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THE RELATIONSHIP OF CULTURE VALUE ORIENTATION CHANGE
AND RORSCHACH INDICES OF PSYCHOLOGICAL DEVELOPMENT

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The relation of culture change to psychological stress was investigated in a sample of second generation Greek-Americans undergoing the acculturation process. The sample was subdivided into four sub-groups on the basis of sex and social class (lower class-middle class) and positioned on a continuum of progressive stages of acculturation. The relation of culture change to psychological stress was then examined in each group separately. An objective measure of culture change based on a theory of variations in value orientations and an objective measure of psychological stress based on genetic theory were employed. It was found that the position of a sub-group on the acculturation continuum alone was not related to the degree of stress evidenced in the psychological measure. It was rather the degree to which American value orientations were internalized by members of each sub-group that was related to stress. Intra-group correlations between the measure of culture change and the measure of psychological stress increased in magnitude along the sub-group continuum of progressive stages of acculturation.

The effect of culture change on the psychological organization of members of American ethnic groups undergoing the acculturation process has been investigated by Hallowell (1942), Spindler (1955), Abel and Hsu (1949), DeVos (1955), and Vogt (1951), among others. These investigators employed the Rorschach test to examine the personality structures of members of the same ethnic group who were at various stages of acculturation to the American core culture. The results of these studies are generally consistent on one major finding: the greater the acculturation, as determined by the different criteria

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employed, the more personality disturbance evidenced on the Rorschach test.

The criterion variables employed in previous studies to differentiate the states of acculturation experienced by members of the same ethnic groups have varied; generation, socioeconomic status, geographic location, religious affiliation, veteran status, and sex have been employed singly or in combination. Direct measurement of change through the use of an independent culture construct has not, however, been attempted by these investigators.

The collaborative work of Florence Kluckhohn and John Spiegel, in which the efforts of a clinical psychiatrist with a strong sociological orientation and a cultural anthropologist were combined, led to the development of a theoretical framework that could better order the complex interrelationship of ethnicity, family structure, and individual psychological functioning among sub-cultural groups in the process of adapting to American society. Kluckhohn's concept of "value orientation" and Spiegel's elaboration of the "social role" concept (Spiegel, 1954; Spiegel & Kluckhohn, 1954; Spiegel, 1956; Spiegel, 1957), were first applied in a comparative study of mental health and illness in Irish, Italian, and Old American families. In this research the interrelationship of ethnic value orientations, family social role structure and functioning, and individual organization, viewed from a psychoanalytic perspective, were examined (Spiegel, 1964; Spiegel, 1968). Their findings in this exploratory, descriptive study led to both a sharpening of their theoretical concepts and the readiness to test them in a more controlled objective study. The research reported here is based on data collected as part of that comprehensive study, which examines mental health and mental illness in Greek-American families undergoing the acculturation process.

The methodology developed to implement Kluckhohn and Spiegel's conceptual framework attempts empirically to examine three relationships: culture change conceptualized as shifts in value orientations, family equilibrium conceptualized in terms of social role structure and function, and individual psychological health viewed from a developmental, i. e., psychoanalytic perspective, in first and second generation members of Greek families. This formidable task was made immeasurably easier by the work of Kluckhohn and Strodbeck (1961). Here, not only Kluckhohn's highly developed value orientation theory was described, but a method for testing it empirically and statistical techniques of measurement were presented as well.

The salient feature of the value orientation construct, in addition to the obvious one of providing an independent theoretical framework for ordering the culture dimension lacking in most culture-personality research, is its provision for examining intergroup variations as well as intra-group variations in values. In contrast to static concepts such as "national character," "modal personality," etc., "value orientation" enables the researcher to order the wide range of variation in behavior patterns observed in all cultures while also providing for the determination of their dominance or modal patterns. The potential fruitfulness of employing this construct in the study of subcultural groups in relation to the core culture in which they live becomes immediately evident. The additional provision of a method for empirically testing this

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relationship makes it a compelling one.

Kluckhohn demonstrated the effectiveness of her method in successfully discriminating five different subcultural groups in the American Southwest on the basis of varying value orientation patterns (Kluckhohn & Strodtbeck, 1961). Their relative distance from American core value orientations was examined in relation to their varying degree of effective adaptation in a wide range of social behaviors encompassing economic, political, and educational spheres.

Our task in studying Greek-Americans centered on examining the relation of value orientation shifts from traditional Greek to core American patterns in first and second generation members of Greek-American families and the relationship of these shifts to mental health in individual members. Furthermore, we wanted to examine inter-generational variations among parents and children in these same families to determine how the nature of these variations related to interpersonal relationships in the family and to the mental health of individual family members.

In this main study we compared a sample of families (see below) in which a second generation member (son or daughter of immigrant parents) was hospitalized with a psychotic reaction with a matched group of families in which there was no history of psychopathology. We obtained from both groups independent measures of value orientations, family role structure and functioning and individual psychological organization. A monograph is currently in preparation describing in detail the methodology we employed and the extensive findings we obtained. The report presented here describes a sub-analysis of a part of the value orientation and Rorschach data we obtained from the second generation sons and daughters of both our sample groups.

In this report the analysis of the data was designed to focus directly on the degree of cultural change experienced by members of the same ethnic group through the use of the value orientation construct. Our intent is to illustrate the methodological rigor that this construct makes possible in cross-cultural research. Here the ordering of intra-group variations in value orientation preferences is shown to alter markedly the relationship between movement toward American core values and psychological stress as measured by the Rorschach. Concomitant use of social class and sex as criterion variables makes it possible to examine the degree of culture change within sub-groups of individuals differentiated on the basis of these two dimensions. These sub-groups, differentiated on the basis of social class and sex, can also be ordered on a continuum representing progressive stages of acculturation, as in previous studies. It then becomes possible to examine the relation of culture change and psychological organization within each sub-group separately and in relation to its position on a continuum of acculturation.

METHOD

Value Orientations

Value orientations are defined by Kluckhohn (1961) as "complex but

TABLE 1

VALUE ORIENTATION MODALITIES AND PREFERENCES: AN INTERPRETATIVE KEY
VALUE ORIENTATION PREFERENCES

Modalities	Preferences	
Activity	<p><u>Doing:</u> Emphasis is on activity measurable by standards conceived as external to the acting individual, i. e., achievement exemplified by American core culture.</p>	<p><u>Being:</u> Emphasis is on activity expressing what is conceived as given in the human personality, i. e., the spontaneous expression of impulses and desires as exemplified by Mexican rural society.</p>
Relational	<p><u>Individualism:</u> Individual goals are preferred to group goals; relationships are based on individual autonomy; reciprocal roles are based on recognition of the independence of interrelating members, exemplified by American core culture.</p>	<p><u>Collaterality:</u> Individual goals are subordinated to group goals; relationships are based on goals of the laterally-extended group; reciprocal roles are based on a horizontal, egalitarian dimension, exemplified by Italian extended family.</p>
Time	<p><u>Future:</u> Temporal focus is on the future; emphasis is on planning for change at points in time extending away from present into future, exemplified by American core culture.</p>	<p><u>Present:</u> Temporal focus is on the present; the past gets little attention; the future is seen as unpredictable, exemplified by Italian and Latin American rural societies.</p>
Man-nature	<p><u>Mastery over Nature:</u> Man is expected to overcome the natural forces and harness them to his purpose, as exemplified by American emphasis on technology to solve all problems.</p>	<p><u>Subjugation to Nature:</u> Man can do little to counteract the forces of nature to which he is subjugated as exemplified by Spanish rural society.</p> <p><u>Harmony with Nature:</u> Man's sense of wholeness is based on his continual communion with nature and with the supernatural, exemplified by Japanese and Navaho Indian societies.</p>

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definitely patterned (rank-ordered) principles, resulting from the transactional interplay of three analytically distinguishable elements of the evaluative process - the cognitive, the affective, and the directive elements... (p.4)" They serve as guides to behavior and have a directional function in the solution of problems which may be categorized by four basic modalities of experience: activity, relational, time, and man-nature relationships. (A brief definition for each of the three value orientations included in these four modalities is provided in Table 1.) Different cultural or subcultural groups may of course vary on the preferred direction they take in the solution of problems in these modalities. Three possible directions or orientations are proposed for each of the three modalities; a fourth modality comprises only two orientations. While each of these is present in all societies, it is the dominant pattern in the rank-ordering of preferences for each of these orientations which differentiates one culture from another. Furthermore, individuals within a particular culture vary among themselves in the degree to which their particular orientations approximate the dominant pattern.

In Table 2, the dominant patterns in each of the four value orientation areas that characterize the American middle-class culture are contrasted to those of the rural Greek society. The American profiles are based on the empirical findings of Kluckhohn (Kluckhohn & Strodtbeck, 1961), while the Greek profiles were constructed on the basis of existing anthropological and sociological studies of life in rural communities (Sanders, 1962; Friedl, 1962).

TABLE 2

DOMINANT VALUE ORIENTATION PROFILES IN
MIDDLE-CLASS AMERICAN AND TRADITIONAL GREEK CULTURE

Modality	Middle-Class American	Traditional Greek
Activity	Do > Be	Be > Do
Relational	Ind > Coll > Lin	Lin > Ind > Coll
Time	Fut > Pr > Pa	Pr > Pa > Fut
Man-Nature	Over > Subs > With	Subs > With > Over

Note. -Do = Doing; Be = Being; Ind = Individualistic; Lin = Lineal; Coll = Collateral; Over = Mastery-over-nature; Subs = Subjugation-to-nature; With = Harmony-with-nature.

³Kluckhohn includes a fifth modality, human nature, in her theoretical framework. This was excluded, however, in the statistical analysis of her data and so was not employed in the current study.

The Americanization Score

The Americanization score is a composite index of value orientation preferences determined for each subject from his responses to the 24 items of the Value Orientation Questionnaire.⁴ Each item in this schedule delineates a life situation in which a problem is posed that lends itself to three solutions that reflect the operation of three alternative value orientations. The subject is asked to choose his first and second preferences among the three solutions presented to him. A rank-ordering of value preferences for each item is thereby determined, the solution not chosen constituting the third or last preference for an item. The 24 items are grouped into the four modalities of human experience: activity, relational, time, and man-nature. Those items that fall in the activity area lend themselves to two alternative choices, not three as in the case of the other modalities.

The derivation of a single Americanization measure was arrived at through determining frequencies expressing the preferential patterning within pairs of alternatives in turn. When reference is made to dominant profiles characterizing American and Greek culture in Table 2, it can be seen that the following pairs of orientations - (Coll/Lin, Ind/Lin, Fut/Pa, Fut/Pr, Over/Subs, and Over/With) - discriminate between the Greek and American profiles, while Ind/Coll and Pr/Pa do not. A preference for the first over the second orientation in each of the six discriminating pairs indicates a choice in the direction of American values, while a preference for the second over the first orientation is a choice in the direction of Greek values. The frequency with which a subject's choice on the 24 items in the schedule indicated a preference in the American direction was computed as a mean percentage value. These values constitute the Americanization score.

Rorschach Indices of Genetic Level

The developmental scoring system employed in the analysis of Rorschach data is based on a maturational theoretical framework. Werner (1948) states the general principle that derives from this theoretical position: "Wherever development occurs, it proceeds from a state of relative globality and lack of differentiation, articulation, and hierarchic integration."

The use of the Rorschach technique for the ordering of perceptual behavior on a developmental continuum was originally described by Dworetzki (1939). Subsequent research by Friedman (1952), Frank (1951), and Siegel (1950) confirmed the relationship between cognitive-perceptual development or "maturity" of Rorschach test responses and independent behavioral indices of mental health. These studies were restricted to the use of location scores (whole, details,

⁴For a detailed description of this instrument see Kluckhohn and Strodtbeck, 1961, Chap. 3.

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etc.) in differentiating the developmental level of the groups that were investigated. Phillips (Phillips, Kaden & Waldman, 1959) extended the use of the genetic framework to include determinant scores (form, movement, etc.) as well.

In a factor analytic study of Rorschach developmental indices, Podell and Phillips (1959) differentiated clusters of scores corresponding to three levels of perceptual maturation. They include W, F and M. which are representative of the developmentally highest level; W-, W_V and I. P. T. representative of developmentally low perception; and F_X , a form dominance index comprised of responses in which form level is adequate. The two indices related to high and low levels of cognitive-perceptual functioning were employed in the present study.

The Rorschach High Index as applied in the present study is comprised of the following scores: W_i (W integrative: the whole blot is perceived as composed of independently perceived parts organized into an integrated totality of good form quality), $M+$ (a human movement response in which the percept reflects good form quality), F_i (functional integrative: two or more details are perceived independently and as having a functional relationship to each other as parts of an integrated unit), and the index $W_i - (W-)$. The W- response is a whole response of poor form quality which indicates an amorphous or diffuse percept where little attention is given to part relations and to perceptions of contours.

The presence in a Rorschach protocol of one or more of the W_i and $M+$ scores and the presence of two or more F_i scores each receives a weight of one. In determining the value for $W_i - (W-)$ the weighted measures are employed; that is, presence or absence of one or more of the W_i and W- scores. This procedure yields three possible values for $W_i - (W-)$: -1, 0, or +1. The weighted value for each of the four signs - W_i , $M+$, F_i , and $W_i - (W-)$ - are added, and a total score for the high index is derived for each subject. This can range from -1 to +4.

The Rorschach Low Index is comprised of the following scores: W_V , (W vague: the whole response indicates a vague percept which corresponds minimally to the form properties of the blot) and the I. P. T. (the index of primitive thought comprised of percepts which indicate confabulated, fabulized and contaminated thinking). In the application of this index, the presence in a Rorschach protocol of one or more of each of the three signs W-, W_V , and I. P. T. receives a weight of one. Therefore, the highest weighted value that a subject can receive is three, indicating the presence of one or more of three signs, the lowest, of course, is zero - that is, absence of any of the scores constituting the signs of the index.

HYPOTHESES

These theoretical considerations provide a basis for hypothesizing what the relationship between culture change and genetic level of psychological functioning in a given sample might be. Adoption of American value orientations

is adaptive in the sense of reflecting identification with the core culture in which the individual is now functioning. We would expect, then, that shift toward American value orientations would be related to genetically late perceptual processes as reflected in the presence of Rorschach scores comprising the High Index. Adoption of American value orientations, however, also involves a change in those cultural values transmitted in the home during the early socialization process by foreign-born Greek parents. This change would be expected to be potentially disorganizing the sense of the disruption of cognitive, affective, and evaluative modes of behavior patterned by Greek value orientations. We would also expect, therefore, that the psychological stress incumbent in this shift will be reflected in those more primitive, genetically early perceptual processes as reflected in the presence of Rorschach scores comprising the Low Index.

Phillips (1968) has pointed out that the relationship of scoring on the developmentally late index to scoring on the developmentally early index differentiates the relative degree of psychological organization that characterizes individuals. It is this relationship that determines the degree to which an individual is capable of subordinating genetically early, primitive processes to the dominance of genetically late integrative ones in the process of culture change. This consideration guided the formulation of specific hypotheses.

In the studies cited above, it was found that the relation of psychological stress to acculturation is stronger in men than in women. In terms of the present study the adoption of American value orientations in men was hypothesized to be correlated negatively with the presence of Rorschach signs comprising the High Index and positively with the presence of Rorschach signs comprising of the Low Index. The obverse relationship was hypothesized to hold for women. In other words, the balance of High to Low genetic developmental level scoring on the Rorschach in men was hypothesized to reflect more intrapsychic disturbance than in women correlative to their adoption of American value orientations, as measured by the Americanization score.

It was also hypothesized that, among those subjects of the second generation sample who had moved into middle-class status, the correlation of the Americanization measure and the High Rorschach Index would be higher than among those who remained fixed in the lower class. The assumption here is that the upward social mobility is predicated on the potential for higher-level integrative cognitive perceptual functioning. There is also evidence, however, that upward social mobility is at the same time a source of psychological stress. It was predicted, therefore, that the correlation between the Americanization measure and scoring on both the Rorschach High and Rorschach Low indices would be higher among middle class subjects than among their lower class counterparts. It was also predicted that among the middle class subjects the correlation of the Americanization measure with the High Rorschach Index on the one hand and the Low Rorschach Index on the other would reflect a precarious balance between "health" and "pathology."

The consideration reviewed above for employing sex and class as criterion variables suggests a classificatory scheme for ordering subjects on an

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acculturation continuum. Lower-class females comprise a sub-group representative of one end of this continuum - those individuals who are expected to have undergone the least amount of acculturation. The upwardly mobile, middle-class males compose a sub-group that can be placed on the opposite end of this continuum. They are the individuals in whom the most acculturation is expected to have taken place. Lower-class males and middle-class females fall in intermediary positions between these two extremes.

The particular order in which the middle sub-groups are placed - that is, in the second or third position - depends on whether sex or class is hypothesized to be the stronger factor related to acculturation. In view of the fact that the social position of females in the present sample was determined on the basis of the education and occupation of their husbands (with the exception of three unmarried subjects), it was decided to order them in the second position on this continuum - before lower-class males. This latter group was expected to be more directly involved in the acculturation process, principally in the occupational sphere, than the middle-class females, who presumably would be less affected by the cultural dictates for adaption in this crucial area.

The position of each of the four sub-groups on this continuum is hypothesized to be related to the relative degree of acculturation stress experience. The relation of psychological stress to culture change reflected in the correlation of the Americanization measure with the Rorschach High and Rorschach Low Indices is expected to increase with the position a sub-group holds on the continuum of progressive degrees of acculturation.

PROCEDURE

The Value Orientation Schedule was individually administered to each subject by social workers, following the instructions set forth by Kluckhohn (Kluckhohn & Strodtbeck, 1961). The Rorschach test was administered individually by clinical psychologists in accordance with a standardized method described by Phillips (1965). This method varies from the usual clinical administration in that the tester limits himself to three questions. "Where do you see _____?" "Why does it look _____ to you?" "Is there anything else about the blot that makes it look like _____?"

The Rorschach protocols were scored according to the Worcester Scoring Manual (Phillips, 1965). Inter-scorer reliability resulting from use of this manual is very high--on the order of .90. Two highly skilled scorers, members of Phillips' staff, who had no knowledge of the subjects or the purpose of the study, scored the protocols.

THE SAMPLE

In the main study, the total sample was comprised of 34 families. The first-generation Greek parents were born and raised in rural areas of Greece and Asia Minor and emigrated to the United States between 1900 and 1920, the period of peak immigration to the United States.

Their second-generation children were born and raised in the Boston area. One half of the sample, designated the "with-patient" group, was selected so as to include a second-generation member who was hospitalized with a psychosis; the second half, designated the "without-patient" group, was without a history of psychopathology in any family member. The with-patient family group was selected by first locating, in state and V. A. hospitals servicing the Boston area, 17 second-generation Greek-American psychotic patients whose diagnoses did not include organic factors. The "index" patient member in the with-patient family group was matched with a second-generation Greek-American in the without-patient group for age, military service, and socioeconomic status of their fathers. All the fathers of all the patients fell into category V on Hollingshead's two-factor index for education and occupation (1958). The parental generation, then, in both with- and without-patient groups falls into the lower-class classification.

The sample included in the present analysis is comprised of the second-generation members of the with-patient families--that is, the brothers and sisters of the patient, who themselves are free of manifest psychopathology - and their counterparts in the without-patient family group, who are also free of manifest psychopathology. The total sample was comprised of 52 males and 45 female subjects. For males, who ranged in age from 27 to 52, the occupation held and educational level attained at the point at which the study was conducted were used in computing their social position. In the case of females, who ranged in age from 25 to 58, education and occupation of spouses of the married women were used in computing social position. Single women, of whom there were three in the sample, were ranked by their own achieved education and occupational level.

RESULTS

It is the intra-group relationship between the Americanization score and High and Low Rorschach Indices in the four groups positioned on an acculturation continuum that we are primarily interested in examining. Previous studies have been limited to a between-groups comparison on the Rorschach measures they employed. While this relationship will also be considered, it cannot answer the major question that is posed: i. e., how does culture change within each group, as determined by the Americanization measures, relate to the High and Low Rorschach Indices of cognitive-perceptual development? In fact, as will be seen below, these two methods of analysis produce results that are inconsistent.

Three variables that could affect the essential intra-group intercorrelation of these measures were controlled for this analysis. These were 1) the correlation of the High and Low Index; 2) R, the total number of responses; and 3) membership in families with a patient and families without a patient.

In Table 3 the results of four separate analyses are presented. The first presented is a first-order correlation in which none of the three variables were controlled. The remaining three are partial correlations controlling for the

TABLE 3
THE RELATIONSHIP OF HIGH AND LOW RORSCHACH INDICES
TO AMERICANIZATION SCORE

Indices	Sub-groups			
	Lower-class Females N=26	Middle-class Females N=19	Lower-class Males N=28	Middle-class Males N=24
	First order correlations:			
High	.374**	.384**	-.313*	-.456***
Low	-.260	.136	.293	.451***
Partial correlations controlling for High and Low Index intercorrelation:				
High	.409***	.369*	-.337*	.375*
Low	-.313*	.075	.319*	.369
Partial correlations controlling for High and Low Index intercorrelation and total Rorschach responses:				
High	.579***	.355*	-.339*	.367*
Low	-.507***	.069	.314	.371*
Partial correlations controlling for High and Low Index intercorrelations, total Rorschach responses, and family membership:				
High	.575***	.280	-.346*	.406
Low	-.508***	.198	.309*	.428**

*p < .10

**p < .05

***p < .02

three variables. It is evident that the essential between group differences were not substantially changed when the three variables were controlled.

On the High Index, the lower-class females produce the highest correlation coefficient, .575. Among lower-class females, who are positioned at the least acculturated point on the acculturation continuum, the adoption of American value orientations is related to scoring on the developmentally High Index. The highly significant negative correlation between the Americanization score and the Low Index indicates that movement in the direction of adopting American value orientations is also related to the absence of cognitive-perceptual disturbance. It is also clear that genetically late cognitive-perceptual modes are dominant over genetically earlier ones in this least acculturated group correlative to their movement toward acculturation. In other words, an optimally healthy relationship obtains between movement toward American culture and cognitive-perceptual functioning. This finding is consistent with the prediction that the least acculturated group would evidence the least amount of stress corollary to their adoption of American value orientation.

In group 2, the middle-class females' Americanization score is correlated positively with the High Index, although not significantly ($r=.28$). Scoring on the Low Index is also positively correlated with Americanization, but the correlation coefficient of .19 evidences a weak relationship. The obtained values are suggestive of a dominance of genetically late cognitive perceptual modes over genetically earlier ones in middle-class females correlative to their adoption of American value orientations.

Among the group positioned in the third place on the acculturation continuum, the lower-class males, a negative correlation of $-.34$ obtains between the High Index and Americanization, while the Low Index is positively correlated with adoption of American value orientations. Among lower-class males, movement in the direction of Americanization is related to a decrease in genetically late cognitive-perceptual modes associated with health, and an increase in immature responses is evident. In other words, there is a maximally disruptive relationship between Americanization and psychological health in this group.

In the fourth group on the continuum, the middle-class males, a positive correlation between Americanization and both High and Low Indices obtains. With regard to this group, in which it was hypothesized on the basis of sex and class that the most acculturation had taken place, we find that movement in the Americanization direction is related to the presence of genetically late cognitive-perceptual functioning. This is paralleled by a strong relationship between Americanization and scoring with genetically early perceptual responses. Hence, balance of genetically late to genetically early perceptual functioning appears to be precarious in subjects as they move toward American values, as was predicted.

The r values obtained in the analysis of the intercorrelation between the Americanization score and the Low Rorschach Index show a progressive increase in magnitude for the position a sub-group holds on the continuum of acculturation. A correlative decrease in the magnitude of the High Index-

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Americanization intercorrelation values is evident in the sub-groups ordered in the first three positions on the continuum. This relationship does not hold up for the fourth group, the middle-class males. The predictions made above regarding the relationship of culture change to psychological stress are clearly upheld in the first three groups. We had also predicted that the relationship of the Americanization score to the High and Low Rorschach Indices would show a precarious balance between "health" and "pathology" in the fourth group, the middle-class males.

The results of an analysis of variance of the means of the Americanization score and the High and Low Rorschach Indices for the four groups are found in Table 4.

Mean values on the Americanization score differentiate the four groups at a .10 level of significance. The means of women of both lower and middle classes (57.88 and 61.79) are lower than those of the males (64.00 and 62.70). This finding is consistent with the prediction that women adopt American value orientations at a slower rate than men. The p values obtained in the comparison of the means of the two groups at a time indicate that it is primarily the difference obtaining between the lower-class females and males of both the lower ($p < .01$) and middle classes ($p < .10$) that accounts for the variance.

A highly significant value ($p < .02$) obtains in the comparison of the mean Rorschach High Index in the four groups: Groups 2 and 3 on the acculturation continuum, the middle-class females and the lower-class males, have higher mean values than the two groups on the two ends of the continuum, the lower-class females and middle-class males. The t tests for the comparison of the means of two groups at a time indicate that it is primarily the difference between the middle-class males, on the one hand, and the lower-class males ($p < .006$) and middle-class females ($p < .01$) that accounts for the variance in the four groups.

The analysis of variance of the means of the four groups on the Rorschach Low Index yielded an insignificant F ratio (.24). The two lower-class groups have higher means on this measure than the two middle-class groups.

The magnitude of the mean High Index values for the four groups, relative to their position on the acculturation continuum, is not consistent with the predictions made. The middle-class males who are positioned in the most acculturated position on the continuum have the lowest mean value on this measure (1.46). It was expected that this most acculturated group would show the highest mean value on the High Index because upward social mobility is related to the presence of developmentally advanced integrative cognitive-perceptual modes which are involved in effective adaptation. What becomes evident in the intercorrelational analysis is that only those middle-class males who adopt core American value orientations are characterized by genetically high cognitive-perceptual modes. Upward social mobility in itself, in fact, without the internalization of American value orientations, is associated with a relative low presence of Rorschach signs indicative of healthy (i.e., integrative cognitive-perceptual) modes in this population. It is the comparison of the two methods of analysis that makes this relationship evident.

TABLE 4

MEAN AMERICANIZATION SCORES AND SELECTED RORSCHACH INDICES BY SEX AND SOCIAL CLASS

Measures	Subgroup				F-Ratio
	Lower-class Females	Middle-class Females	Lower-class Males	Middle-class Males	
	N=26	N=19	N=28	N=24	
Americanization score	57.89	61.79	64.00	62.71	2.07*
High Rorschach Index	1.77	2.42	2.46	1.46	3.24**
Low Rorschach Index	.85	.74	.86	.71	.24
Total Rorschach responses	48.39	52.32	50.75	52.83	.91
	p values obtained in t tests for the comparison of means of two groups at a time				
	<u>1 - 2</u>	<u>2 - 4</u>	<u>2 - 3</u>	<u>1 - 4</u>	<u>1 - 3</u> <u>3 - 4</u>
Americanization score	.19	1.0	.37	.10	.01 .61
High Rorschach Index	.14	.01	1.0	.26	.09 .006
Low Rorschach Index	.62	1.0	.60	.51	1.0 .49

*p < .10

**p < .05

Lower-class females obtained the next lowest mean value (1.77) on the High Index. This comparatively low value is congruent with the lowest position this group holds on the acculturation continuum. However, the intercorrelational analysis indicates that, within this group, adoption of American value orientations is related to the presence of genetically late Rorschach signs and the absence of genetically early ones. While the group as a whole obtains a low mean value on the High Index and relatively high mean value on the Low Index, the introduction of the Americanization measure in the intercorrelational analysis places these women in a different relationship to the remaining three groups. In this group where acculturation stress is the least of the four groups, we see that the adoption of American values is related to an optimally healthy personality organization as revealed in the Rorschach signs.

In the second group on the acculturation continuum, middle-class females, the mean value of 2.42 on the High Index points to the comparatively high presence of developmentally mature Rorschach signs. This is the only group where the intercorrelation analysis results in r values for the High and Low Rorschach Indices and the Americanization measure that are consistent with the mean values for position on the acculturation continuum. In this group, where the mean Rorschach High value is high and the Rorschach Low value low, we see a corresponding positive correlation with the Low Index.

The lower-class male group obtained the highest mean value on the High Rorschach Index: 2.46. Within this group, however, the adoption of American

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values is negatively correlated with the presence of genetically late Rorschach signs, as the intercorrelational value of $-.34$ indicates. Furthermore, the positive correlation of the Americanization score with the Low Index indicates that the adoption of core American values is related also to the presence of developmentally low Rorschach signs. Lower-class males who adopt American values are subject to the greatest amount of psychological stress.

SUMMARY AND CONCLUSIONS

The results of the present study point to the complex interrelationship of social class, sex, and culture change as they relate to psychological stress. The usual procedure of differentiating groups by various indices of acculturation and comparing them on measures of psychological stress treated as dependent variables tends to obscure this complexity. The additional technique of analyzing group mean measures of social class and culture change for interaction effects does not make it possible to examine the intra-group variations that reveal this complexity.

Findings of previous researchers indicating that the relation of psychological stress to acculturation is more acute in men than in women is supported in this study. Our findings, however, point to additional dimensions in this association. Among lower-class females the internalization of American core values is associated with psychological health, while among lower-class males the obverse is found. Lower-class males who adopt the American core value orientations, that is those of the middle class, evidence signs of psychological disequilibrium on the Rorschach.

One can infer that "Americanization" among lower-class second generation Greek-American women is less stressful, since the implementation of core American value orientations is left principally to their spouses as wage earners and as principal representatives of the family in "American" society. The lower-class male subjects in our sample on the other hand, are faced with these same social contingencies facing middle-class males. It would appear that the adoption of American value orientations among lower-class Greek-Americans sharpens the disparity between their actual social status and their adopted value orientations. To have internalized orientations that place high value on achievement, on future planning, on overcoming external obstacles to attainment, while at the same time remaining fixed in the lower-class, that is failing to progress socially to the middle-class, must indeed be a source of continuing conflict.

The association between adoption of American core value orientations and psychological health is not as strong in middle-class women as it is in their counterparts in the lower-class. Middle-class status among women is accompanied by greater involvement in American culture in a wide range of activities. This involvement and the culture change on which it is predicated entails stresses that lower-class women in their more delimited environment are spared. Furthermore, it is again the spouses of middle-class women who bear the major brunt of acculturation so that while their coping tasks are greater, in American core value terms, than those of lower-class women, they are less

encompassing than those of middle-class males.

Among Greek-American males who have achieved middle-class status, those who are the most "Americanized" evidence a precarious psychological balance. The drive to achieve and to maintain a high level of work performance appears to be a continuing source of strain. They obviously possess greater psychological resources, but these are being sorely tested by the stresses they experience by the culture change incumbent on "making it" in American society.

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