (March, 1959), 163-165.
13. Glazer, N. and D. P. Maynihan, Beyond the Melting Pot, Cambridge, Massachusetts, The MIT Press and The Harvard University Press, 1963.
14. Goodenough, F. L. and D. B. Harris, "Studies in the Psychology of Children's Drawings: II, 1928-1949," Psychological Bulletin, XLVII (September, 1950), 369-433.
15. Greenburg, Don, How to Be a Jewish Mother, Los Angeles, California, Price, Stern & Sloan, 1964.
16. Gustafson, J., "Protestant Sociology of the Family," Religious Education, LII (May, 1957), 89-93.
17. Hurvitz, N., "Sources of Middle-Class Values of American Jews," Social Forces, XXXVII (February, 1958), 117-123.
18. Kaminetsky, J., "Evaluating the Program and Effectiveness of the All-Day Jewish School," Jewish Education, XXVII (February, 1956), 39-49.
19. Kluckhohn, F. R. and F. L. Strodtbeck, Variations in Value Orientations, Evanston, Illinois, Row Peterson & Company, 1961.
20. Konstadt, N. and E. Forman, "Field Dependence and Esternal Directedness," Journal of Personality and Social Psychology, I (January, 1965), 490-493.
21. Kretch, D., R. Crutchfield and E. Ballasky, Individual in Society, New York, McGraw Hill, 1962.
22. Lander, R. and M. Zbrowski, "Hypothesis Concerning the Eastern European Jewish Family," Psychiatry, XIII (October, 1950), 447-464.
23. Lawler, M., "Cultural Influences on Preference for Design," Journal of Abnormal and Social Psychology, LI (April, 1955), 690-692.

24. Levinson, B. M., "A Comparison of Performance of Bilingual and Monolingual Native Born Jewish Pre-School Children of Traditional Parentage in Four Intelligence Tests," Journal of Clinical Psychology, XV (November, 1959), 74-76.
25. Mandelbaum, D. G., "Change and Continuity in Jewish Life," The Jews, edited by M. Sklare, Glencoe, Illinois, The Free Press, 1958.
26. Marlowe, D., "Some Psychological Correlates of Field Independence," Journal of Consulting Psychology, XXII (September, 1958), 334.
27. Mason, L., "The Characterization of American Culture in Studies of Acculturation," American Anthropologist, LVII (June, 1955), 1264-1279.
28. Mead, Margaret, And Keep Your Powder Dry, New York, William Morrow & Co., 1942.
29. Peixrotta, H. E., "The Bender-Gestalt Motor Test as a Culture Free Test of Personality," Journal of Clinical Psychology, X (January, 1954), 369-372.
30. Postman, L., "Witkin, H. A., Lewis, H. B., Hertzman, M., Machover, K., Meissner, P. B. and Wapner, S., Personality Through Perception," Psychological Bulletin, LIII (September, 1955), 79-83.
31. Sauna, V. D., "Social Science Research Relevant to American Jewish Education: Sixth Bibliographic Review," Jewish Education, XXXIV (May, 1964), 187-202.
32. Schivitzgebel, R., "The Performance of Dutch and Zulu Adults on Selected Perceptual Tasks," Journal of Social Psychology, LVII (September, 1962), 73-77.
33. Segall, M. H., D. T. Campbell and M. J. Herskovits, "Cultural Differences in the Perception of Geometric Illusions," Science CXXXIX (March, 1963), 769-771.
34. Sherman, C. B., The Jew Within American Society, Detroit, Michigan, Wayne State University Press, 1961.
35. Strauss, M., "Mental Ability and Cultural Needs: A Psychocultural Interpretation of the Intelligence Test Performance of Ceylon University Entrants," American Sociological Review, XVI (December, 1951), 371-375.

36. Strodtbeck, F. L., "Family Interaction, Values and Achievement," Talent and Society, edited by D. McClelland and others, New York, Van Nostrand, 1958.
37. Torrance, W. and P. Meadows, "American Cultural Themes: an Analysis of Foreign Observer Literature," Sociology and Social Research, XLIII (April, 1958), 3-7.
38. Weber, Max, The Protestant Ethic and the Spirit of Capitalism, translated by Talcott Parsons, New York, Scribner & Sons, 1948.
39. Wertheim, J. and S. A. Mednick, "The Achievement Motive and Field Independence," Journal of Consulting Psychology, XXII (June, 1955), 38.
40. Witkin, H. A., "Further Studies of Perception of the Upright When the Direction of the Force Acting on the Body is Changed," Journal of Experimental Psychology, XLII (January, 1962), 9-20.
41. _____, "Individual Differences in Ease of Perception of Embedded Figures," Journal of Personality, XIX (May, 1950), 1-55.
42. _____, "Perception of Body Position and the Position of the Visual Field," Psychological Monographs, LXIII (1949), Whole No. 302.
43. Witkin, H. A., and S. E. Asch, "Studies in Space Orientation: IV. Perception of the Upright with Displaced Visual Fields," Journal of Experimental Psychology, XXXVIII (September, 1948), 762-782.
44. Witkin, H. A. and others, Psychological Differentiation, New York, John Wiley and Sons, Inc., 1962.
45. Witkin, H. A. and others, Personality Through Perception, New York, Harper & Brothers, 1954.
46. Woerner, M. and G. Levine, "A Preliminary Study of the Relation Between Perception and Thinking in Children," unpublished study, Department of Psychology, New York University, New York, 1960.
47. Wolfenstein, Martha, "Trends in Infant Care," American Journal of Orthopsychiatry, XXIII (February, 1953), 120-130.

48. Wolfenstein, Martha, "Two Types of Jewish Mothers," Childhood in Contemporary Cultures, edited by Margaret Mead and Martha Wolfenstein, Chicago, Illinois, The University of Chicago Press, 1955.
49. Yank, K. S., H. Y. Tzou and C. Y. Wu, "Rorschach Responses of Normal Chinese Adults," Journal of Social Psychology, LX (June, 1963), 175-186.
50. Zbrowski, M., "The Place of Book Learning in Traditional Jewish Culture," Childhood in Contemporary Cultures, edited by Margaret Mead and Martha Wolfenstein, Chicago, Illinois, The University of Chicago Press, 1955.
51. Zbrowski, M. and E. Herzog, Life is with People, New York, International Universities Press, 1952.

CHAPTER II

METHODOLOGY

Subjects

Group I (relatively acculturated Jewish) consisted of twenty boys selected at random from a Hebrew day school in Dallas, Texas. Before this random selection was made, those with overt, diagnosed perceptual difficulties (dyslexia, etc.) were eliminated, as were those from bilingual homes. The age range was from 7 years to 9 years 10 months, with a mean age of 8 years 5 months. The grade level breakdown was as follows: four subjects from fourth grade, eight from third grade, five from second grade and three from first grade.

The Hebrew day school from which this group was selected is co-educational. However, it is run along traditional lines in that while one half of the day is spent in standard secular studies, the other half is spent in Hebrew studies, including language, history, ritual, prayers, etc. The boys are required to keep their heads covered while in school and the dietary laws are observed in the serving of snacks, lunches, etc. The principal of the school is a graduate of an Orthodox Seminary.

Group II (relatively assimilated Jewish) consisted of twenty boys selected at random from a private, non-sectarian

school in Dallas, Texas. Before this random selection was made, all those with overt, diagnosed perceptual difficulties were eliminated. There were no children from bilingual homes, to the best knowledge of the Head of the Lower School, who aided in the selection. Religious affiliation was determined by information on the school application forms. The children in this group listed familial membership in the reformed Temple.

This group ranged in age from 7 years 2 months to 10 years 3 months with a mean age of 8 years and 10 months. The grade level breakdown was as follows: four subjects from fourth grade, ten from third grade, three from second grade and three from first grade.

Group III (Protestant) consisted of twenty boys selected at random from the same local private school as the boys in Group II. As with the other two groups, all those with overt, diagnosed perceptual difficulty were eliminated before the selection took place. There were no children selected from bilingual homes. The children in this group were primarily Episcopalian and Presbyterian, with some Methodist children included, as ascertained from their school application blanks. No exact breakdown by sect was available.

This group ranged in age from 7 years 8 months to 10 years 5 months with a mean age of 8 years and 8 months. The grade level breakdown was as follows: four boys from fourth

grade, ten from third grade, three from second grade and three from first grade.

Description of the Instruments

The Otis Quick-Scoring Mental Ability Test (Form Alpha) was used as a test of general intelligence for the groups. This test was administered as both a non-verbal and verbal test and a total score obtained, which was then converted into an Alpha I.Q. The Manual (9) indicates that this total score is "much more reliable than the score obtained from the non-verbal test alone" (9, p. 1). The biserial coefficient between the total score of Form Alpha and grade placement is given as .86. This coefficient was obtained from data using only second and third grade students (9, p. 5).

The Block Design subtest and the Vocabulary subtest of the Wechsler Intelligence Scale for Children (10) were also administered. A factor analytical study of the WISC undertaken by Goodenough and Karp (3) indicates that the Block Design has its highest loading on the "Analytical Field Approach" factor, as do the standard tests of perceptual field dependence, the RFT, EFT and BAT.

A similar study, undertaken by Cohen (1) confirms these results. The factor he identified was "Perceptual Organization" on which the Block Design heavily loaded. "The tests which load on it are all non-verbal and require the interpretation and/or organization of visually perceived materials" (1, p. 287).

In a "job analysis" of the Block Design (and two other Wechsler performance subtests), Witkin (12) indicates that effective performance . . . requires the overcoming of an embedded context . . . the reference design must be broken up into component blocks if it is to be reproduced" (12, pp. 67-68).

The Goodenough and Karp (3) study indicates that the Vocabulary subtests load heavily on the "Verbal Comprehension" factor. Cohen's study (1) confirms this.

With reference to Jewish acculturation, Levinson's (5, 6, 7) work is particularly germane. In a study of the WISC and WAIS performance of traditional Jewish subjects on the pre-school, elementary school, and university levels, he found minimal scatter among the sub-tests of the pre-school children and pronounced scatter among the elementary and university groups. The difference between the verbal and performance I.Q.'s of the pre-school children was significant only at the .10 level. However, for the elementary school and university groups, this difference was significant at the .001 level (7).

Since Levinson did not report tests of significance on the various subtests, the author of the present study used Fisher's t to determine the significance of the difference on the Block Design between Levinson's pre-school and university groups, between Levinson's pre-school and elementary school groups, and between Levinson's elementary school and

university groups. Fisher's t was also computed between these groups for the Vocabulary subtest. Scaled score equivalents of the WISC and WAIS from Levinson's data (7, p. 179) were used in the computations.

The results indicate that there was a significant difference ($<.01$) between the pre-school and university groups on the Block Design, with the pre-school group scoring significantly higher. There was also a significant difference ($<.01$) in performance between the pre-school group and the elementary school group, with the pre-school group scoring significantly higher. There was no significant difference in performance between the elementary school group and the university group.

With the Vocabulary subtest, the direction of results was reversed, with the university group scoring significantly higher ($<.01$) than the pre-school group. The elementary school group scored significantly higher ($<.01$) than the pre-school group. The difference between the elementary school group and the university group was not found to be significant, although the university group's scaled mean score was higher.

In a Canadian study utilizing Jewish day school students, non-Jewish public school students, and Jewish public school students, Wendt and Burwell (11) reported a significant disparity between the verbal and performance WISC I.Q.'s of their Jewish subjects. The same disparity was not evident

in the performance of their non-Jewish subjects. In addition, a significant difference in performance was found between the Jewish day school students and the non-Jewish subjects on the Block Design and Object Assembly subtests of the WISC, with the non-Jewish students scoring significantly higher. (no breakdown of the Vocabulary subtest is reported in this study.)

White Levinson's (5, 6, 7) interpretation of WISC scatter is in terms of a relative increase in verbal ability in a traditional Jewish cultural setting, Wendt and Burwell (11) point out that an equally logical interpretation could be made in terms of a lack of development of spatial-perceptual ability along with this increased verbal ability. In addition to the observations on the Block Design and Object Assembly, this hypothesis is derived from the relative performance on the Thurstone Concealed Figures, Cards and Form Boards tests. A significant correlation between these spatial-perceptual tasks and verbal I.Q. among their Jewish day school students

. . . indicates that these students may have used verbal abilities in the solution of what were, for the perceptual problems. . . . It is possible, although less efficient, to establish for each item on these tests, a verbal generalization that will lead to a correct solution (11, p. 102).

In a study on 1,010 Israeli children, Ostrar (8) found that in adapting the WISC for use in Israel, the performance tests, including the Block Design, were not suitable for

cross-cultural comparisons. The verbal tests and items (translated and adapted) were found to be better suited as inter-cultural measuring instruments.

The Children's Embedded Figures Test (CEFT) was also utilized. The EFT, used in Witkin's studies, has been found too difficult for subjects below the age of ten. A modification of this test for use with young children was first developed by Goodenough and Eagle (2). This modification of the EFT, and CHEF, was designed for children between the ages of five and nine. In the factor analytical study by Goodenough and Karp (3), the CHEF loaded highest on the "Analytical Field Approach: factor (.61) and also loaded significantly on the "Attention-Concentration" factor (.29). The CHEF, however, is not portable and is difficult to administer because of the size and weight of the figures.

The version used in the present investigation, the CEFT, is a modification of the CHEF by Karp and Konstadt (4). This modification is portable and easily administered.

The CEFT consists of twenty-five test items, complex, brightly colored, meaningful figures. Eleven of these complex figures have embedded within them a simple tent figure, the remaining fourteen a simple house figure.

Subjects are given the tent figure (in the form of a cut-out) and asked to find this figure in each of four simple discrimination plates, to a criterion of two successive discriminations. Four training figures, similar to the actual

test figures, are then presented, one at a time. The subject is instructed to find the tent within each figure. The tent cut-out is removed from view after presentation of the first training plate and is not shown to the subject again unless he specifically requests it, or unless he has failed three consecutive items. The test plates are presented, one at a time, after completion of the training trials. Unless the subject fails to discriminate correctly in any one of the last four test items, the house figure is presented, and the subject is asked to find this figure on four discrimination plates. A training plate, similar to the actual test plates, is then presented. The house cut-out is removed from view after the training trial is completed, and the actual test plates are then presented, one at a time. Responses are scored 1 or 0, and the maximum score on this test is 25 (4).

This test was standardized on 160 New York City public school children, ranging in age from five to twelve years. Internal consistency reliability coefficients on the 7-12 year groups range from .83 to .90, with an over-all coefficient of .87. Validity coefficients (as compared with the EFT) on the 9-12 age groups ranged from .70 to .86, with an overall coefficient of .85 (4, p. 4).

Procedure

All testing was conducted during a one month period from March 27 to May 2, 1967. For the children in the Hebrew day school, the Otis Quick Scoring Mental Abilities

Test was administered by the investigator to each grade level, in a classroom situation, in strict accordance with the instructions in the manual (9). The interval between verbal instructions was timed with a stopwatch. The investigator scored the tests for this group. For Groups II and III, Otis scores on tests administered and scored by the school's Director of Testing were obtained. No test had been administered prior to nine months before the testing period covered by this investigation.

Each subject was told by the investigator that the purpose of the investigation was to conduct some "scientific research." Each subject was further told that the test battery was not an intelligence test and that the results would in no way affect his school grades or become part of his school record. Every effort was made to establish and maintain rapport. No child was tested during the recess period. For all three groups, first graders were tested early in the morning, shortly after school began. For the other grade levels, testing was done at the convenience of the subject's classroom teacher.

The order of administration of the tests was the same for each subject. The Vocabulary subtest of the WESC was administered first, then the Block Design, then the CEFT. Each test was administered and scored in strict accordance with the instructions in the test manuals (10, 4). The Block Design was timed with a standard stopwatch, calibrated

at five-second intervals. On the other two tests, no time limit was adhered to, and the subject was encouraged to take as much time as he required. The average testing time ranged from twenty to thirty-five minutes per subject.

Statistical Treatment

The hypotheses were tested by analysis of variance. Where the results of this analysis of variance were significant, Fisher's t was computed. In addition, hypothesis III was further tested by means of a Pearson Product Moment Correlation Coefficient between the Otis Quick-Scoring Mental Abilities Test and the Block Design subtest of the Wechsler Intelligence Scale for Children and a Pearson Product Moment Correlation Coefficient between the Otis Quick-Scoring Mental Abilities Test and the Children's Embedded Figures Test. The .05 level of significance was established for the analyses of variance and for the Fisher's t .

Supplementary statistics, in the form of intercorrelations among measures for the various groups, were also computed. Significance of the differences between these intercorrelations was tested with Fisher's z .

CHAPTER BIBLIOGRAPHY

1. Cohen, J., "The Factorial Structure of the WISC at Ages 7-6, 10-6 and 13-6," Journal of Consulting Psychology, XXIII (June, 1959), 285-299.
2. Goodenough, D. R. and C. J. Eagle, "A Modification of the Embedded Figures Test for Use with Young Children," Journal of Genetic Psychology, CIII (April, 1963), 67-74.
3. Goodenough, D. R. and S. A. Karp, "Field Dependence and Intellectual Functioning," Journal of Abnormal and Social Psychology, LXIII (January, 1961), 241-246.
4. Karp, S. A. and N. L. Konstadt, Manual for the Children's Embedded Figures Test, Brooklyn, New York, Cognitive Test, 1963.
5. Levinson, B. M., "Cultural Pressure and WAIS Scatter in a Traditional Jewish Setting," Journal of Genetic Psychology, XCIII (September, 1958), 277-286.
6. _____, "Subcultural Values and I.Q. Stability," Journal of Genetic Psychology, XCVIII (February, 1961), 69-82.
7. _____, "Traditional Jewish Cultural Values and Performance on the Wechsler Tests," Journal of Educational Psychology, L (April, 1959), 177-181.
8. Ostrar, G., "Is a Verbal Test Cross Cultural," Studies In Education, edited by A. M. Dushkin and C. Frankenstein, New York, Ronald Press, 1960.
9. Otis, A., Otis Quick-Scoring Mental Abilities Tests: Manual of Directions for Alpha Test, New York, Harcourt, Brace and World, Inc., 1939.
10. Wechsler, David, WISC Manual, New York, The Psychological Corporation, 1949.
11. Wendt, R. A. and E. Burwell, "Test Performance of Jewish Day School Students," Journal of Genetic Psychology, CV (June, 1964), 99-103.
12. Witkin, H. A. and others, Psychological Differentiation, New York, John Wiley and Sons, Inc., 1962.

CHAPTER III

RESULTS

The results of the Block Design subtest of the Wechsler Intelligence Scale for Children, the Children's Embedded Figures Test (CEFT), the Otis Mental Abilities Test (Form Alpha), the Vocabulary subtest of the Wechsler Intelligence Scale for Children, and the chronological ages of the groups were analyzed by means of analysis of variance to ascertain whether there were significant differences among the relatively acculturated Jewish group, the relatively assimilated Jewish group, and the Protestant group. The means and standard deviations on the measures were also obtained for these groups.

The data in Table I indicate that the scores on the Block Design exceed the level of significance for the F test, which had been set at .05. The null hypothesis that there was no significant difference among the three groups on the Block Design was rejected.

TABLE I

SUMMARY OF ANALYSIS OF VARIANCE FOR THE BLOCK DESIGN SUBTEST OF THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN

Source	Sum of Squares	d.f.	Mean Square	F	B
Between	1453.2340	2	726.6170	8.0598	.001
Within	5138.7000	57	90.1526		
Total	6591.9340	59			

The data in Table II indicate that the differences on the Children's Embedded Figures Test exceed the level of significance for the F test, which had been set at .05. The null hypotheses that there was no significant difference among the three groups on the CEFT was rejected.

TABLE II
SUMMARY OF ANALYSIS OF VARIANCE FOR THE
CHILDREN'S EMBEDDED FIGURES TEST

Source	Sum of Squares	d.f.	Mean Square	F	P
Between	135.0340	2	67.5170	4.2304	.05
Within	909.7000	57	15.9596		
Total	1044.7340	59			

The data in Table III indicate that the Otis scores do not reach the required .05 level of significance for the F test. The null hypotheses, that there was no significant difference among the groups on the Otis, was therefore accepted.

TABLE III
SUMMARY OF ANALYSIS OF VARIANCE FOR THE
OTIS MENTAL ABILITIES TEST (ALPHA)

Source	Sum of Squares	d.f.	Mean Squares	F	P
Between	471.2400	2	235.6200	1.4134	N.S.
Within	9501.7000	57	166.6964		
Total	9972.9400	59			

Since Hypotheses Three, as stated in Chapter I, regarding the Otis scores, was made contingent upon the amount of variance in the Otis which could be accounted for by an analytical field approach, Pearson Product Moment Correlation Coefficients were calculated between the Otis scores and the Block Design scores and between the Otis scores and the CEFT scores for all three groups combined. The resultant r 's were .1306 and .2185, respectively. The squares of these coefficients indicate that only .017 of the variance in the Otis can be accounted for by the analytical field approach as measured by the Block Design, and only .048 of the variance in the Otis can be accounted for by the analytical field approach as measured by the CEFT.

As indicated in Table IV, the Vocabulary scores do not reach the required .05 level of significance for the F test. The null hypotheses, that there was no significant difference among the groups on this measure, was therefore accepted.

TABLE IV

SUMMARY OF ANALYSIS OF VARIANCE FOR THE VOCABULARY SUBTEST
OF THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN

Source	Sum of Squares	d.f.	Mean Squares	F	P
Between	15.6000	2	7.8000	.0999	N.S.
Within	4449.8000	57	78.0666		
Total	4465.4000	59			

The data in Table V indicate that the chronological ages of the groups did not reach the required .05 level of significance which had been set for the F test. The null hypothesis, that there was no significant difference among the groups in chronological age, was therefore accepted.

TABLE V
SUMMARY OF ANALYSIS OF VARIANCE ON CHRONOLOGICAL AGE

Source	Sum of Squares	d.f.	Mean Squares	F	P
Between	294.9400	2	147.4700	1.15	N.S.
Within	7281.2500	57	127.7412		
Total	7576.1900	59			

In summary, Tables I through V indicate that there were significant differences among the groups on the Block Design subtest of the Wechsler Intelligence Scale for Children, where the level of significance exceeded .001, and on the Children's Embedded Figures Test, where the level of significance exceeded .05. The null hypothesis that there were no significant differences among the groups on the Vocabulary subtest of the Wechsler Intelligence Scale for Children, the Otis Mental Abilities Test (Alpha), and in chronological age was accepted, since the F ratio on these measures failed to reach or exceed the required .05 level of significance.

t tests were computed on the two significant variables to determine whether Hypotheses One and Two, as stated in

Chapter I, would be accepted or rejected. The required level of significance on these t tests was set at .05.

The data in Table VI indicate that the means for the two groups differed significantly on the Block Design. The difference between the means for the two groups does not reach or exceed the required level of significance, which had been set at .05, on the Children's Embedded Figures Test.

TABLE VI

LEVEL OF SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE RELATIVELY ACCULTURATED JEWISH GROUP (GROUP I) AND THE RELATIVELY ASSIMILATED JEWISH GROUP (GROUP II) ON THE BLOCK DESIGN AND THE CHILDREN'S EMBEDDED FIGURES TEST

Test	Group I		Group II		t	P
	Mean	S.D.	Mean	S.D.		
Block Design	16.2000	7.4471	23.5500	8.4111	-2.4479	.05
CEFT	12.2500	3.8062	12.5000	4.2130	- .1978	NS

The data in Table VII indicate that the means for the relatively acculturated Jewish group and the Protestant groups

TABLE VII

LEVEL OF SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE RELATIVELY ACCULTURATED JEWISH GROUP (GROUP I) AND THE PROTESTANT GROUP (GROUP III) ON THE BLOCK DESIGN AND THE CHILDREN'S EMBEDDED FIGURES TEST.

Test	Group I		Group III		t	P
	Mean	S.D.	Mean	S.D.		
Block Design	16.2000	7.4471	28.1500	11.4336	-3.9799	.01
CEFT	12.2500	3.8062	15.5500	3.6397	-2.6121	.05

differed significantly on the Block Design and on the Children's Embedded Figures Test.

The data in Table VIII indicate that the means between the assimilated Jewish group and the Protestant group differed significantly on the Children's Embedded Figures Test. The difference between the means of these two groups did not reach or exceed the required .05 level of significance on the Block Design.

TABLE VIII

LEVEL OF SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE RELATIVELY ASSIMILATED JEWISH GROUP (GROUP II) AND THE PROTESTANT GROUP (GROUP III) ON THE BLOCK DESIGN AND THE CHILDREN'S EMBEDDED FIGURES TEST

Test	Group II		Group III		t	P
	Mean	S.D.	Mean	S.D.		
Block Design	23.5500	8.4111	28.1500	11.4336	-1.5320	N.S.
CEFT	12.5000	4.2130	15.5500	3.6397	-2.4142	<.05

The results in Tables VI, VII and VIII indicate that there were significant differences on the Block Design between the relatively acculturated Jewish group and the assimilated Jewish group and between the relatively acculturated Jewish group and the Protestant group. The Protestant group was outstanding in terms of highest mean score. Hypotheses One is therefore accepted.

The results in Tables VI, VII and VIII further indicate that there was a significant difference in the Children's

Embedded Figures Test between the relatively acculturated Jewish group and the Protestant group and between the relatively assimilated Jewish group and the Protestant group, with the Protestant group outstanding in terms of a higher mean score. Hypothesis Two is therefore accepted.

Discussion

The first hypothesis stated that differences among the mean scores of the three groups would be significant on the Block Design subtest of the Wechsler Intelligence Scale for Children with the Protestant group outstanding in terms of high score. Tables VI, VII and VIII report the levels of significance reached by the groups. The relatively acculturated Jewish group scored significantly lower than both the relatively assimilated Jewish group and the Protestant group. While mean differences between the relatively assimilated Jewish group and the Protestant group did not reach significance, the results were in the direction hypothesized, with the Protestant group achieving a higher mean score.

The second hypothesis stated that differences among mean scores of the three groups would be significant on the Children's Embedded Figures Test, with the Protestant group outstanding in terms of high score. Tables VI, VII and VIII indicate that the Protestant group scored significantly higher on this measure than did the other two groups. There was no significant difference in group mean scores between the acculturated Jewish group and the assimilated Jewish group on this measure.

The third hypothesis stated that differences among the three groups would be significant on the Otis Mental Abilities Test, contingent upon the amount of variance in the Otis which could be accounted for by an analytical field approach. Table III shows that the differences among the groups did not reach significance. Correlations between the Otis and the Block Design and between the Otis and the CEFT indicated that only a very small proportion of the variance in the Otis could be accounted for by an analytical field approach, as measured by these two tests. The coefficient of non-determination indicates that 98.3% of the variation of Otis scores was independent of the analytical field approach factor as measured by the Block Design and 95.2% of this variation was independent of the analytical field approach factor as measured by the CEFT.

Sub-hypothesis one stated that there would be no significant difference in the mean ages of the three groups. Table V shows that the differences among the mean chronological ages for the three groups does not reach significance.

Sub-hypothesis two stated that differences among mean scores of the groups would be significant on the Vocabulary subtest of the Wechsler Intelligence Scale for Children, with the relatively acculturated Jewish group outstanding in terms of high score. Table IV shows that the differences

among the means do not reach significance. Table IX gives the means and standard deviations for the three groups on this measure.

TABLE IX

MEANS AND STANDARD DEVIATIONS FOR THE RELATIVELY ACCULTURATED JEWISH GROUP (GROUP I), THE RELATIVELY ASSIMILATED JEWISH GROUP (GROUP II) AND THE PROTESTANT GROUP (GROUP III) ON THE VOCABULARY SUBTEST OF THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN

Group	Mean	S.D.
Group I	33.09	8.5609
Group II	34.8	8.4178
Group III	33.6	8.8509

Table IX indicates that the relatively assimilated Jewish group achieved a higher mean score on this measure than the relatively acculturated Jewish group or the Protestant group. A Pearson Product-Moment Correlation Coefficient was calculated between chronological age and scores on the Vocabulary subtest. The resultant r was .6412. Chronological age was then residualized from the scores on the Vocabulary subtest. The residualized means and standard deviations for each group are shown in Table X.

Table X indicates that, with the effects of chronological age residualized from the Vocabulary scores, the relatively acculturated Jewish group achieved the highest mean score on this measure.

TABLE X
RESIDUALIZED MEANS AND STANDARD DEVIATIONS ON THE
VOCABULARY SUBTEST OF THE WECHSLER
INTELLIGENCE SCALE FOR CHILDREN

Group	Mean	S.D.
Group I	1.2111	6.2191
Group II	.5472	6.2822
Group III	.6641	7.1493

Supplementary Statistics

Pearson Product Moment Correlation Coefficients were calculated between the various measures for each group. These intercorrelations are shown in Tables XI, XII and XIII.

TABLE XI
INTERCORRELATIONS BETWEEN THE VOCABULARY SUBTEST, THE
BLOCK DESIGN SUBTEST AND THE CHILDREN'S EMBEDDED
FIGURES TEST FOR THE RELATIVELY
ACCULTURATED JEWISH GROUP

Measure	Vocabulary	Block Design	CEFT
Vocabulary	1.0000	.0663*	.2002*
Block Design		1.0000	.0335*
CEFT			1.0000

*Not significant

An analysis of these intercorrelations indicates statistically insignificant correlations between the three measures for the relatively acculturated Jewish group. These results

seem to indicate that, within this group, there was very little transfer from one task to another, *i. e.*, that the variance in the scores on each test were independent of the variance of scores on the others.

TABLE XII

INTERCORRELATIONS BETWEEN THE VOCABULARY SUBTEST, THE BLOCK DESIGN SUBTEST AND THE CHILDREN'S EMBEDDED FIGURES TEST FOR THE RELATIVELY ASSIMILATED JEWISH GROUP

Measure	Vocabulary	Block Design	CEFT
Vocabulary	1.0000	.5530*	.7232*
Block Design		1.0000	.6102*
CEFT			1.0000

*P < .02

An analysis of these intercorrelations shows statistically significant correlations between the measures for the relatively assimilated Jewish group. Thirty per cent of the variation in scores on the Block Design can be accounted for by the variation in Vocabulary. In the Children's Embedded Figures Test 52.30 per cent of the variance can be accounted for by the variation in Vocabulary and 37.23 per cent of the variation in the Children's Embedded Figures Test can be accounted for by the variation in the Block Design.

TABLE XIII

INTERCORRELATIONS BETWEEN THE VOCABULARY SUBTEST, THE
BLOCK DESIGN SUBTEST AND THE CHILDREN'S EMBEDDED
FIGURES TEST FOR THE PROTESTANT GROUP

Measure	Vocabulary	Block Design	CEFT
Vocabulary	1.0000	.0796**	.5485
Block Design		1.0000	.6155*
CEFT			1.0000

* $P < .02$

**Not significant

Table XIII shows that between the Vocabulary subtest and the Children's Embedded Figures Test and between the Block Design subtest and the Children's Embedded Figures Test there were statistically significant correlations for the Protestant group. In the CEFT, 30.08 per cent of the variation can be accounted for by the variation in Vocabulary, while 37.88 per cent of the variation in the CEFT can be accounted for by the variation in the Block Design. The correlation between the Vocabulary scores and the Block Design scores was not significantly different from zero for this group.

Further analysis of the data, using Fisher's z transformation, indicates a highly significant difference ($p < .0003$) between the Vocabulary-Block Design correlations for the relatively assimilated Jewish group and the Protestant group. This may indicate that the assimilated Jewish

group was using verbal ability (as measured by the Vocabulary subtest) in what was essentially a perceptual task for the Protestant group.

Using Fisher's z transformation, significant differences ($p < .003$) were found between the Block Design-Children's Embedded Figures Test correlations for the Protestant and relatively acculturated Jewish group scores, and between the relatively assimilated and the relatively acculturated Jewish group. As stated in Chapter II, both of these measures have been found to be heavily loaded on the Analytical Field Approach factor, and we would thus expect the two measures to be significantly related on the basis of this common factor. Table XI indicates that for the relatively acculturated Jewish group, the correlation between these two measures was not significantly different from zero. In view of this group's relatively poor performance on both of these measures, the low correlation may be indicative of this group's inability to perceive in an analytical fashion, so that the analytical field approach factor was not operant (or was operant to a small degree) in the performance on these tasks.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Summary

The purpose of this study was to investigate the relative levels of psychological differentiation in Jewish and Protestant children. The major hypothesis tested was that relatively acculturated Jewish boys would be significantly more field dependent than their Protestant peers, with relatively assimilated Jewish boys falling intermedially between the two groups. The sub-hypothesis, also investigated in this study, was that relative verbal ability was positively and significantly related to Jewish acculturation. These hypotheses were stated in the form of null hypotheses for evaluative purposes.

There were three groups utilized for this study. The first group consisted of twenty relatively acculturated Jewish boys, who were selected at random from a Hebrew day school. The second group consisted of twenty relatively assimilated Jewish boys, selected at random from a non-sectarian private school. The third group consisted of twenty Protestant boys, selected at random from the same non-sectarian private school as the second group. Children with overt, diagnosed perceptual difficulties and children

from bilingual homes were eliminated before the random selection took place.

The Block Design subtest of the Wechsler Intelligence Scale for Children, the Children's Embedded Figures Test the Otis Quick-Scoring Mental Abilities Test and the Vocabulary subtest of the Wechsler Intelligence Scale for Children were administered to each subject. Analyses of variance revealed significant differences among the groups on the two measures of field dependence, the Block Design and the Children's Embedded Figures Test.

Further statistical analysis utilized Fisher's t. The results indicated that there were significant differences between the relatively acculturated Jewish group and the Protestant group on the Block Design and on the Children's Embedded Figures Test, with the Protestant group outstanding in terms of high scores. These results also indicated that there was a significant difference between the relatively acculturated Jewish group and the relatively assimilated Jewish group on the Block Design, with the relatively assimilated Jewish group outstanding in terms of high score. There was no significant difference between these two groups on the Children's Embedded Figures Test.

The Protestant group scored significantly higher than the relatively assimilated Jewish group on the Children's Embedded Figures Test. There was no significant difference between these two groups on the Block Design.

Analysis of variance indicated no significant differences among the three groups on the Otis Quick-Scoring Mental Abilities Test. Further statistical analysis, utilizing Pearson Product Moment Correlation Coefficient computed between the Otis and the Block Design and between the Otis and the Children's Embedded Figures Test revealed that only a very small proportion of the variance in the Otis could be accounted for by an analytical field approach.

The sub-hypothesis that relative verbal ability was positively and significantly related to Jewish acculturation was tested by means of analysis of variance on the Vocabulary scores, used as a measure of verbal ability in this investigation. There was no significant difference among the three groups. Further statistical analysis, through intercorrelations, indicated that chronological age was highly correlated with Vocabulary scores. When chronological age was residualized from the Vocabulary scores, the relatively acculturated Jewish group achieved the highest mean score. However, there were no significant differences among the three groups on the residualized Vocabulary scores.

Supplementary analysis of the data, by means of intercorrelations between the measures for each group, indicated a significant difference between the Vocabulary-Block Design correlations for the relatively assimilated Jewish group and the Protestant group. This result was interpreted as

indicating that the relatively assimilated Jewish group was using verbal ability in what was essentially a perceptual task for the Protestant group.

Although the Block Design-CEFT correlations for both the Protestant and relatively assimilated Jewish groups were found to be significant, the correlation between these two measures was not found to be significantly different from zero in the relatively acculturated Jewish group. This was interpreted as indicating that the analytical field approach factor was operant to a negligible degree in the latter group's performance on these two tasks.

Conclusions

The results of the present study strongly indicate that relatively acculturated Jewish boys are significantly more field dependent than their Protestant peers. The results further indicate that relatively assimilated Jewish boys are more field dependent than their Protestant peers and that there may be a tendency within this group to compensate for the lack of perceptual ability by the use of verbal abilities in what are essentially perceptual situations.

That the results of the present study may not be necessarily limited to the specific groups utilized or limited to the specific geographical region in which this study was conducted may be indicated by the corroboration of these results by other studies. Direct corroboration may be found

in the Dershowitz (1) study. Indirect corroboration may be found in such peripheral studies as the Wendt and Burwell (5) and Levinson (2, 3, 4) findings.

Further research in this area is already underway. At the present time, a cross-cultural study of field dependence involving six cultures is being conducted by Price-Williams at Rice University.

CHAPTER BIBLIOGRAPHY

1. Dershowitz, Z., "Influence of Cultural Patterns on the Thinking of Children in Certain Ethnic Groups," unpublished doctoral dissertation, Department of Education, New York University, New York, 1966.
2. Levinson, B. M., "Cultural Pressure and WAIS Scatter in a Traditional Jewish Setting," Journal of Genetic Psychology, XCIII (September, 1958), 277-286.
3. _____, "Subcultural Values and I.Q. Stability," Journal of Genetic Psychology, XCVIII (February, 1961), 69-82.
4. _____, "Traditional Jewish Cultural Values and Performance on the Wechsler Tests," Journal of Educational Psychology, L (April, 1959), 177-181.
5. Wendt, R. A. and E. Burwell, "Test Performance of Jewish Day School Students," Journal of Genetic Psychology, CV (June, 1964), 99-103.

BIBLIOGRAPHY

Books

- Beck, Samuel J. and others, Rorschach's Test: I Basic Processes, New York, Grune & Stratton, Inc., 1961.
- Berelson, B. and G. A. Steiner, Human Behavior, New York, Harcourt, Brace & World, Inc., 1964.
- Bruner, J., "Personality Dynamics and the Process of Perceiving," Perception: An Approach to Personality, edited by R. B. Blake and G. V. Ramsey, New York, Ronald Press, 1961.
- Cohen, Albert K., Delinquent Boys, Glencoe, Illinois, The Free Press, 1951.
- Dennis, W., "Cultural and Developmental Factors in Perception," Perception: An Approach to Personality, edited by R. B. Blake and G. V. Ramsey, New York, Ronald Press, 1951.
- Glazer, N. and D. P. Maynihan, Beyond the Melting Pot, Cambridge, Massachusetts, The MIT Press and The Harvard University Press, 1963.
- Greenbrug, Don, How to be a Jewish Mother, Los Angeles, California, Price, Stern and Sloan, 1964.
- Karp, S. A. and N. L. Konstadt, Manual for the Children's Embedded Figures Test, Brooklyn, New York, Cognitive Tests, 1963.
- Kluckhohn, F. R. and F. L. Stradtbeck, Variations in Value Orientations, Evanston, Illinois, Row, Peterson and Company, 1961.
- Kretch, D., R. Crutchfield and E. Ballasky, Individual in Society, New York, McGraw Hill, 1962.
- Mandelbaum, D. G., "Change and Continuity in Jewish Life," The Jews, edited by M. Sklare, Glencoe, Illinois, The Free Press, 1958.
- Mead, Margaret, And Keep Your Powder Dry, New York, William Marrow & Co., 1942.

- Ostrar, G., "Is a Verbal Test Cross Cultural," Studies in Education, edited by A. M. Dushkin and C. Frankenstein, New York, Ronald Press, 1960.
- Otis, A., Otis Quick-Scoring Mental Abilities Tests: Manual of Directions for Alpha Test. New York, Harcourt, Brace and World, Inc., 1939.
- Sherman, G. B., The Jews Within American Society, Detroit, Michigan, Wayne State University Press, 1961.
- Strodtbeck, F. L., "Family Interaction, Values and Achievement," Talent and Society, edited by D. McClelland and others, New York, Man Nostrand, 1958.
- Weber, Max, The Protestant Ethic and the Spirit of Capitalism, translated by Talcott Parsons, New York, Scribner & Sons, 1948.
- Wechsler, David, WISC Manual, New York, The Psychological Corporation, 1949.
- Witkin, H. A. and others, Psychological Differentiation, New York, John Wiley and Sons, Inc., 1962.
- Witkin, H. A. and others, Personality Through Perception, New York, Harper & Brothers, 1954.
- Wolfenstein, Martha, "Two Types of Jewish Mothers," Childhood In Contemporary Cultures, edited by Margaret Mead and Martha Wolfenstein, Chicago, Illinois, The University of Chicago Press, 1955.
- Zbrowski, M., "The Place of Book Learning in Traditional Jewish Culture," Childhood in Contemporary Cultures, edited by Margaret Mead and Martha Wolfenstein, Chicago, Illinois, The University of Chicago Press, 1955.
- Zbrowski, M., and E. Herzog, Life is with People, New York, International Universities Press, 1952.

Articles

- Bleuler, M. and R. Bleuler, "Rorschach Ink-Blot Tests and Social Psychology," Character and Personality, IV (June, 1935), 99-114.
- Cohen, J., "The Factorial Structure of the WISC at Ages 7-6, 10-6 and 13-6," Journal of Consulting Psychology, XXIII, (June, 1959), 285-299.

- Cook, T. H., "The Application of the Rorschach Test to a Samoan Group," Rorschach Research Exchange, VI (September, 1942), 51-60.
- Elkind, D., R. Koegler and E. Go, "Field Dependence and Concept Formation," Perceptual and Motor Skills, XVII (January, 1963), 383-386.
- Frymer, J. R., "Aural Perceptions of Authoritarians in Different Cultural Situations," Journal of Experimental Education, XXVIII (March, 1959), 163-165.
- Goodenough, D. R. and C. J. Eagle, "A Modification of the Embedded Figures Test for Use with Young Children," Journal of Genetic Psychology, CIII (April, 1963), 67-74.
- Goodenough, D. R. and S. A. Karp, "Field Dependence and Intellectual Functioning," Journal of Abnormal and Social Psychology, LXIII (January, 1961), 241-246.
- Goodenough, F. L. and D. B. Harris, "Studies in the Psychology of Children's Drawings: II, 1928-1949," Psychological Bulletin, XLVII (September, 1950), 369-433.
- Gustafson, J., "Protestant Sociology of the Family," Religious Education, LII (May, 1957), 89-93.
- Hurvitz, N., "Sources of Middle-Class Values of American Jews," Social Forces, XXXVII (February, 1958), 117-123.
- Kaminetsky, J., "Evaluating the Program and Effectiveness of the All-Day Jewish School," Jewish Education, XXVII (February, 1956), 39-49.
- Konstadt, N. and E. Forman, "Field Dependence and External Directedness," Journal of Personality and Social Psychology, I (January, 1965), 490-493.
- Landes, R. and M. Zbrowski, "Hypotheses Concerning the Eastern European Jewish Family," Psychiatry, XIII (October, 1950) 447-464.
- Lawler, M., "Cultural Influence on Preference for Designs," Journal of Abnormal and Social Psychology, LI (April, 1955), 690-692.
- Levinson, B. M., "A Comparison of Performance of Bilingual and Monolingual Native Born Jewish Pre-School Children of Traditional Parentage in Four Intelligence Tests," Journal of Clinical Psychology, XV (November, 1959), 74-76.

- Levinson, B. M., "Cultural Pressure and WAIS Scatter in a Traditional Jewish Setting," Journal of Genetic Psychology, XCIII (September, 1958), 277-286.
- _____, "Subcultural Values and I.Q. Stability," Journal of Genetic Psychology, XCVIII (February, 1961), 69-82.
- _____, "Traditional Jewish Cultural Values and Performance on the Wechsler Tests," Journal of Educational Psychology, L (April, 1959), 177-181.
- Marlowe, D., "Some Psychological Correlates of Field Independence," Journal of Consulting Psychology, XXII (September, 1958), 334.
- Mason, L., "The Characterization of American Culture in Studies of Acculturation," American Anthropologist, LVII (June, 1955), 1264-1279.
- Peixrotta, H. E., "The Bender-Gestalt Motor Test as a Culture Free Test of Personality," Journal of Clinical Psychology, X (January, 1954), 369-372.
- Postman, L., "Witkin, H. A., Lewis, H. B., Hertzman, M., Machover, K., Meissner, P. B. and Wapner, S., Personality Through Perception," Psychological Bulletin, LII (September, 1955), 79-83.
- Sauna, V. D., "Social Science Research Relevant to American Jewish Education: Sixth Bibliographic Review," Jewish Education, XXXIV (May, 1964), 187-202.
- Schwitzgebel, R., "The Performance of Dutch and Zulu Adults on Selected Perceptual Tasks," Journal of Social Psychology, LVII (September, 1962), 73-77.
- Segall, M. H., D. T. Campbell and M. J. Herskovits, "Cultural Differences in the Perception of Geometric Illusions," Science, CXXXIX (March, 1963), 769-771.
- Strauss, M., "Mental Ability and Cultural Needs: A Psycho-cultural Interpretation of the Intelligence Test Performance of Ceylon University Entrants," American Sociological Review, XVI (December, 1951), 371-375.
- Torrance, W. and P. Meadows, "American Cultural Themes: An Analysis of Foreign Observer Literature," Sociology and Social Research, XLIII (April, 1958), 3-7.

- Wendt, R. A. and E. Burwell, "Test Performance of Jewish Day School Students," Journal of Genetic Psychology, CV (June, 1964), 99-103.
- Wertheim, J. and S. A. Mednick, "The Achievement Motive and Field Independence," Journal of Consulting Psychology, XXII (June, 1955), 38.
- Witkin, H. A., "Further Studies of Perception of the Upright When the Direction of the Force Acting on the Body is Changed," Journal of Experimental Psychology, XLII (January, 1962), 9-20.
- _____, "Individual Differences in Ease of Perception of Embedded Figures," Journal of Personality, XIX (May, 1950), 1-55.
- _____, "Perception of Body Position and the Position of the Visual Field," Psychological Monographs, LXIII (1949), whole No. 302.
- Wilkin, H. A. and S. E. Asch, "Studies in Space Orientation: IV. Perception of the Upright with Displaced Visual Fields," Journal of Experimental Psychology, XXXVIII (September, 1948), 762-782.
- Wolfenstein, Martha, "Trends in Infant Care," American Journal of Orthopsychiatry, XXIII (February, 1953), 120-130.
- Yank, K. S., H. Y. TZou and C. Y. Wu, "Rorschach Responses of Normal Chinese Adults," Journal of Social Psychology, LX (June, 1963), 175-186.

Public Documents

- Crutchfield, R. S., D. G. Woodworth and R. E. Albright, "Perceptual Performance and the Effective Person," Lackland AFB, Texas Personnel Laboratory Reports, 1958, WADC-TN-58-60, ASTIA Document #AD 151-039.

Unpublished Materials

- Bauman, G., "The Stability of the Individual's Mode of Perceiving and of Perception-Personality Relationships," unpublished doctoral dissertation, Department of Psychology, New York University, New York, 1951.

Dershowitz, Zachary, "Influence of Cultural Patterns on the Thinking of Children in Certain Ethnic Groups," unpublished doctoral dissertation, Department of Education, New York University, New York, 1966.

Woerner, M. and T. Levine, "A Preliminary Study of the Relation Between Perception and Thinking in Children," unpublished study, Department of Psychology, New York University, New York, 1960.