

TRADITIONAL VALUES AND CONTEMPORARY
ACHIEVEMENT OF JAPANESE AMERICAN-PUPILS

by

Audrey James Schwartz

CSE Report No. 65

December 1970

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, California

PREFACE

Educational institutions are confronted with pressures and demands for changes which range over the entire spectra of structure and activity. Although demands have varied, two common themes have been those relating to the absolute level of academic achievement attained by all pupils and to the levels and kinds of achievement attained by selected subpopulations of pupils.

The introduction of new educational programs as part of a growing response to these demands raises important evaluative questions: which of the programs are effective; how can differences in the effectiveness of programs be explained; what are the interactions between these programs and the traditional curriculum; what attitudinal changes result; what are the relationships between these new programs and changes in the functions performed by educational institutions?

Adequate evaluation of educational programs requires a broad overview of the educational institutions in which they are lodged and the study of the interaction of the subsidiary units. Evaluation must treat the effect of programs on all aspects of the institution, including not only immediate effectiveness but also impact on personnel, social climate, and the values and attitudes of individual pupils as well. That is to say, evaluation research should examine both the specific and general effects of educational programs and should furnish an adequate description not only of the extent to which the programs attain the stated objectives, but also other unintended and unplanned effects.

Because competent evaluation requires that programs be judged on their affective as well as their cognitive outcomes, pupil value orientations enter into the design of evaluation research as dependent

variables. The practical implication of including values in the study, design becomes clearer as more is learned about the relationships between value orientations and academic achievement. Value orientations are a potentially significant source of data-input for decisions relating to the modification and retention of educational programs, and programs that foster value orientations which are shown to be favorable for academic achievement are, for this purpose, more effective than programs which do not.

Value orientations can further contribute to evaluation research in the capacity of control variables. They can assist in the description of circumstances under which educational programs bring about the desired outcome and, further, they can assist with the explanation of why planned programs produce differential effects for different pupils. A topic of current relevance to the planning of educational programs is the correlation of their cognitive outcomes with values, ethnicity, and socioeconomic status.

The present research is concerned with the value orientations of Japanese-American pupils and compares that data with the value orientations of Anglo pupils. It is one of a series of studies sponsored by the Center for the Study of Evaluation dealing with the relationships between values and achievement for pupils from different ethnic and socioeconomic backgrounds. Analyses of Mexican-American and Anglo pupils have been reported earlier (See Schwartz, 1969).

The research indicates that despite the variations in value orientations within each pupil group, the values of pupils from the same ethnic and socioeconomic subpopulation are more similar to each other than they are to the values of white collar Anglos or "middle class" Americans. The studies also suggest that few orientations lead to the achievement of all subpopulations;

the most notable of these orientations is "Faith in Human Nature" or generalized trust in one's fellow man. It also seems clear that values themselves interact and create a general orientation which in turn affects achievement, and the cluster of value orientations that are positive for achievement differs somewhat among subpopulations.

The suggested implication of these general findings for evaluative research is that planned educational programs will not produce the same effect on each pupil, even when measured aptitude is controlled. Variations in the socialization experienced by pupils from different home environments cause variations in their affective development. This in turn is related to their academic achievement, to the specific value orientations leading to achievement and, ultimately, to the kind of classroom social climate in which they can best achieve.

Americans of Japanese ancestry--who comprise only one-fourth of one percent of the population--rank higher than any other physically identifiable subgroup on positive attributes like education and income, and lowest on negative attributes like unemployment, crime, and delinquency. With particular reference to education, in California, the home of 34 percent of Japanese-Americans, both Japanese-American men and women rank first of all major racial and ethnic groups in amount of formal schooling. In Los Angeles County, the home of more than half of the state's Japanese-Americans, the median completed school year is 12.4 in contrast with a median of 12 for the total population (California Department of Industrial Relations 1965, p. 26).

This record in education is qualitative as well as quantitative. As discussed later, comparisons of objective test scores for Los Angeles City public school pupils show that the performance of Japanese-Americans is considerably higher than that of other minority groups and, in all but one instance, higher than Anglos (Table 1). That academic achievement is relatively high for Japanese-Americans in other parts of the country as well is suggested by data from the U. S. Office of Education's report on "Equality of Educational Opportunity" (1966). In that survey, the median percentile scores for the twelfth grade nation-wide sample of combined Oriental pupils are 48.8 in reading comprehension and 51.3 in mathematics--both higher than scores of other minority groups.¹

¹These figures are below the national Anglo medians of 52.1 for reading and 51.8 for mathematics, a qualification perhaps explained by the study's failure to treat Japanese-Americans separately from other Oriental-Americans.

In short, the educational attainment of Japanese-Americans, both in quantity and quality, has been outstanding in recent years. This fact, especially in view of earlier, less glowing reports of their scholastic performance (Darsie, 1926; Portenier, 1947; Pusey, 1945), has stimulated a variety of explanations centering largely on cultural values.

There is little consensus, however, on which cultural values--Japanese or American--are responsible for the achievement of contemporary Japanese-Americans. One recent attempt to account for the successful adaptation of Japanese-Americans credits acculturation to middle class American values:

If, however, successful adaptation to the larger society consists mainly in acculturation, measured by the ability of a group to share and follow the values, goals, and expected behaviors of the majority, then the Japanese-American group has been very successful. Japanese-American values, skills, attitudes, and behavior apparently do not differ markedly from those of the average American. 'Scratch a Japanese American and find a white Anglo-Saxon Protestant' is a generally accurate statement. (Kitano, 1969, p. 3).

The acquisition of some selected middle class American values by Japanese-Americans has been documented by empirical study (Arkoff, 1959; Babcock & Caudill, 1958; Caudill & De Vos, 1966; Iga, 1959; and others).

A contrary view supports the centrality of traditional Japanese values to Japanese-American achievement:

It is one of the major tenets of this report that while the overt behavior of the Nisei may, in many situations, be indistinguishable from the behavior of the white middle class, this behavior arises in considerable part from a Japanese system of values and personality structure. (Caudill, 1952, p. 29).

These traditional values, it is generally agreed, include orientation toward the family unit in its nuclear and extended forms, subordination of the individual to the collectivity, sense of duty, reliance on order and hierarchy, respect for authority, and rational means to attain long-range goals (Benedict, 1946; Broom & Kitsuse, 1956; Caudill, 1952; De Vos, 1965; Iga, 1957; Kitano, 1969; Parsons, 1949).

The inconsistency in these two conclusions arises from the differences that can be drawn between acculturation, that is the internalization of the values of an alien culture on the one hand, and socialization or the learning of norms that are specific to a social situation on the other. Values are "conceptions of desirable states of affairs that are utilized in selective conduct as criteria for preference or choice or as justifications for proposed or actual behavior" (Williams, 1967, p. 23). While closely related to social norms, they are not the same; "Norms are the more specific, concrete, situation-bound specifications; values are the criteria by which norms themselves may be and are judged" (ibid.).

The first explanation of achievement holds that Japanese-Americans have internalized many of the values of the middle class and that they, in fact, utilize the same criteria in evaluating action; the second explanation is more concerned with traditional Japanese values and with the acquisition by Japanese-Americans of the social knowledge to participate successfully in American middle class institutions.

The distinction between socialization to the norms of American institutions and acculturation to American middle class values can be justified in the instance of Japanese-Americans by the fact that their early socialization--and thus socialization most resistant to change--usually takes place within structures which are parallel rather than identical to those of the American

middle class. As members of a distinct minority group, the socialization of young Japanese-American children is circumscribed by the ethnic community "which both protects and impedes the individuals within it" (Broom & Kitsuse, 1955). Ethnic socialization anticipates the child's eventual participation in the systems of the larger society in that it transmits the minority group's perception of the larger society's operating norms. However, it is unlikely that this minority group can equally perceive and transmit the value criteria by which these norms are judged. The point to be made here is that Japanese-Americans apply their knowledge of appropriate behavior within Anglo institutions, while retaining their traditional behavior patterns and values within the ethnic community.

The empirical determination of the relative importance of traditional Japanese values and values of the American middle class to the educational achievement of Japanese-American pupils requires knowledge of (a) the extent to which traditional values are currently held by pupils of Japanese ancestry, (b) the extent to which traditional values are similar to those of Anglo pupils, and (c) the relationships between individually held values and academic success for both Japanese-American and Anglo pupils.

The thesis of this paper is that the success of Japanese-American public school pupils depends more on the value orientations that differentiate the two groups than upon the value orientations held in common. The acculturation that has taken place thus far does not adequately account for achievement. Value differences, related to the orientation of the individual toward the social system, persist; these value orientations--which more nearly approximate the values institutionalized in the formal educational system than do those of middle class Americans--furnish the best explanation for the comparatively high achievement of Japanese-Americans.

What follows is a description of research findings addressed to these

issues. First is a description of the research design including the Japanese-American sample and the variables of prime interest; second is a discussion of educational achievement in the Japanese-American community; next is a comparison of the value orientations of Japanese-American and Anglo pupils and the relationships of these orientations to academic achievement; and finally, a discussion of the findings.

RESEARCH DESIGN

Data for this analysis were obtained in 1966 from a survey of 2200 pupils enrolled in the sixth, ninth, and twelfth grades of 23 Los Angeles City schools. A purposive, non-probability sampling technique was used to select schools with varying racial, ethnic, and socioeconomic composition, and quota sampling of state-mandated courses (in which there was no "ability grouping") was used within each school. Subsampling within the classroom was not permitted. Of the obtained sample, 254 pupils were classified by visual inspection and by surname identification as Japanese-American. All of these pupils were enrolled in racially mixed schools.²

²The larger ethnic enclaves in Los Angeles were destroyed by the evacuation of Japanese in 1942 and the subsequent relocation created smaller areas of ethnic concentration. Thus Japanese-American pupils usually attend integrated schools. There are, however, several predominantly Japanese elementary schools, one of which is included in the sample. For details of the sampling design and complete descriptions of the schools sampled and of the obtained sample see Schwartz (1967, 1969).

Information about family background, educational and occupational aspirations, educational plans, and value orientations was obtained from pupils responses to a printed questionnaire presented by research personnel in regularly scheduled class periods. Official achievement records were made available for 85 percent of the Japanese-American sample--those whose parents sent their written approval to the school.

About half of the Japanese-American respondents were in the last year of high school (12th grade), and the remainder divided between the last year of junior high (9th grade) and the last year of elementary school (6th grade). Pupils from blue collar and white collar homes are evenly represented in the secondary school sample, although there is over representation of blue collar elementary school pupils (Table 2). The educational level of parents is high--about 60 percent of the Japanese-American pupils report that both mothers and fathers have graduated from high school and, of that number, about a third of the mothers and half of the fathers have attended college (Table 3); all of which suggests some status inconsistency between the educational and occupational attainments of Japanese-Americans in the Los Angeles area.³

³The correspondence between social status measured by education and by income is contaminated by discriminatory practices against minority populations. Though the Japanese in California have the most years of education according to U. S. Census data, they rank second to Anglos in annual median income.

In the interest of clarity, socioeconomic controls for Japanese-American pupils have been abandoned, as a comparison of pupils from blue and white collar homes on a number of variables including parents' educational level, educational performance, value orientations, and the relationship between value orientations and achievement showed no large or significant differences. For some selected comparisons, in which socioeconomic status is relevant, the distinction between blue and white collar Anglo pupils is retained.

As used here, the term value orientation refers to the various emotional rather than rational outlooks of the pupils. This concept is sometimes referred to by terms like attitudes, beliefs, dispositions, and feelings; the unifying characteristic is that each involves individual sentiments or affect more than cognitive processes. This is not to say that the relationship between the two can be completely severed, but the distinction is useful for analytical purposes. The value orientations treated here are those for which theory and previous research suggest a relationship to school achievement (Brim, 1954; Brookover, 1962; Central Advisory Council for Education, 1967; Kahl, 1953; Rosen, 1956; Rosenberg, 1965; Schwartz, 1967, 1969; Straus, 1962; U.S. Office of Education, 1966). The variables are divided into four groups according to the functions they are expected to perform in the attainment of academic success:

Group one has to do with the goals toward which the individual strives. These include Occupational Aspirations, Educational Aspirations and Plans, Occupational Rewards (the importance the individual places on extrinsic rewards like power, prestige, and security in his occupational choice), and Idealized School Goals (the ends the pupil believes school ought

to help him attain regardless of whether it does or not).

Group two is concerned with activities appropriate for goal attainment. These variables include Instrumental Orientation (the pupil's evaluation of the utility of going to school now for future benefit), Expressive Orientation (the extent to which school attendance affords the pupil pleasure), and Formal School Compliance (the decisions the pupil says he would make if confronted with choices between conflicting universalistic school expectations and peer loyalties and his unquestioned acceptance of the teacher's authority).

Group three treats the individual's perception of the feasibility of attaining his goals. These include Self-Esteem (the individual's evaluation of himself in general and in relation to others whom he knows), Faith in Human Nature (the attitude of the pupil toward people regardless of his personal knowledge of them), and the Futuristic Orientation (the belief that the individual can exercise control over his environment and thereby affect his own destiny).

Group four is related to the mode and intensity of individual interpersonal relations, that is, whether the individual is inclined to take action without approval of others. The two areas explored are Orientation toward Family Authority (the legitimacy of parental control over pupil activity) and Independence from Peers (the sensitivity of the pupil to opinions of his age-mates and their effect on his own activities).

Value orientation variables for secondary school pupils were created by combining responses to the relevant questionnaire items (each with four alternatives ranging from "strongly agree" to "strongly disagree") into scales and indices. Scalogram procedures were used wherever possible (Guttman, 1950). For two variables--with Coefficients of Reproducibility below the conventional .89 acceptance level--items were combined into indices rather than scales, and the index score tells the number of positive responses

but implies nothing about the ordering of items or the unidimensionality of the value orientation. Each value orientation variable, composed of the combined items, was then separated into categories of "high" and "low" at the point that most evenly divides the entire sample; the "high" category is expected to be favorable for academic achievement.

Value orientation variables for elementary school pupils were created from responses to single items selected for their discriminatory power in the value orientations of secondary school pupils. These single items were also dichotomized into "high" and "low" at the point that most evenly divides the entire elementary school sample. Zero-order correlations among the value orientation variables are sufficiently low to insure statistical independence. They are presented for the complete secondary school sample in Table 4.

EDUCATIONAL ACHIEVEMENT IN THE JAPANESE-AMERICAN COMMUNITY

From all accounts the Issei came to the U.S. with a high regard for the instrumental value of education--a regard that persists in contemporary Japanese-American culture. It had been customary for the 19th Century Japanese peasant (prohibited from dividing his land holdings) to give his property to the oldest son and to compensate other children with gifts of education. It was also common for younger sons either to migrate to the Japanese cities for formal schooling in order to compete for employment as civil servants and as technical and administrative personnel in the newly

developing industries, (Parsons, 1949, p. 284) or to migrate to the U. S. for the educational and occupational opportunities it could afford.⁴

For an immigrant population, the Japanese who came to the U. S. were relatively well educated (U. S. Department of Interior, 1946, reports a median of eight years of formal schooling), and they identified education as the major instrument for the occupational mobility of their children. Compared to other groups, the Japanese children started school at an earlier age and remained in school longer (Thomas, 1956, p. 89), and the devotion of their parents to the task of providing them with educational opportunities is largely responsible for the relatively high attainment of the Nisei. Moreover, during periods of job scarcity, like the Depression of the Thirties, many high school graduates chose to attend college rather than enter the "ethnically-defined" blue collar occupations of their parents (Broom & Kitsuse, 1956).

The Issei's appreciation for formal education extended beyond its instrumental value for preferred occupational roles and they established parochial schools with instruction in Japanese reading, writing, history, and the like to supplement public education. The purpose of these schools was to socialize American-born children (who were not sent to Japan for prolonged visits with relatives) to the culture of Japan and thereby ensure its survival in the United States. The language schools flourished until

⁴The prime reason for leaving Japan given by ten percent of the Issei sample interviewed by the UCLA Japanese-American project was "opportunity for further education;" 97 percent maintain contact with relatives in Japan and virtually none viewed themselves with assimilationist goals (Modell, 1968, pp. 72-79). That some Issei did attend American schools is corroborated by a study of the Japanese-born population of Davis County, Utah; one-fourth of the male sample attended school in the U. S. and averaged three additional years of education (Iga, 1957, p. 272).

the evacuation of West Coast Japanese during the Second World War, and only a small number remain. Some of the cultural transmission functions of these schools, however, have been absorbed by other ethnically-oriented voluntary associations, though few Japanese-American children currently receive formal instruction in the Japanese language.

Emphasis on formal education continues to be characteristic of the Japanese-American community. Sixty percent of the Japanese-American pupils surveyed in Los Angeles report that their parents graduated from high school. They also report that many have attended college--30 percent of the fathers and 23 percent of the mothers (Table 3)--and at the secondary school level, 77 percent state that "many" or "some" of their relatives or friends of their parents have had education beyond high school. Moreover, most pupils have high educational aspirations for themselves; over 85 percent of the secondary school pupils indicate that both they and their parents would like them to receive an education beyond high school and the number who expect to do so is almost equally high (Table 5). In addition, the Japanese-American pupils ascribe high educational aspirations to their friends; 95 percent of the twelfth grade, 75 percent of the ninth grade, and 61 percent of the sixth grade pupils report that "all" or "most" of their friends desire to continue their education after high school completion.

The occupational aspirations of Japanese-American pupils are consistent with their educational aspirations and plans. More than 80 percent of the secondary sample aspire to upper white collar jobs; that is, to jobs that usually require a minimum of four years of college, and only six percent aspire to blue collar jobs which require considerably less schooling (Table 6). It is of further interest to note their high ambition for social mobility. Extrapolations from data presented in Table 6, which cross-classifies occupational aspirations with parent's occupational level, indicate that 68

percent of junior high pupils and 58 percent of senior high pupils would be upwardly mobile if they enter their preferred occupation; equally important, less than five percent would be downwardly mobile. This "fierce" drive for upward mobility and the use of education to attain it has also been observed by others (Caudill, 1952, p. 27; Kitano, 1969, p. 142).

The high achievement test scores of Japanese-American pupils in contrast with other Los Angeles pupils and with national norms has already been noted. The mean standardized reading comprehension and mathematics scores are shown for each subpopulation in the Los Angeles sample by grade-level in Table 1. With one exception (12th grade reading comprehension) the Japanese-American pupils score higher in both reading and math than nonJapanese-American pupils at every grade, and they never score at or below the national mean.

The obvious fact that early childhood socialization to the language of instruction is central to academic achievement is illustrated by the comparison of mathematics and reading comprehension scores of Japanese-American pupils. Table 7, which presents achievement levels by pupil home language, suggests that Japanese-American pupils whose major home language is Japanese are disadvantaged in the competition for achievement. Their objective test scores are not only lower than those of Japanese-Americans who have been socialized to English from birth, but the differences between the groups from English and nonEnglish speaking homes are greater for measures of reading comprehension, which requires considerable proficiency in the English language, than for mathematics, which requires somewhat less.⁵

⁵ Similar discrepancies between math and reading achievement of Orientals have been reported by the U. S. Office of Education survey (1966), Stodolsky and Lesser (1967), and Darsie (1926). The discrepancy between present and past achievement of Japanese-Americans can also be explained by greater anticipatory socialization to the behaviors expected by the public school--particularly fluency in the English language.

A COMPARISON OF VALUE ORIENTATIONS

The Japanese-American and the Anglo secondary school samples were contrasted on the value orientation variables and found to differ significantly on a number of them. In general, Japanese-American vis-a-vis Anglo pupils are more Expressive in their orientation toward school, are more favorable toward Formal School Compliance and Family Authority, and are less Futuristic in that their orientation toward individual fate control is low. Nevertheless, they have higher Occupational Aspirations and place greater value on extrinsic Occupational Rewards.

The two groups are similar in their Idealized School Goals from school attendance and in their Instrumental Orientation toward school activities--both very high--and in their expressed Independence from Peers. The distributions of these value orientations for Japanese-American and Anglo secondary school pupils, with the questionnaire items that operationalize them, are presented in Table 8. Two techniques are employed to determine the statistical significance of the differences between the two groups--the test for differences in value orientation scale score means and a test for differences in proportion of pupils with "high" value orientations--in view of the fact that various procedures do not necessarily lead to similar decisions.

From previous analysis (Schwartz, 1967, 1969) it is known that several of the value orientations of Anglo white collar pupils differ significantly from those of blue collar pupils. Most notable are their greater Futuristic Orientation at all grade levels, and at the twelfth grade alone, their greater Independence from Peers and their lower Idealized School Goals and Expressive Orientation. Dominant American values are, as a rule, taken to

be those of the middle class or white collar Anglos. However, a comparison of the value orientations of the Japanese-Americans with the value orientations of these pupils whom they so much resemble in academic achievement shows the same results as those obtained in the comparisons with the entire Anglo sample: Japanese-American pupils are more Expressive, less Futuristic, and similar in Idealized School Goals and Independence from Peers (Table 9).

The value orientations of sixth grade pupils are contrasted using single item indicators (Table 10). In these comparisons, the Japanese-Americans are again significantly higher in Formal School Compliance and in Instrumental Orientation, and are significantly lower in Futuristic Orientation. An unanticipated finding at this grade level is that Japanese-American pupils are higher than Anglo pupils in Faith in Human Nature.⁶

The Japanese-American and Anglo pupils also differ from one another in the relationship of these value orientations to their academic success. Four of the orientations are statistically related to the reading comprehension or mathematics achievement of Japanese-Americans and six to similar achievement of Anglos, yet only one--high Faith in Human Nature--is related to achievement in each group. (Tables 11 & 12).

Related to the achievement of Japanese-American pupils (Table 11) are high Faith in Human Nature (significant at 6th, 9th, and 12th grades), low Independence from Peers (significant at 9th and 12th grades), low Self-Esteem (significant at 9th grade), and low Instrumental Orientation (significant

⁶At the ninth grade the Japanese-American pupils have slightly lower Faith in Human Nature than do Anglos and at the twelfth grade they score about the same. Apparently, the observed optimistic orientation toward people in general in the smaller and more homogeneous elementary school diminishes with participation in universalistic social systems like the large secondary school.

at 12th grade).

Important to the achievement of Anglo pupils (Table 12) are high Futuristic Orientation (significant at 6th, 9th, and 12th grades), high Idealized School Goals (significant at 9th and 12th grades), high Faith in Human Nature, orientation toward Family Authority and, unexpectedly, low orientation toward Formal School Compliance (significant at 9th grade), and high Self-Esteem (significant at 12th grade).

DISCUSSION

These findings support the hypothesis that the comparatively high achievement of Japanese-Americans in public school is related more to values that are traditional in Japanese culture than to the acquisition of dominant American values. Although Japanese-American and Anglo pupils are similar with respect to several value orientations, there is little to support the position that the orientations they hold in common derive from the American middle class. These commonalities--(a) an emphasis on present school attendance for future benefit (evidenced by high Idealized School Goals and high Instrumental Orientation) and (b) a concern for peer group opinion (evidenced by low Independence from Peers)--can logically be derived from the Japanese culture as well as the Anglo.

For example, formal education has customarily been held in high regard in Japan, and the literacy rates of that country have been exceptional, even before the establishment of universal schooling in 1872 (Makino, 1966). Furthermore, we have already noted the instrumental orientation of the Issei and Nisei generations in their consumption of public education for

the occupational mobility of themselves and their children and in their provision of parochial education for transmission of the Japanese culture.

In like manner, sensitivity to peer group approval can be traced to Japanese values which stress "collectivity" over "self" orientations in social systems like the family, employment, and school (Parsons, 1949, pp. 281 ff.). The "adolescent society" is now an equally relevant system to Japanese-American youth and their mode of relating to it, like the family and the school, is characteristically one of dependence and subordination rather than individual action.

More telling in the case against acculturation as an explanation of achievement are the differences in orientations of Japanese-American and Anglo pupils. Perhaps most germane is the generally favorable view of Japanese-Americans toward hierarchical authority (evidenced by higher Formal School Compliance and Family Authority scores)--a finding consistent with observations of the subordinate-superordinate structure of traditional Japanese culture (Benedict, 1946; Parsons, 1949).⁷

The point to be made here is that Japanese-American pupils seem to reject the notion of individual autonomy. Not only are they oriented toward the "collectivity" and acceptance of its authority structure (which is lineal for the family and school and collateral for the peer social system), in comparison with Anglos they express little personal mastery over the

⁷ A significantly greater number of Japanese-American girls than boys are oriented to authority, although both are more favorable toward it than Anglo pupils of the same sex (unpublished data). Some modification of traditional Japanese values is apparent, however, for 12th grade pupils in that they are more like Anglos in their orientation toward Family Authority. The norms of the traditional Japanese-American family which rigidly structures social interaction between boys and girls are reported to be at odds with those of the popular "teen-age culture" which emphasizes romantic love and casual social contact in mate selection (Pelzel, 1950;

future (evidenced by significantly lower Futuristic Orientation scores). Whereas Japanese-American pupils indicate exceedingly high educational and mobility aspirations and express significantly greater desire than Anglos for extrinsic rewards (evidenced by high Occupational Reward scores--all characteristics of minority groups that have entered the occupational structure at the bottom and more characteristic of those that have experienced status discrepancy--their mode of ascent is one of group cooperation rather than individual pursuit. What is more, the presence or absence of the belief that individual action can modify a person's destiny has little relationship to the achievement of Japanese-Americans, in spite of the fact that it is significant and positive for the achievement of comparable Anglos, Mexican-Americans, and Negroes (Schwartz, 1967, 1969; and unpublished data).

Another value that distinguishes Japanese-American from Anglo pupils is their more Expressive orientation toward the school. Despite the instrumental orientation of Japanese-American pupils toward formal education, their relations within the school are characterized by high affect. More of them "like school" and more think of school 'mainly as a place for having fun.'⁸

La Violette, 1946); and to the extent that Japanese-American pupils accept the culture of their age-group there is strain in the family unit. These senior high school pupils, like their Anglo classmates, feel that they should be autonomous from parental control in their relations with their friends.

⁸This finding is in accord with those of the International Study of Achievement in Mathematics (Husen 1967, p. 290) -- that Japanese pupils "like" school more and American pupils "like" school less than thirteen year old pupils from the other ten countries surveyed. Furthermore, if, as some suggest, the activities of contemporary Japanese-American adolescents are constrained by their parents into prescribed social systems (Kitano, 1969), then interpersonal gratification, if it is to occur at all, must occur within their formal confines.

The observed difference in Expressive orientation may be an example of a more encompassing difference between the two populations in which the orientation of the Japanese toward social systems is characterized as gemeinschaft and that of middle class Americans as gesellschaft (Caudill & Scarr, 1962; Iga, 1957; La Violette, 1946). It can be argued that the gemeinschaft orientation tends to inhibit interaction and socialization experiences beyond the primary group and thereby presents an obstacle to the achievement of Japanese-Americans in affectively neutral or gesellschaft social systems. These obstacles may, however, be overcome by a universalistic orientation toward people in general, as shown by the observed positive relationship between the Faith in Human Nature measure and the academic achievement of Japanese-American pupils at all grade levels. Further, the relationship has also been observed for Mexican-American, Negro, and blue collar Anglo pupils--all of whom have strong gemeinschaft orientations (Schwartz 1967, 1969; and unpublished data). In other words, given a gemeinschaft social orientation, ultimate achievement in an affectively neutral system depends upon a universalistic orientation (such as Faith in Human Nature): those who possess the highest degree of the value will achieve the greatest; those who possess the lowest degree will achieve the least.

This is not to say that strong group affiliation in itself is detrimental to achievement; that depends upon the values of the group. For Japanese-American secondary school pupils, most of whom perceive their peers as having similarly high educational aspirations, dependence upon peer approval is related to scholastic attainment. For the Anglos in this study, however, strong peer affiliation has no significant effect. Another orientation that is closely associated with dependence upon peers is the evaluation of one's self in comparison with others. Though there is little difference between the

measured Self-Esteem of the two groups, its influence is positive for the achievement of Anglos and negative for the achievement of Japanese-Americans. The reason for the relationship between low Self-Esteem and achievement of Japanese-Americans is not clear. Perhaps reluctance to view one's self competitively with others strengthens the collectivity orientation which has been shown to contribute to achievement, or low Self-Esteem may also influence the strong drive for educational and occupational mobility noted above.

In sum, Japanese-American pupils have certain advantages for success in the American public school that appear to be rooted in the Japanese culture; first, the traditional family, with its rigid system of obligations subordinating individual interests to those of the group, provides an environment within which children internalize family-defined achievement goals that emphasize educational success and subsequent occupational mobility and are socialized to legitimate means for attaining them; second, the structure of interpersonal relations within the family, which subordinates all members to the authority of the father, anticipates the lineal authority structure of the American school and facilitates the child's adaptation to its bureaucratic organization; and third, the "collectivity" rather than "self" orientation of the family is congruent with the strong peer group affiliation characteristic of contemporary "teen-age culture" which, for Japanese-Americans, is supportive of achievement. This confluence of family, school, and peer values fosters the scholastic attainment of Japanese-Americans, and the affective gratification they receive from school attendance, which further sustains their instrumental efforts, is illustrative of the harmony of their three most relevant social systems.

Anglo pupils, on the other hand, must cope with a disjunction between the goals they hold from school attendance and the means they believe are

legitimate to attain them. Like Japanese-Americans they place high instrumental value upon education, but they agree less with the concept of hierarchical authority--a difference that can logically be traced to the greater collateral orientation of the contemporary American family. Anglo pupils are less accepting of formal school norms than are Japanese-American pupils who, it appears, have been taught an ideal model of school social interaction. Other investigators have observed the negative influence of Anglo peer groups on individual Anglo achievement (esp. Coleman, 1961). In light of the findings with respect to the positive influence of Japanese-American peer groups on achievement and their favorable orientation toward Formal School Compliance, it would seem that the conflict between youth and adults in the school, first brought to attention by Waller (1961), does not apply to Japanese-American pupils.

To conclude, this analysis supports the position posed earlier that the remarkable achievement of Japanese-American pupils among all cultural groups in American educational institutions is due to values that are traditional in the Japanese culture, and that these are not the same as those which lead to the achievement of middle class American pupils. Although there are similarities between the two cultures, there is a cluster of value orientations that not only distinguishes Japanese-American pupils but contributes to their scholastic success. These value orientations relate to the concept of "collective" rather than "individual" action and to the acceptance of the generation-based lineal authority of the school. Comparisons of value orientations of Japanese-American and Anglos show the two groups to be similar in appreciation of the instrumental value of education and the importance of peers as a reference group, but to differ in that Japanese-Americans are more

expressive toward school activities and have less belief that individual action can affect a person's future. All of these value orientations have been traced to values of traditional Japan. In addition, Japanese-American pupils have higher occupational aspirations and desire greater extrinsic rewards from their chosen life-work--both related to their ethnic minority status in the U.S. These findings indicate that although Japanese-American pupils have learned the formal norms of the American public school, they are less acculturated to the values of the American middle class than popularly believed and that explanations which rely on theories of acculturation do not adequately account for their successful adaptation to the American society.

REFERENCES

- Arkoff, A. Need patterns in two generations of Japanese-Americans in Hawaii. Journal of Social Psychology, 1959, 50, 75-79.
- Babcock, C., & Caudill, W. Personal and cultural factors in the treatment of a Nisei man. In G. Seward (Ed.), Clinical studies in culture conflict. New York: Ronald Press, 1958. Pp. 409-449.
- Benedict, R. The chrysanthemum and the sword: Patterns of Japanese culture. Boston: Houghton Mifflin, 1946.
- Brim, O. G. College grades and self-estimates of intelligence. Journal of Educational Psychology, 1954, 45. (December).
- Brookover, W. B., Paterson, A., & Shailer, T. Self-concept of ability and academic achievement in junior high school students. East Lansing: Michigan State University, 1962.
- Broom, L., & Kitsuse, J. I. The validation of acculturation: A condition to ethnic assimilation. American Anthropologist, 1955, (57), 44-48.
- . The managed casualty: The Japanese-American family in World War II. Berkeley and Los Angeles: University of California Press, 1956.
- California Department of Industrial Relations. Californians of Japanese, Chinese, Filipino Ancestry. San Francisco: Division of Fair Employment Practices, 1965.
- Caplow, T. Sociology of Work. Minneapolis: University of Minnesota Press, 1957.
- Caudill, W. Japanese-American personality and acculturation. Genetic Psychology Monographs, 45, 3-102.
- Caudill, W., & De Vos, G. A. Achievement, culture, and personality: The case of the Japanese Americans. In B. E. Segal (Ed.), Racial and ethnic relations. New York: Thomas Crowell, 1966. Pp. 77-89.
- Caudill, W., & Scarr, H. A. Japanese value orientations and culture change, Ethnology, 1962, 1, 53-91.
- Central Advisory Council for Education. Children and their primary schools. London: Her Majesty's Stationery Office, 1967.
- Coleman, J. S. The adolescent society. Glencoe: The Free Press, 1961.
- Darsie, M. L. The mental capacity of American born Japanese children. Comparative Psychology Monographs. Baltimore: Williams and Wilkins, 1926.

- De Vos, G. A. Achievement orientation, social self-identity, and Japanese economic growth. Asian Survey, 1965, 5, 575-89.
- Guttman, L. The basis for scalogram analysis. In Stouffer, et.al. (Eds.), Measurement and prediction. Princeton: Smith, Peter, 1950.
- Husen, T. (Ed.) International study of achievement in mathematics: A comparison of twelve countries, Volume II. New York: John Wiley and Sons, 1967.
- Iga, M. The Japanese social structure and the source of mental strains of Japanese immigrants in the United States. Social Forces, 1957, 35, 271-278.
- Kahl, J. Educational and occupational aspirations of "common man" boys. Harvard Educational Review, 1953, 23.
- Kitano, H. L. Japanese Americans: The evolution of a subculture. Englewood Cliffs: Prentice-Hall, 1969.
- La Violette, F. E. Americans of Japanese ancestry. Toronto: Canadian Institute of International Affairs, 1946.
- Makino, T. Some notes on literacy and education in Japan. Japanese Sociological Studies. The Sociological Review, Monograph 10 (September) 1966, 89-93.
- Modell, J. The Japanese American family: A perspective for future investigations. Pacific Historical Review, 1968, 37, 67-81.
- Opler, M. Cultural dilemma of a Kibei youth. In G. Seward (Ed.), Clinical studies in culture conflict. New York: Ronald Press, 1958, 297-316.
- Parsons, T. Population and social structure of Japan. In T. Parsons, (Ed.), Essays in sociological theory. Glencoe: The Free Press, 1949, 275-297.
- Pelzel, J. C. Some social factors bearing upon Japanese population, American Sociological Review, 1950, 15, 20-25.
- Portenier, L. G. Abilities and interests of Japanese-American high school seniors. Journal of Social Psychology, 1947, 25, 53-61.
- Pusey, H. C. Arithmetic achievement of Japanese-Americans. Math-Teacher, 1945, 38, 172-174.
- Rosen, B. The achievement syndrome: A psychocultural dimension of social stratification. American Sociological Review, 1956, (April) 21.
- Rosenberg, M. Society and the adolescent self-image. Princeton: Princeton University Press, 1965.

Schwartz, A. J.. Affectivity orientations and academic achievement of Mexican-American youth. Doctoral Dissertation, UCLA. Ann Arbor: University Microfilm, 1967.

. Comparative values and achievement of Mexican-American and Anglo pupils. Los Angeles: UCLA Center for the Study of Evaluation.

Stodolsky, S., & Lesser, G. Learning patterns in the disadvantaged. Harvard Educational Review, 1967, 37, 546-93.

Straus, M. A. Deferred gratification, social class, and the achievement syndrome. American Sociological Review, 1962, (June), 27.

Thomas, D. S. The Japanese American. In J. B. Gittler (Ed.), Understanding minority groups. New York: John Wiley and Sons. Pp. 84-108.

U.S. Department of Interior. The evacuated people: A quantitative description. Washington D.C.: U.S. Government Printing Office, 1946.

U.S. Office of Education. Equality of educational opportunity. Washington D.C.: U.S. Government Printing Office, 1966.

Waller, W. The sociology of teaching. New York: Russell and Russell, 1961.

Williams, R. Jr. Individual and group values. The Annals, (May) 371, 20-37.

Table 1. Standardized Achievement Test Scores for Sampled Subpopulations of Los Angeles Public School Pupils

Test and Grade-Level	Stanine Score*					
	Spanish-Surname	Negro		Anglo		Japanese-American
	\bar{x} s.d.	\bar{x} s.d.	\bar{x} s.d.	\bar{x} s.d.	\bar{x} s.d.	\bar{x} s.d.
Sixth Grade Reading Comprehension (California Achievement Test) Math Fundamentals (California Achievement Test)	3.49 1.63 4.68 1.76 (286)	4.07 1.60 5.21 1.52 (56)	5.26 1.83 5.37 1.40 (96)	6.23 1.85 6.91 1.66 (65)		
Ninth Grade Reading Comprehension (California Achievement Test) Math Fundamentals (California Achievement Test)	3.53 1.47 3.33 1.53 (899)	3.88 1.32 3.58 1.46 (114)	5.14 1.43 4.82 1.48 (558)	6.00 1.84 6.02 1.91 (67)		
Twelfth Grade Reading Comprehension (Cooperative English) Quantitative (Iowa)	4.34 1.63 4.22 1.37 (677)	4.15 1.77 3.98 1.34 (101)	5.93 1.62 5.79 1.80 (473)	5.59 1.68 6.28 1.74 (122)		

*The stanine scale ranges from a low of one to a high of nine; the mean is set at five and the standard deviation is two. Stanine scores are equally spaced steps on the achievement scale and should not be confused with percentiles which are equal proportions of the population.

Table 2. Japanese-American Pupil Sample By Grade-Level and Parents' Occupational Status

Grade-Level	Occupational Level*			Total
	Blue Collar	White Collar		
Sixth Grade	73**	27		100% (65)
Ninth Grade	48	52		100% (67)
Twelfth Grade	47	53		100% (122)
Total Sample	54 (136)	46 (118)		100% (254)

* Occupational level is coded from pupil responses to open-ended questions pertaining to the occupation of the chief family bread-winner. The essential distinction between blue and white collar is that made by Edwards for the U.S. Bureau of Census between those who work with their "hands" and those who work with their "heads." It is assumed that each has a somewhat distinct standard of life, economically and, to a considerable extent, intellectually and socially (Caplow 1957, Pp. 42-48).

** Cell entries are percentages across rows.

Table 3. Japanese-American Pupil Sample By Grade-Level and Parents' Educational Attainment

Pupil Grade-Level	Highest Educational Attainment of Parent						
	Less Than High School Graduation		High School Graduation		College Attendance		Don't Know
	Father	Mother	Father	Mother	Father	Mother	
Sixth Grade	9*	8	17	41	31	20	43 31 100% (65)
Ninth Grade	13	12	40	41	26	28	21 19 100% (67)
Twelfth Grade	21	23	28	39	32	21	19 17 100% (122)

Percentage of Total Sample 16 (41) 16 (41) 28 (71) 40 (101) 30 (77) 23 (58) 21 (54) 100% (254)

*Cell entries are percentages across rows of the educational attainment of each parent separately

Table 4. Zero-Order Correlation Coefficients for Value Orientation Variables: Secondary School Pupils

Value Orientation	1	2	3	4	5	6	7	8	9	10
1. Expressive		-.07	-.08	-.03	-.12	-.03	-.11	.04	.02	.15
2. Faith in Human Nature	.06		.01	.04	.22	.06	.06	.08	-.01	-.14
3. Family Authority	.02	.02		.23	-.03	.07	.00	.04	-.01	-.03
4. Formal School Compliance	.03	.03	.05		.02	.11	.02	.03	.05	-.04
5. Futuristic	-.02	.10	-.02	.04		-.01	.03	.07	-.01	-.10
6. Ideal School Goals	.15	.08	.04	.05	-.02		-.03	.14	.06	.04
7. Independence from Peers	-.06	.04	-.01	.03	.05	-.01		.01	.02	-.14
8. Instrumental	.00	.00	.02	.03	.05	.04	.00		.01	.02
9. Self-Esteem	.05	.04	-.02	.02	.04	.06	.07	-.01		.01
10. Occupational Reward	.14	.10	.01	-.05	-.07	.05	-.11	.00	.05	
Twelfth Grade										

Table 5. Educational Aspirations and Expectations of Japanese-American Secondary School Pupils

	Ninth Grade			Twelfth Grade		
	Pupil Aspiration	Pupil Expectation	Parent Aspiration	Pupil Aspiration	Pupil Expectation	Parent Aspiration
Don't Know	7	1	6	5	1	7
Quit School	1	-	-	3	-	-
High School Graduation	10.5	5	3	7	6	3
Trade School	5	5	-	3	7	2
Junior College	10.5	26	14	15	37	22
Four Year College	48	48	49	38	34	48
Graduate School	18	15	28	29	15	18
	100%	100%	100% (N 67)	100%	100%	100% (N 122)

Table 6. Occupational Aspirations of Japanese-American Secondary School Pupils by Family Socioeconomic Status

Pupil Aspirations	Family Socioeconomic Status						
	Ninth Grade			Twelfth Grade			TOTAL
	BC	LWC	UWC	BC	LWC	UWC	
Upper White Collar	86 (24)	93 (15)	83 (15)	76 (37)	83 (19)	92 (34)	82.5 (90)
Lower White Collar	11 (3)	-	6 (1)	14 (7)	13 (3)	8 (3)	12 (13)
Blue Collar	3 (1)	7 (1)	11 (2)	10 (5)	4 (1)	-	5.5 (6)
	100% (28)	100% (16)	100% (18)	100% (49)	100% (23)	100% (37)	100% (109)

Table 7. School Achievement for Japanese-American Pupils by Home Language and Grade-Level

Grade-Level and Home Language	<u>% Below Average^a</u>		<u>% Average</u>		<u>% Above Average</u>		Base N
	Read	Math	Read	Math	Read	Math	
Sixth Grade							
English	4 ^b	2	39	35	57*	63	(49)
Japanese	13	-	80	47	7	53	(15)
Ninth Grade							
English	6	6	26	35	68*	59*	(34)
Japanese	12	12	65	59	23	29	(17)
Twelfth Grade							
English	6	12	50	35	44*	53	(68)
Japanese	21	9	55	39	24	52	(33)

^a School achievement is measured by national standardized tests. "Below Average" is stanines 1, 2, and 3; "Average" is stanines 3, 4, and 6; "Above Average" is stanines 7, 8, and 9. For an explanation of stanines see note Table 1.

^b The first group of figures are read as follows: 4% of the reading and 2% of the math scores for 6th grade pupils from English-speaking homes are "Below Average;" 13% of reading and no math scores of 6th grade pupils from Japanese-speaking homes are "Below Average."

* Difference in proportion of "Above Average" pupils from English-speaking and from Japanese-speaking homes is significant at $\leq .01$.

Table 5. Value Orientations of Japanese-American and Anglo Secondary School Pupils

Value Orientation	Ninth Grade		Twelfth Grade	
	Japanese	Anglo	Japanese	Anglo
Expressive Orientation (Scalogram)				
I think of school mainly as a place for having fun (+ agree)				
The main thing I enjoy about school is being with friends (+ agree)				
I usually enjoy my classes here at school (+ agree)				
In general do you like or dislike school? (+ like)				
Coefficient of Minimum Marginal Reproducibility	\bar{x} score	3.70*	3.70	3.58
9th grade	s.d.	.77	.83	.90
12th grade	% high	69**	73	64**
Faith in Human Nature (Scalogram)				
In general, people can be trusted (+ agree)				
Most people make friends because they are able to use them (+ disagree)				
When you get right down to it, people are no good (= disagree)				
Coefficient of Minimum Marginal Reproducibility	\bar{x} score	3.18	3.29	3.50
9th grade	s.d.	.90	.86	.75
12th grade	% high	45	52	64
Family Authority (Scalogram)				
Even if parents disapprove, they should not stop teenagers from seeing their friends (+ disagree)				
Teenagers should make their own decisions instead of their parents telling them what to do (+ disagree)				
Teenagers should never date a person against their parents' wishes (+ agree)				
Children should obey all the rules their parents make for them (+ agree)				
Coefficient of Minimum Marginal Reproducibility	\bar{x} score	3.11	2.85	2.72
9th grade	s.d.	1.23	1.37	1.19
12th grade	% high	45	36**	29
				27

Table 8. Cont'd

9th 12th
J A J A

Formal School Compliance (Scalogram)

Even when they punish the whole class, I feel that teachers are usually right (+ agree) Mary works in the library. Betty, who is Mary's best friend, needs a certain book to write a report. Betty knows that many other pupils also need the book so she asks Mary to hide it until she can come for it. Mary thinks it is wrong to do this. Do you . . . (+ agree) Bill is grading tests for his class. John, who is Bill's best friend, is just below passing. If Bill gives him a break he can help him pass. John thinks Bill should help him. Do you . . . (+ disagree)

	Coefficient of Reproducibility	Minimum Marginal Reproducibility			
9th grade	.98	.65	\bar{x} score	3.32	3.14
12th grade	.91	.66	s.d.	.78	.89
			% high	52	.44

3.22 3.02*
.95 .96
50 39.xx

Futuristic Orientation (Scalogram)

People should not expect too much out of life so they won't be disappointed (+ disagree) Planning only makes a person unhappy since your plans hardly ever work out anyhow (+ disagree) The wise person lives for today and lets tomorrow take care of itself (+ disagree)

	Coefficient of Reproducibility	Minimum Marginal Reproducibility			
9th grade	.92	.67	\bar{x} score	2.86	3.05
12th grade	.99	.67	s.d.	.95	.98
			% high	27	40**

3.25 3.43*
.96 .87
54 61

Idealized School Goals (index)

School should train me for my future job

(+ agree)

School should help me get along with the different people I will meet in my lifetime (+ agree) School should help me understand the world I now live in (+ agree)

\bar{x} score
s.d.
% high

3.77
.54
86

3.82
.45
86

3.83 3.79
.46 .45
84 82

Table 8. Cont'd

9th

12th

J A J A

Independence from Peers (Scalogram)

I wouldn't mind being thought of as an "odd ball" (+ agree)
 I feel upset if the group doesn't approve of me (+ agree)
 I never do things just to make others think well of me (+ agree)
 If I disagree with what the group decides I would never say so (+ disagree)

	Coefficient of Reproducibility	Minimum Marginal Reproducibility	\bar{x} score		
9th grade	.89	.62	3.01	2.97	2.97
12th grade	.89	.65	1.11	1.30	1.28
			30	33	32

Instrumental Orientation (Scalogram)

Going to school now will not help me get a better job later (+ disagree)
 Doing my schoolwork will make things easier for me after I get out of school (+ agree)
 Going to school will not help my future in any way (+ disagree)

	Coefficient of Reproducibility	Minimum Marginal Reproducibility	\bar{x} score		
9th grade	.96	.88	3.79	3.76	3.74
12th grade	.93	.86	.45	.45	.48
			86	86	82

Occupational Reward Values (Scalogram)

A job should make me powerful in the community (+ important)
 A job should make people look up to me (+ important)
 A job should give me a chance to get rich (+ important)
 A job should be steady so I will always have work (+ important)

	Coefficient of Reproducibility	Minimum Marginal Reproducibility	\bar{x} score		
9th grade	.94	.69	3.58	3.59	3.32*
12th grade	.94	.68	1.05	1.10	1.18
			26	21	19

Table 8, Cont'd

	9th		12th	
	J	A	J	A
Self-Esteem (index)				
I feel that I am at least as good as others I know (+ agree)				
If I could, I'd rather be someone different from myself (+ disagree)				
On the whole I am pretty well satisfied with myself (+ agree)				
There are times when I think that I am no good at all (+disagree)				
	x score	3.59	3.69	3.76
	s.d.	1.66	1.60	1.59
	% high	53	52	56
				3.93
				1.50
				61
Occupational Aspirations (coded from open-ended responses)				
1. Lower blue collar--unskilled and semi-skilled				
2. Upper blue collar--skilled, foreman, self-employed craftsman				
3. Lower white collar--semi-skilled				
4. Intermediate white collar--skilled, "glamor" jobs, owner of medium size business				
5. Upper white collar--managerial, professional, owner of a large business				
	x score	4.41	4.21*	4.46
	s.d.	.90	.88	.91
				4.16*
				.95
	Base N	67	558	122
				473

*p < .05 for t value of mean differences between Japanese-American and Anglo scale scores.

**p < .05 t-test for difference in proportion of Japanese-American and of Anglo pupils who are high on the value orientation

Table 9. Selected Value Orientations of Japanese-American and Anglo White Collar Secondary School Pupils

Value Orientation	Japanese-American		Anglo White Collar	
	% High	Base N	% High	Base N
Expressive 12th grade	73	(122)	60*	(188)
Futuristic 9th grade	27	(67)	47*	(305)
12th grade	54	(122)	67*	(188)
Ideal School Goals 12th grade	84	(122)	78	(187)
Independence from Peers 12th grade	33	(122)	37	(188)

*p_.05, t-test for difference in proportion.

Table 10. Selected Value Orientations of Japanese-American and Anglo Sixth Grade Pupils

Value Orientation	Japanese	Anglo
Faith in Human Nature In general, people can be trusted (+ agree)	\bar{x} response s.d. % + 1.88 ^a .60 80	1.35* .77 45**
Formal School Compliance Even when they punish the whole class, I feel that teachers are usually right (+ agree)	\bar{x} response s.d. % + 2.08 .74 82	1.77* .93 68**
Futuristic Orientation People should not expect too much out of life so that they won't be disappointed (+ disagree)	\bar{x} response s.d. % + 1.97 .71 12	2.22* .81 24**
Instrumental Orientation Doing my school work will make things easier for me when I get out of school (+ agree)	\bar{x} response s.d. % + 2.68 .53 77	2.51* .64 58**
Base N		65 96

^aThe responses to the items are weighted as follows: strongly agree=4; agree=3; disagree=2; and strongly disagree=1. For the Futuristic item the weighting is reversed.

*p < .05, t-value for mean differences.

**p < .05, t-test for difference in proportion.

Table 11. Mean Achievement Stanine Scores by Selected Value Orientations
Japanese-American Pupils

Value Orientation	High			Low		
	\bar{x}	s.d.	n	\bar{x}	s.d.	n
Sixth Grade						
Faith in Human Nature	6.47	1.66	(51)	5.08*	1.78	(13)
Reading Comprehension	7.10	1.55	(51)	6.11*	1.33	(13)
Mathematics						
Ninth Grade						
Faith in Human Nature	6.72	1.65	(25)	5.65*	1.98	(31)
Reading Comprehension	6.74	1.46	(25)	5.71*	1.96	(31)
Mathematics						
Independence from Peers	5.71	1.72	(17)	6.31	1.96	(39)
Reading Comprehension	5.53	1.16	(17)	6.45*	1.85	(39)
Mathematics						
Self-Esteem	5.72	2.00	(29)	6.65**	1.67	(26)
Reading Comprehension	5.84	1.82	(29)	6.52	1.81	(26)
Mathematics						
Twelfth Grade						
Faith in Human Nature	6.78	1.70	(67)	5.26	2.00	(38)
Reading Comprehension	6.55	1.81	(67)	5.79*	1.92	(38)
Mathematics						
Independence from Peers	5.00	1.85	(35)	5.89*	1.74	(70)
Reading Comprehension	5.86	1.94	(35)	6.49*	1.82	(70)
Mathematics						
Instrumental						
Reading Comprehension	5.56	1.79	(82)	5.70	1.94	(23)
Mathematics	6.09	1.84	(82)	6.96**	1.89	(23)

*p \leq .05, one-tailed t-test of significance for difference in achievement means.

**p \leq .05, two-tailed t-test of significance for difference in achievement means.

Table 12. Mean Achievement Stanine Scores by Selected Value Orientations
Anglo Pupils

Value Orientation	<u>High</u>		<u>Low</u>	
	\bar{x}	s.d. n	\bar{x}	s.d. n
Sixth Grade				
Family Authority	5.55	2.03 (57)	4.64	2.00 (16)
Reading Comprehension	5.53	1.71 (58)	4.93	1.89 (16)
Mathematics				
Futuristic	6.16	2.07 (18)	5.08*	2.01 (57)
Reading Comprehension	6.40	1.53 (18)	5.10*	1.71 (58)
Mathematics				
Ninth Grade (blue collar)				
Faith in Human Nature	5.27	1.71 (94)	4.47*	1.96 (72)
Reading Comprehension	5.19	1.70 (94)	4.30*	1.87 (71)
Mathematics				
Family Authority	5.11	1.82 (105)	4.60*	1.91 (60)
Reading Comprehension	4.92	1.87 (104)	4.62	1.74 (60)
Mathematics				
Formal School Compliance	4.67	1.89 (84)	5.18**	1.80 (82)
Reading Comprehension	4.65	1.86 (84)	4.97	1.78 (81)
Mathematics				
Futuristic	5.56	1.82 (63)	4.54*	1.79 (102)
Reading Comprehension	5.34	1.69 (62)	4.48*	1.84 (102)
Mathematics				
Idealized School Goals	5.08	1.85 (144)	3.86*	1.58 (22)
Reading Comprehension	4.93	1.78 (143)	3.98*	1.94 (22)
Mathematics				
Ninth Grade (white collar)				
Futuristic	6.17	1.45 (60)	5.09*	1.96 (75)
Reading Comprehension	5.67	1.62 (60)	4.93*	1.82 (75)
Mathematics				

Table 12, Cont'd

	High			Low		
	\bar{x}	s.d.	n	\bar{x}	s.d.	n
Twelfth Grade (blue collar)						
Futuristic	6.04	1.64	(114)	5.00*	1.81	(95)
Reading Comprehension	5.94	1.82	(114)	4.52*	1.68	(97)
Mathematics						
Idealized School Goals	5.65	1.79	(180)	5.07*	1.77	(29)
Reading Comprehension	5.31	1.91	(182)	5.10	1.88	(29)
Mathematics						
Twelfth Grade (white collar)						
Futuristic	6.62	1.36	(117)	5.98*	1.95	(51)
Reading Comprehension	6.64	1.83	(116)	6.16	2.07	(50)
Mathematics						
Self-Esteem	6.14	1.47	(103)	5.95*	1.66	(64)
Reading Comprehension	6.78	1.96	(102)	6.10*	1.68	(63)
Mathematics						

*p \leq .05, one-tailed t-test of significance for difference in achievement means.

**p \leq .05, two-tailed t-test of significance for difference in achievement means.