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Self-Actualization and Persistence in Selected Vocational Curricula for First-Time Entering Students at a Community College

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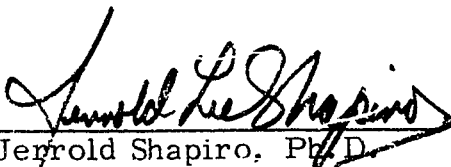
SELF-ACTUALIZATION AND PERSISTENCE IN SELECTED
VOCATIONAL CURRICULA FOR FIRST-TIME ENTERING
STUDENTS AT A COMMUNITY COLLEGE

by

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Investigated personality factors associated with self-actualization among first time entering students at a predominately trade-technical community college. The Ss were 529 students enrolled in liberal arts and trade-technical programs. The Ss were administered the Personal Orientation Inventory (POI) and the results formed the basis of two analyses.

I. A 2x2x2 (eight cells) factorial analysis included length of attendance, vocational choice, and age, applied to each of the 12 POI scales. It was found that: (1) POI measures did not differentiate between persisters and drop-outs over a one semester period; (2) that liberal arts students received better POI scores than did technical-vocational students on the scales of Inner-Directed Control, Existentiality, Self-Regard, Synergy, and Capacity for Intimate Contact; and (3) that older students received better scores than younger students on the Time Competence, Inner-Directed Control, Self-Actualizing Values, Synergy, and Self-Regard scales.

II. A 1x8 analysis for each of the 12 POI scales indicated differences between the eight major ethnic groups represented in the study. The scales of Time Competence, Inner-Directed Control, and Existentiality were significant at the .01 level, and the scales of Synergy, Self-Actualizing Values, Nature of Man, Self-Acceptance, and Capacity for Intimate Contact were significant at the .05 level. A subsequent Newman-Keuls analysis revealed greatest differences

between Filipinos, Chinese, and Portuguese versus other groups studied. Caucasians received higher scores on all scales and Filipinos scored consistently low on all scales. A comparison of the Tc and I scales for the ethnic groups indicated a relationship between these scales and degree of acculturation.

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CHAPTER I

Statement of the Problem

Within the past decade the comprehensive community college has increasingly been called upon to provide vocational training. Many high schools have discontinued the teaching of manual skills as the community colleges have established these programs. In Hawaii a community college system was established in 1964 and five existing post-high school technical schools were incorporated into the system. In 1965 the legislature called for a deemphasis of vocational education in the high schools and incorporation of this function into the community college curricula. Accordingly, vocational training now occupies a large share of the community college curriculum and an increasing number of high school graduates and adults are enrolling in these programs. One concomitant of this shift in student populations is the observation that increasing numbers of students are failing to complete their vocational programs. Mast (1972) concluded that approximately 62 percent of the students initially enrolled in technical-vocational courses at Honolulu Community College never completed the program.

While it has been customary for community colleges to conduct follow-up studies on their students and graduates, these surveys have generally dealt with the liberal arts transfer students. Attempts to

locate the non-transfer or technical-vocational student have been difficult because of the mobility of this population. It is also customary for community colleges to periodically research the drop-out problem, but again these efforts have been somewhat futile as these students tend to disperse quite rapidly, or, if contacted by mail, tend not to reply to inquiries (O'Connor, 1965). Therefore research studies of the technical-vocational students who fail to complete their program have been somewhat neglected. Most of the information that is available for this group of students has come from the processing of data left behind in cumulative records. It is for this reason that these studies have focused primarily on demographic characteristics which may have value for census purposes but have failed to recommend treatments for these problems.

Much productive research in community colleges over the past two decades has provided important information concerning the community college student. A number of investigators (Darley, 1962; Knoell & Medsker, 1964; Medsker & Trent, 1965; Tillery, 1964) have profiled the community college student in terms of age, achievement, socio-economic background, standardized test scores, interests and aptitudes. There remains, however, little knowledge of the community college student in terms of values, needs, and other personality variables. This void suggested in the Junior College Student Personnel Programs report to the Carnegie Corporation (1965) still

is valid today. The committee deliberated with representatives from 50 junior colleges and concluded that there existed a critical need for certain kinds of information about the community college student, such as:

"What are the characteristics which differentiate among successful persisters in various programs and between successful and unsuccessful enrollees in a given program . . . There is a need to provide a comprehensive profile of the entering student at each junior college. This profile should encompass a description of major aptitudes, accomplishments, goals and aspirations, educational attitudes and values, and social class backgrounds (Hoyt p. 9)."

Since this report was issued researchers have increasingly turned their attention to personality variables which might characterize the community college student. (Medsker & Trent, 1965; Tillery, 1964; and others) Unfortunately, however, personality variables within specific sub-groups have received little attention and so little is known about the values and needs of the technical-vocational student, the multi-ethnic groups in the community college, and the drop-out student.

Attempts have been made to assess needs of community college students through surveys and questionnaires concerning reasons for withdrawal. The implication here being that once these reasons are known then the college can institute changes in attempts to better meet

the needs of the students. Demos (1967) however, notes that students tend not to give the real reasons for their withdrawal.

Vocational theorists such as Super (1951), O'Hara (1957), Tiedeman (1961), among others have written about the importance of the self-concept to vocational choice and job satisfaction. Many colleges have responded and, though knowing little about the concepts that the students have of themselves, have attempted to make their institutions places where the student can test his aptitudes and interests, where he can develop and revise his vocational plans, and where he can discover his identity, examine his values, and bring his goals and aspirations into realistic alignment. Hardee (1954) surveyed 93 colleges and universities and found that most of them offered courses in personal and social adjustment. O'Banion (1969) describes the Santa Fe Junior College program which revolves around a course designed for the development of non-intellectual aspects of the students' personality. Many other community colleges have offered specific courses designed to help develop the self-concept, but it is felt that few of these programs have been formulated on the basis of an adequate knowledge of the values and needs of the students. Whether these programs will yield results in terms of more adequate career development and subsequently a lower non-completion rate in the technical-vocational programs is yet to be determined.

The experimenter feels that the community colleges in Hawaii

must exert considerable effort in an attempt to make their institutions responsive to the psychological needs of the students. The Hawaiian community college student has certain unique characteristics, the understanding of which should have great impact on the development of the college program, and particularly so in the area of vocational education. Currently, the primary emphasis of the vocational programs is on the teaching of manual skills, with little, if any opportunity for the student to develop non-intellectual aspects of his personality. At the present time the community colleges in Hawaii are enrolling large numbers of students from the lower socio-economic groups and from minority groups of diverse ethnic backgrounds and very little is known about the values, needs, and aspirations of these students. This study is an attempt to investigate these factors.

Of particular concern to this study is a large group of students from diverse cultural backgrounds who arrive at the college seeking placement in a vocational program, which, when completed, will lead to immediate employment. It is likely that most of these students will never attain their vocational goals and it is difficult to identify those factors which might differentiate the successful from the unsuccessful.

The students in this study are representative of eight different ethnic groups and it has been estimated that approximately 40 per cent of the students are of lower-class status (Educational Development Plan, 1971). Also enrolled are a large number of students from foreign countries,

especially from the Pacific Basin. It is felt by the experimenter that within each ethnic group the successful student exhibits behavior that is markedly different from the unsuccessful student. It is also believed that the more persistent student appears to be more committed to his educational program than is the unsuccessful student and that the former displays personality characteristics commensurate with his degree of commitment. It is hypothesized that these differences are a function of the current psychological health of the students and that those students who are successful can be characterized as more highly self-actualizing.¹

Despite a lack of evidence supporting the proposition that there is a relationship between self-actualization and persistence in vocational choice for students enrolled in technical-vocational courses of study at the community college it seems likely that this would hold if the assumptions of vocational theorists (Super, 1951; O'Hara, 1957; Roe, 1957; and others) are correct.

The particular significance of this study for Hawaii has been noted. The community colleges emerged on the education scene in quite an abrupt manner and perhaps of necessity used as models similar institutions on the mainland. The curricula have for the most part been patterned after these models with little regard for the

¹For a brief description of the characteristics of the self-actualized person the reader is referred to Appendix A.

significant differences in populations. It would seem that this study would be of assistance in helping the Hawaii community colleges establish an arena, as suggested by Collins (1967) ". . . where each student will find the means by which he can establish his own identity and where he can begin to appraise himself accurately, shed super-cargoes of fears and unrealistic expectations, sever the personal, emotional, and ideational dependencies which fetter him, and test himself in closely simulated or in real life situations. Perhaps more than their cousins in the liberal arts colleges and universities, these students will require assistance in their striving for self-actualization (p. 3)."

THEORETICAL FRAMEWORK

Maslow (1954, 1970) holds that the psychological health of the individual is dependent upon the satisfaction or gratification of his basic needs. According to Maslow these needs are arranged in a hierarchy of prepotency and the individual's behavior at any point in time will to a great extent be determined by the degree to which he has satisfied these needs. Since the needs emerge in a prepotent manner (higher level needs dominate only when lower needs are gratified) the individual's behavior will be directed predominately toward the minimal requirements of the dominating need. Maslow states that the chief principle of organization in human motivational life is the emergence

in the healthy person of less potent needs upon gratification of more potent ones. To the degree that the individual is able to minimally satisfy the lower needs, his personality becomes more directed toward higher levels of motivation and ultimately toward a full expression of his potentials. Maslow calls this highest level need self-actualization.

As far as motivational status is concerned, healthy people have sufficiently gratified their basic needs for safety, belongingness, love, respect and self-esteem so that they are motivated primarily by trends to self-actualization (defined as ongoing actualization of potentials, capacities and talents, as fulfillment fuller knowledge of, and acceptance of, the person's own intrinsic nature (p. 23).

Maslow believes that the degree of basic need gratification is positively correlated with degree of psychological health. An individual then who exhibits a high level of psychological health is satisfying higher level needs and can be thought of as either self-actualizing or as growing toward self-actualization. The individual's choice of occupation and his commitment, or lack of commitment, will identify his current need status and consequently his degree of psychological health (Roe, 1956).

Maslow (1970) confines the concept of self-actualization to older people, viewing the characteristics of the self-actualized person as attributes developed through time and experience. Young people seem not to have achieved a sense of identity, not to have worked out their own system of values, nor to have experienced love, tragedy, achievement, success, and all those human potentialities which are realized as one experiences life. It is possible, however, according to Maslow,

to differentiate "healthy" from "unhealthy" college students and to those healthy persons he applies the concept of "good-growth-toward-self-actualization (p. xx)." Since age then appears to be a determinant of self-actualization it would seem possible that older college students would have achieved a higher level of self-actualization than the average college student.

Centers and Bugental (1966) studying the motivational strength of intrinsic and extrinsic job factors with 692 employed adults found that persons employed in skilled and semi-skilled occupations were motivated primarily by amount of pay, financial security, and social considerations, whereas intrinsic sources of satisfaction characterized persons in higher level jobs. Centers and Bugental concluded that ". . . individuals in lower level occupations are more likely to be motivated by lower-order needs (pay, security, etc.) because these are not sufficiently gratified to allow higher-order needs (the self-fulfillment possible in the job itself) to become prepotent (p. 197)." The experimenter feels that need satisfaction is related to vocational choice and the prediction is made that college students enrolled in technical-vocational programs will be motivated by different levels of need gratification than will students enrolled in the liberal arts curriculum.

The source of motivation in decision-making has been explored by Reisman (1951). He sees the individual as being motivated by external or internal sources, a form of socialization which reflects the dominant

value system of the culture. Reisman views the inner-directed person as one who has acquired norms in the process of socialization and who has ceased to look to others for direction and tends to make autonomous decisions. The other-directed person places less value on internalized norms or principles and values more certain aspects of group behavior. Shostrom (1967) has described the other-directed person as one who is motivated by feelings of insecurity and fear and whose method of relating (and of making decisions) is unconsciously dominated by an ". . . insatiable need for affection or reassurance of being loved (p. 55)." Reisman views contemporary man as being other-directed and advocates the cultivation of the autonomous man, one able to conform if he wants to but able to choose not to conform.

Shostrom (1967) views the psychologically healthy person as autonomous and measures self-actualization in terms of degree of autonomy. "The self-actualizing person tends to be less dependency- or deficiency-oriented than either the extreme inner- or the extreme other-directed person. He may be characterized as having more of an autonomous, self-supportive, or being orientation. He is other directed in that he must to a degree be sensitive to people's approval, affection, and good will, but the source of his actions is essentially inner-directed (p. 55)."

Rogers (1961) views the healthy personality in much the same manner as does Maslow and feels that the individual is motivated

to become what he inwardly and actually is. Rogers sees the individual as striving always toward self-actualization. In so doing he behaves in ways that are consistent with his picture of himself. The healthy individual is able to look objectively at himself and integrate his real feelings and thoughts into a self-concept which is congruent with his world of experience. Rogers describes the values of the individual in his growth toward being and living as transcending culture. Like Maslow he suggests an organismic basis for the valuing process and affirms the commonality of a basic value orientation. Rogers sees individuals striving toward self-actualization as tending to be open and pretenseless. They reject the attempts of others to dominate or control them; they value self made decisions; value their own feelings and the feelings of others; accept and appreciate themselves and others for what they are; and place a high value on deep interpersonal relationships. These characteristics appear to be true of individuals who have achieved happiness in their lives and satisfaction in their vocations.

That occupational choice represents an attempt by the individual to self-actualize is the conclusion drawn by Wheller & Carnes (1968). Investigating the relationships among self-concepts, ideal self-concepts, and stereotypes of probable and ideal vocational choices with 134 freshman and sophomore students Wheeler and Carnes conclude that the choice of a vocation is considerably more than an implementation

of the self-concept. They suggest that the vocation may be seen as a means of self-actualization or development toward the ideal self.

Occupational choice has been the subject of vocational theorists and researchers for many years. Early emphasis was placed on establishing criteria for predicting success in specific jobs and subsequently constructing tests of differential aptitudes in order to match applicant to job. The basic theory underlying this approach is that people differ in their traits and jobs differ in their requirements and that once job requirements are isolated and quantified then each individual can be guided to that vocation which most nearly coincides with his abilities. The success of this procedure has been well documented by the United States Employment Service (1947). Aptitude matching is also seen to be a major function of student personnel services in junior colleges (Seibel, 1966).

Other theorists, notably Strong (1933) and Kuder (1948), stressed the importance of individual differences in interests to vocational choice. Both writers accumulated a large amount of material about the likes and dislikes of persons employed in many occupations and from this data developed clusters of like and dislike items for most major occupations. The Strong Vocational Interest Blank and the Kuder Preference Record are widely used today in community colleges and in research in vocational development. More recently there have been attempts made to establish a relationship between personality

factors and vocational choice. Ginzberg, Ginsburg, Axelrad, and Herma (1961), recognized the limitations of tests of ability and interest inventories and in their theory of occupational choice stressed environmental-personological interaction as an explanation of vocational behavior during the developmental process and ultimately to occupational decision-making. To Ginzberg, et al., the individual grows through stages of vocational development first within a period of tentativeness and subsequently within a period of realistic choices. Through this process the individual ultimately chooses a career in which he can make as much use as possible of his interests and capacities in a manner that will satisfy as many of his values and goals as possible. Darley and Hagenah (1955) working in the area of vocational interest measurement concluded that vocational choice and measured occupational interests reflect the value systems, the needs, and the motivations of individuals. Other theorists (Tiedeman and O'Hara, 1962; Tyler, 1961; and Brayfield, 1961) have recognized the importance of measured interests in vocational choice, suggesting that an understanding of the individual's motives and goals can be obtained through an assessment of common components of interest inventories.

Super (1953, 1957) synthesized previous concepts of vocational development in the formulation of his comprehensive theory of vocational development. While accepting the concepts of individual differences, occupational ability patterns, occupational multipotentiality

of the individual, and recognizing the process of vocational choice and adjustment through life stages he views occupational choice primarily as implementing the individual's self-concept. Super (1953) notes:

People differ in their aptitudes, interests, and personalities.

Vocational preferences and competencies, the situations in which people live and work, and hence their self-concepts, change with time and experience . . . making choice and adjustment a continuous process.

Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing and in the development of the self-concept.

The process of vocational development is essentially that of developing and implementing a self-concept; it is a compromise process in which the self-concept is a product of the interaction of inherited aptitudes, various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows . . . (p. 189).

The relationship between personality and vocational choice is viewed by Roe (1956) as an outgrowth of the developmental process where the individual's behavior is expressive of the level and degree to which he has satisfied his basic needs. Utilizing Maslow's concept of self-actualization, Roe views occupational choice as an expression of the individual's attempt to find need satisfaction through his work. The need to self-actualize is suggested by Roe to be quite significant in terms of job satisfaction. "The need for self-actualization seems less likely to have specific concomitants in terms of particular occupations, but its strength may well be the key factor in differentiating

those who put enormous yet easy and pleasant effort into their work from those who do not. This factor of happy effort and of the amount of personal involvement in the work is probably the most important single factor in success in the work (p. 34)."

The satisfaction of needs as a theory of vocational choice has been formulated by Holland (1959) wherein he delineates occupations in terms of personality characteristics. Holland defines six different adjustive orientations each of which represents a somewhat different life style; according to individual orientation, they are ranked by their relative strengths in a hierarchy. The life style heading the hierarchy determines the direction of vocational choice. The hierarchical ordering is quantitatively determined through interest inventories which reveal information in terms of the individual's values, attitudes, needs, self-concept, preferred activities, and sources of threat and dissatisfaction. The individual at the time of vocational decision-making selects that occupation which satisfies his adjustive orientation. The degree of success in this process would appear to depend on the individual's ability to make discriminations among potential environments in terms of his own attributes. Holland defines this ability as self-knowledge and encompasses this concept in certain hypotheses.

1. Persons with inaccurate self-knowledge make inadequate choices more frequently than do persons with more accurate self-appraisals.

2. Persons with limited self-knowledge, including self-evaluation, may make inadequate choices with respect to both range and level of choice.

3. Persons whose self-knowledge is limited in both range (direction) and level (relative level of intelligence) will represent the extremes of inadequate vocational choice. In contrast, persons with relatively accurate self-knowledge will make more adequate choices.

Occupational commitment is seen by some theorists (Borden, Nachman, and Segal, 1963) as occurring through gratification of needs. Like Roe (1953), Borden, et al., attempt to explain vocational behavior within the framework of psychoanalytic theory. Occupations can be described in terms of the gratifications that particular kinds of work offer for the individual. They identify the dimensions which account for the major gratifications as needs, motivations, impulses, and activities. Though their theory excludes persons motivated by external forces, like Roe they suggest that for these people the relation between personal characteristics may account for whether the job is tolerable or quite unpleasant.

The research of Suziedelis & Steimel (1963) has helped clarify the relationship between need hierarchies and inventoried interests. These investigators administered the Edwards Personal Preference Schedule and the Strong Vocational Interest Blank to 198 college freshmen and sophomores and obtained a significant number of positive

relationships between needs and interests. Though the study did not include persons representing the simpler trades nor persons of lower socio-economic status the results do suggest that need hierarchies may be related to job satisfaction within given occupational area.

THE PERSONAL ORIENTATION INVENTORY

The Personal Orientation Inventory, (Shostrom, 1966), was chosen for this investigation because the theoretical constructs which it is intended to measure are drawn from the writers of growth psychology, as was the personality dimension to be investigated in the study. The items utilized in the inventory are suggested to be related to the theoretical formulations of Maslow's (1954; 1962; 1970) concept of self-actualization, Riesman's, et al., (1951) system of inner- and other-directedness and May's, et al., (1958) and Perls' (1947;1951) concepts of time orientation. The several sub-scales on the inventory are felt to provide a comprehensive measure of values and behavior seen to be of importance in the development of self-actualization.

Following are descriptions of the POI scales as stated in the manual.

1. The Time Ratio Scales. The time scales measure the degree to which the individual lives in the present as contrasted with the past or future. The time competent (T_c) person lives primarily in the present with full awareness, contact and full feeling reactivity while

the time incompetent (T_I) person lives primarily in the past, with guilts, regrets, and resentments, and/or in the future, with idealized goals, plans, expectations, predictions and fears.

2. The Support Scales. The support scales are designed to measure whether an individual's mode of reaction is characteristically "self" oriented or "other" oriented. Inner (I), or self-directed individuals are guided primarily by internalized principles and motivations while other (O) directed persons are to a great extent influenced by their peer group or other external forces.

3. Self-Actualizing Values. The items on the SAV scale are derived from Maslow's concept of self-actualizing people. A high score means that the individual holds and lives by values of self-actualizing people, and a low score means he rejects values of self-actualizing people.

4. Existentiality. The Existentiality (Ex) scale measures one's flexibility in applying self-actualizing values and principles to one's life. It is a measure of one's ability to use good judgement in applying these general principles. Higher scores reflect flexibility in application of values. People who get low scores tend to hold values so rigidly that they may become compulsive or dogmatic.

5. Feeling Reactivity. The Fr Scale measures sensitivity to one's own needs and feelings. A low score on this scale shows insensitivity to one's own needs and feelings.

6. Spontaneity. The S scale measures the ability to express feelings in spontaneous action. A low score indicates that one is fearful of expressing feelings behaviorally.

7. Self-Regard. This scale (Sr) measures affirmation of self because of worth or strength. A high score suggests the ability to like one's self because of one's strength as a person. A low score indicates low self-worth.

8. Self-Acceptance. The Sa scale measures affirmation or acceptance of self in spite of weaknesses or deficiencies. A low score indicates inability to accept one's weaknesses.

9. Nature of Man. The Nc scale measures degree of the constructive view of the nature of man. A high score means that one sees man as essentially good. He can resolve the goodness-evil, masculine-feminine, selfishness-unselfishness and spirituality-sensuality dichotomies in the nature of man. A low score means that one sees man as essentially evil or bad and is not synergistic.

10. Synergy. (Sy) A high score on this scale is a measure of the ability to see opposites of life as meaningfully related. A low score means that one sees opposites of life as antagonistic. When one is synergistic one sees that work and play are not different, that lust and love, selfishness and selflessness, and other dichotomies are not really opposite at all.

11. Acceptance of Aggression. The A scale measures ability to

accept one's natural aggressiveness as opposed to defensiveness, denial, and repression of aggression. A high score measures the ability to accept anger or aggression within one's self as natural. A low score means that one denies having such feelings.

12. Capacity for Intimate Contact. This scale (C) measures ability to develop contactful intimate relationships with other human beings, unencumbered by expectations and obligations. A low score means that one has difficulty with warm inter-personal relationships. Making contact may be defined as the ability to develop and maintain an "I-Thou" relationship in the here-and-now and the ability to meaningfully touch another human being. Other measured dimensions which facilitate contact are the ability to express vs. impress, being vs. pleasing, and the ability to relate intensely to another person either aggressively or tenderly.

SELF-ACTUALIZATION AND ETHNICITY

Reference was made above to the unusual composition of the student body studied and it is felt that special consideration should be given this factor of ethnicity as it is related to the study.

It has been noted by the investigator that normative data for the POI is not available for community college students of different ethnic backgrounds. The college freshman norms reported in the manual have been based on test results of students enrolled in Western and

Midwestern liberal arts colleges (Shostrom, 1966), and it has been established that students in this type of institution differ in several ways from community college students (Knoell, 1964; Medsker, 1965; Tillery, 1964; Trent & Medsker, 1965). That there are differences in obtained scores between the subjects studied and the normative group is observed in Figure 1.

Insert Figure 1 about here

It is assumed that the above populations differ in terms of cultural background since Caucasians are a small minority among a student body comprised of ten different ethnic groups. The question is then raised about the possible effect of cultural influence of POI scores. A preliminary t test of the differences of POI scores between Caucasian and Japanese students indicate that significant differences do occur on all but three scales.

Insert Table 1 about here

Although Maslow (1968) suggests that self-actualizing values and behavior are ". . . intrinsic in the structure of human nature itself, that they are biologically and genetically based (p. 167)" he also affirms that they are culturally developed. Whether these values are absolute among different cultures appears open to question.

Honignann (1954), Finney (1969), De Vos (1969), and others have questioned the projection of middle-class American needs and values cross-culturally. However, the ethnic groups studied here have adopted, or are in various degree of adopting, the needs and values of the middle-class American society. It would seem logical then that if the POI does measure important dimensions of behavior and valuing, and if these dimensions are culturally developed then a comparison of these dimensions between ethnic groups would seem to be important. Obviously the influence of these ethnic differences must be considered in interpreting the results of other comparisons made in the study. If differences are found between vocational groups, for example, these may actually reflect to a large degree ethnic rather than vocational differences per se.

THE HYPOTHESES

This study was designed to test the hypothesis that persistence in vocational choice for first-time entering students at a community college is positively related to self-actualization. Specifically, it was an attempt to confirm the notion that the students who succeed in their first chosen field of study would have received better scores on the Personal Orientation Inventory than the students who fail to complete their vocational program.

It is also hypothesized that age is a condition for receiving higher

Figure 1. Profiles of freshman normative group and Honolulu
Community College subjects studied.

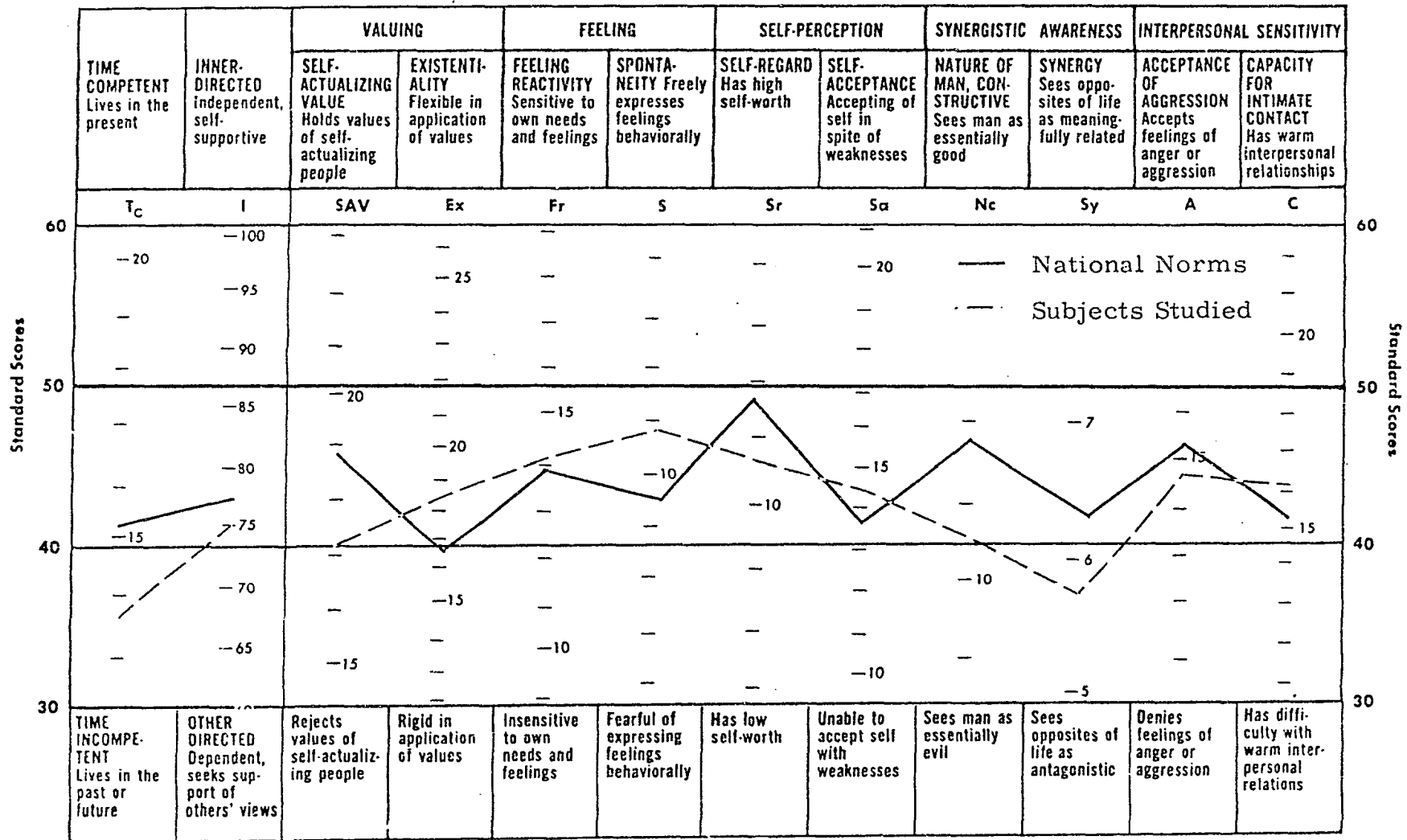


Table 1

Test of Difference between Caucasians and Japanese
for the Personal Orientation Inventory

Scale	df	t
Time Incompetence (T _I)	244	3.21**
Time Competence (Tc)	244	3.41**
Other Directed (O)	244	3.04**
Inner Directed (I)	244	3.21**
Self-Actualizing Value (SAV)	244	3.00**
Existentiality (Ex)	244	2.82**
Feeling Reactivity (Fr)	244	2.10*
Spontaneity (S)	244	1.95
Self Regard (Sr)	244	2.53*
Self Acceptance (Sa)	244	1.42
Nature of Man (Nc)	244	.98
Synergy (Sy)	244	2.33*
Acceptance of Aggression (A)	244	2.16*
Capacity for Intimate Contact (C)	244	3.08**

* p<.05.

** p<.01.

self-actualization scores. This appears to be consistent with Maslow's (1970) criteria for self-actualization. It is further hypothesized that technical-vocational students are less self-actualized than are liberal arts students. This proposition is based on the observation of the experimenter that technical-vocational students exhibit behavior that appears to be characteristic of those individuals who are primarily concerned with satisfying lower level needs and who appear to have a minimal understanding of their interests, aptitudes, and goals.

In addition to the above it is further proposed that differences in POI scores exist between ethnic groups and that there exists also between these groups a relationship between degree of self-actualization as measured by POI scores and degree of acculturation. Acculturation here has been defined in terms of length of residence in the Islands and degree of isolation by residence.

The variables mentioned above consider the factors of persistence, age, major field of study, and acculturation. These variables form the hypotheses of the study.

SPECIFIC HYPOTHESES

1. Students who persist will have better self-actualization scores than students who drop out.
2. Older students will have better self-actualization scores than younger students.

3. Liberal arts students will have better self-actualization scores than will vocational students.

4. That there is a positive relationship between degree of acculturation and scores obtained on the POI and that there will be a difference between ethnic groups on POI scales.

TERMS OPERATIONALLY DEFINED

1. Young students are those subjects who have enrolled in the community college directly from high school and are not more than eighteen years of age.

2. Old students are those subjects who were out of high school one year or more prior to enrollment at the college.

3. Liberal arts students (sometimes referred to as general education students) are those subjects who are not enrolled in a technical-vocational program, and who are carrying at least 10 credits of general education courses identified as such in the college catalogue.

4. Technical-vocational students (also referred to as terminal students) refer to those students who are enrolled in a certificate or degree granting technical-vocational program designated as such in the college catalogue.

5. Persistence is defined as completion of the first semester of the first chosen major and enrollment in the second semester of the same major.

6. Non-persistence is defined as not enrolled in the second semester of the first chosen major.

7. Psychological health is defined with reference to scores on the Personal Orientation Inventory (Shostrom, 1966), hereafter abbreviated as the POI. Good psychological health is defined as scores falling within the "normal" category as given in the POI manual for college freshmen. Poor psychological health is defined as scores falling below the normal range as defined above or above the self-actualized range as stated in the manual.

Two relatively independent studies were set up. The first analysis deals with the first three hypotheses. An analysis of variance will be computed for each of the sub-scales of the Personal Orientation Inventory. The second analysis constitutes an investigation of hypothesis four: that there will be a difference between ethnic groups on POI scales.

CHAPTER II

Methods

SUBJECTS

The subjects were all entering freshmen at Honolulu Community College. Only those students who were classified as entering college for the first time were included. Students with prior experience in either college or trade school were excluded. The ages of the students are typical of freshmen students in a comprehensive community college, ranging from 17 years to 53 years. The subjects in the sample are predominately male as would be expected in colleges stressing the trades curricula.

Table 2

Distribution of Subjects by Sex and by
Major Field of Study^a

Major	Male		Female		Total
	Number	Percent	Number	Percent	Number
Liberal Arts	85	71.4	34	28.6	119
Vocational	355	86.6	55	13.4	410
Total	440	83.2	89	16.8	529

^a A complete breakdown of subjects by curriculum can be found in Appendix A.

The records of the students indicate that they are fairly representative of community college students in Hawaii in terms of grade-point average. High school transcripts, though only available for 43% of the total group studied, do suggest average achievement. No significant difference in grade-point average was noted between students enrolled in liberal arts and those enrolled in technical-vocational programs (Figure 2).

Insert Figure 2 about here

The subjects are further representative of the diverse ethnic groups found in Hawaii, though proportionately fewer Caucasians are found to enroll at this college. The distribution of subjects by ethnic groups is shown in Figure 3.

Insert Figure 3 about here

GROUPS

Subjects were classified as liberal arts students or technical-vocational students. Group membership was determined by the stated objective of the student at the time he enrolled. For purposes of this study, those students classified as technical-vocational who were at the same time enrolled in general education transfer level courses

Figure 2. Smoothed distribution curves of high school grade-point average for the liberal arts and vocational students studied for whom data was available.

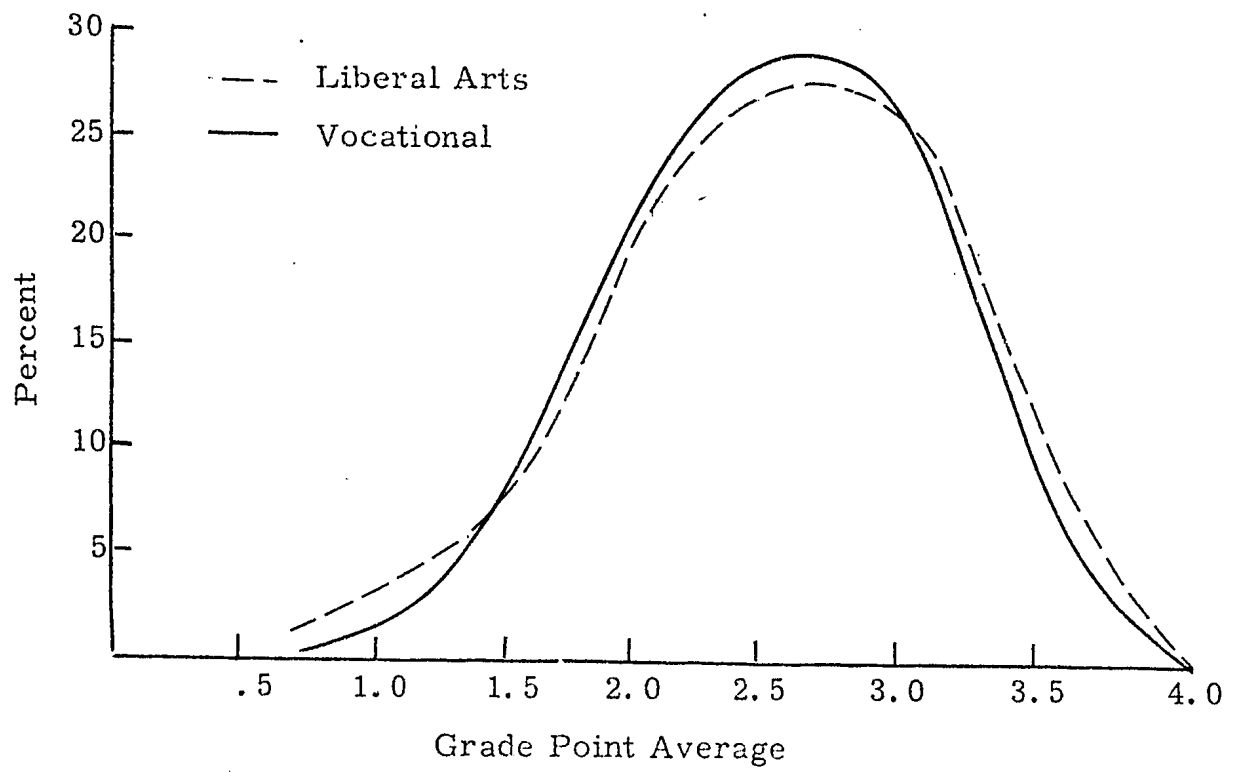
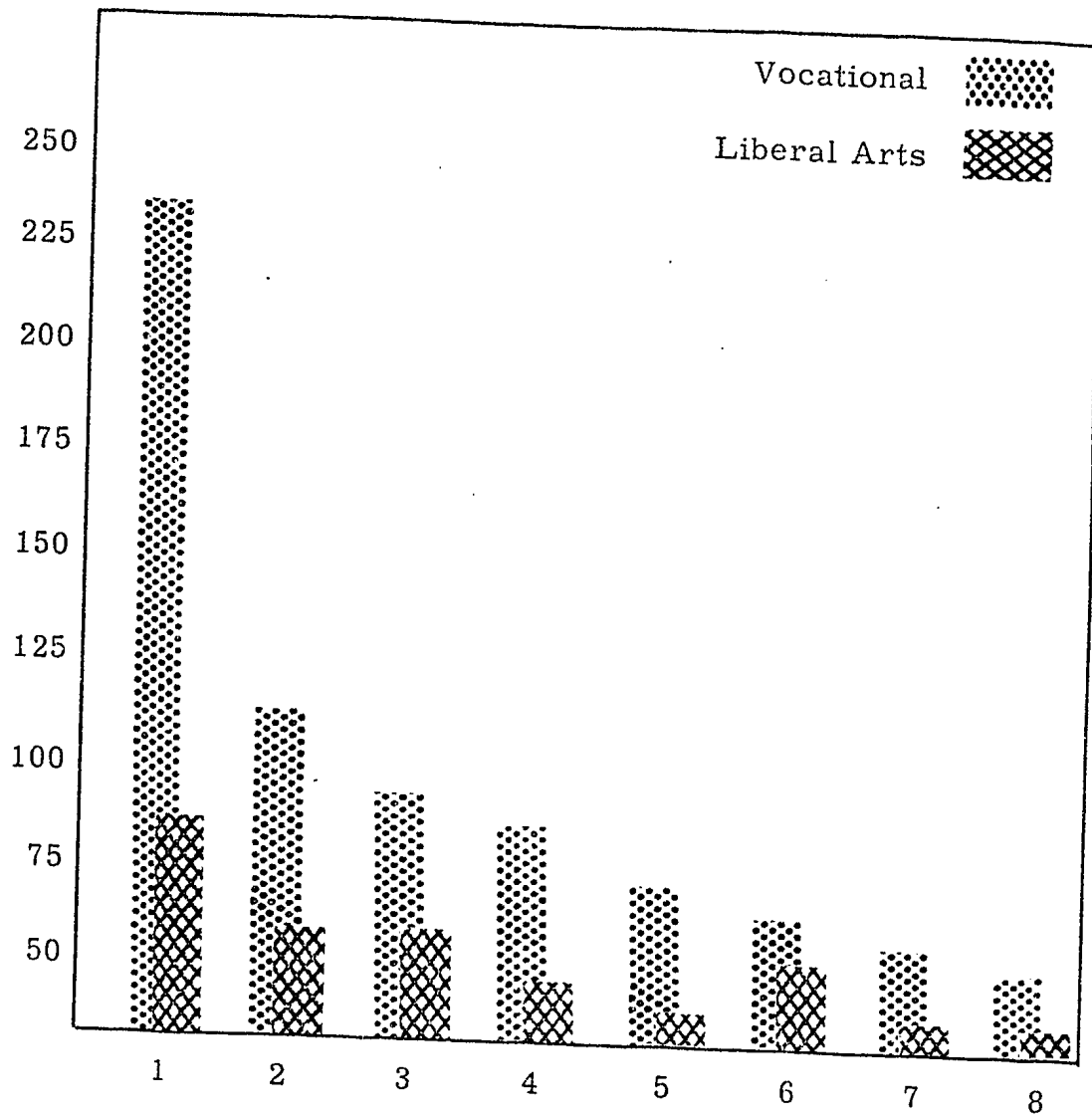


Figure 3. Distribution of subjects by ethnic background and by major field of study.



1 Japanese; 2 Hawaiian; 3 Chinese; 4 Filipino; 5 Mixed; 6 Caucasians; 7 Portuguese; 8 Other.

were excluded from the study. An additional division was made on the basis of age: young students (Y) were those who entered the college directly from high school, and old students (O) were those who entered the college after at least one year out of high school. If the student graduated from high school the semester preceeding entry into college and he was not over 19 years of age he was assigned to the younger age group. A last division was made of all groups on the basis of length of attendance in their program. Students who did not return for the second semester were classified as non-persisters and those students who did return were classified as persisters. Thus there were 8 groups in all: liberal arts young persisters; liberal arts old persisters; liberal arts young non-persisters; liberal arts old non-persisters; vocational young persisters; vocational old persisters; vocational young non-persisters; and vocational old non-persisters.

Table 3

Numbers of Subjects in Major Groups and Group Mean Age

Major	Group Y		Group O		Both Groups	
Group	Number	Mean Age	Number	Mean Age	Number	Mean Age
Liberal Arts	84	17.9	35	24.4	119	19.8
Vocational	237	17.9	173	23.4	410	20.2
Total	321	17.9	208	23.6	529	20.1

Table 4

Distribution of Subjects Into Groups Studied
by Persistence

	Persisters				Non-Persisters			
	Young		Old		Young		Old	
	No.	%	No.	%	No.	%	No.	%
Liberal Arts	54	10.2	22	4.1	30	5.6	13	2.4
Vocational	164	31.0	113	21.3	73	13.8	60	11.3
Total	218	41.2	135	25.4	103	19.4	73	13.7

MEASURES

The Personal Orientation Inventory (Shostrom, 1966) was used in this study to distinguish students who score relatively high on measures of psychological health and students who score low on measures of psychological health. The Personal Orientation Inventory (POI) consists of 150 two choice, paired opposite value judgements empirically determined to distinguish psychologically healthy from less psychologically healthy individuals. The items are scored twice, first for two basic scales of personal orientation: inner-directed support, and time competence; and second for ten subscales, each of which measures a conceptually important element of self-actualization. The inner-directed support scale measures the degree to which an individual's reactivity is basically oriented toward himself. The time competence

scale measures the degree to which an individual effectively uses his time. High scores, within limits specified below, are in the direction of greater psychological health while low scores indicate poorer psychological health. The POI was developed as a measure of self-actualization, the assumption being that self-actualization is attainable only by those individuals who are psychologically healthy and whose mental health can be measured through an examination of his system of values. The self-actualized person is seen as a more fully functioning individual who utilizes his capabilities, or potentialities; who uses time effectively in a manner consistent with his life goals; functions in a relatively autonomous self-supportive way; lives by values felt to be held by psychologically healthy individuals; and behaves in a fashion ". . . free of the inhibitions and emotional turmoil of those less self-actualized (Shostrom, 1966)." In this study scores on the Personal Orientation Inventory are used to compare the differences between age groups, vocational groups, and persisters and non-persisters. It is felt that the psychological health dimensions it attempts to measure are those personality factors believed to be of significance in commitment to vocational choice (Roe, 1956). The subscales which purport to measure aspects of self-actualization are: self-actualizing values (SAV), existentiality (Ex), feeling reactivity (Fr), self-regard (Sr), self-acceptance (Sa), nature of man (Nc), synergy (Sy), acceptance of aggression (A), and capacity for intimate

contact (C).

Norms are based on 2,607 male and female college freshmen and are reported in the manual for the basic scales and additional subscales. Reliability coefficients for the major scales of Time Competence and Inner-Direction are .71 and .84 respectively, and correlation coefficients for the subscales range from .55 to .85.

PROCEDURES

During the first two weeks of the fall semester the POI was administered to all available freshmen by the experimenter. Several instructors devoted one class period for the administration of this inventory. The subjects were asked to submit data concerning their age, date of graduation from high school, ethnic background and major field of study. In addition high school transcripts were inspected by trained student help and grade point averages were obtained for all subjects of record. At the beginning of the second semester the examiner interviewed all instructors on campus and obtained from them the names of subjects who did not return. From this information the subjects were classified as either persisters (returned) or non-persisters (did not return). All data was then coded appropriately, punched into data cards and verified.

DESIGN AND STATISTICS

The study employed two analyses. The first analysis included

12 2x2x2 factorial analyses of variance, one for each POI scale. Since the analyses involved disproportionate cell frequencies the method of expected cell frequencies was used (Myers, 1966). There were a total of eight cells, four of which were filled by persisting students and four by non-persisting students. These subjects were further divided into groups on the basis of major field of study and age. Figure 4 illustrates this experimental design.

	P = 353	NP = 176
Liberal Arts	76	43
	Y = 54 O = 22	Y = 30 O = 13
Vocational	277	133
	Y = 164 O = 113	Y = 73 O = 60

Figure 4. Design of the analysis of variance for the study with actual cell distributions.

A second analysis was employed to test the differences on the 12 POI scales between eight ethnic groups. In this instance a one-way

analysis of variance was used for each of the scales. For those scales in which an overall significance was found the Newman-Kuels model was employed to determine mean differences (Ericksen, 1970).

THE PRESUPPOSITIONS

It was necessary to make some presuppositions regarding non-persistence. There were at least two factors to be considered. These were: the possibility of transfer for the withdrawing liberal arts student; and the assumption that the non-persisting student would not have achieved his objective at the time of his withdrawal. Since the stated goal of the liberal arts student was to receive a two-year degree and/or transfer to the University of Hawaii and since the requirements for automatic transfer to the University is the satisfactory completion of 24 credits, it was assumed that the subjects studied and who had withdrawn had not transferred since they all were classified as first-time entering freshmen students. It was also assumed that the terminal vocational student would not have achieved his objective in one semester or less. All of the vocational students studied were enrolled in one- or two-year certificate or degree granting programs.

It was necessary to make a number of other assumptions:

1. That the sample was representative. Students who had already withdrawn at the time of testing were not included and neither were

students who were absent at the time of testing.

2. That the test used for measuring self-actualization is valid and reliable for the population studied and was properly administered.

3. That the subjects were all equally motivated.

4. That the experimenter's bias would not influence the administration of the test.

5. That distractors in the test situation would be randomly distributed.

6. That subjects, instructors, and authorities would cooperate fully.

7. That all subjects would be able to read and comprehend the test content (perhaps a hazardous assumption).

The following factors are presupposed to be irrelevant although present: variations in physical characteristics; variations in socioeconomic background; and minor differences in the administration of the test. The amount of information which subjects have about the experiment is presupposed to be controlled by the instructions to the subjects. There was no indication that an S was aware of the hypotheses being tested.

CHAPTER III

Results

The first section of this chapter will offer as an introduction to the analyses a brief description of the subjects studied as compared to the normative freshman group. The second section will present the analysis of variance as applied to the first three hypotheses. The third section will deal with the problem of ethnicity as applied to hypothesis four. The concluding section will present a summary and conclusions.

SUBJECTS

The assumption was first made that the technical-vocational subjects studied would receive lower self-actualization scores than those published for the normative freshman group. As indicated in the discussion of Ethnicity, the normative population was from four-year liberal arts mainland colleges. Community college students have been found (Knoell, 1964; Medsker, 1965; Tillery, 1964; and others) to differ in many ways from students in four-year institutions. The experimenter predicted that these differences would be reflected in lower self-actualization scores for the present population. Preliminary investigation of the means of the two groups (Figure 1) indicate that the subjects did have lower scores on seven of the 12 scales and

a test of significance indicates that three of these scales: Self-Regard, Synergy, and Acceptance of Aggression, were significant at the .05 level or less (Table 5). The test also indicates that the subjects scored significantly higher on the dimensions of Existentiality, Feeling Reactivity, Self-Acceptance, and Capacity for Intimate Contact. This data suggests that the Honolulu Community College students in general do compare favorably with their counterparts on the mainland, though they appear to have significantly lower feelings of self-worth, have difficulty in relating objects of life in a meaningful way, and tend to deny feelings of anger or aggression.

This brief profile offers an overall picture of the subjects studied. Relative distinct differences between vocational groups can be seen in Figure 5.

Insert Figure 5 about here

That there are also significant differences between ethnic groups is evident from Figure 6.

Insert Figure 6 about here

ANALYSIS I

The first analysis in the study investigated the three variables

Table 5

Test of Difference Between Subjects Studied
and National Freshman Means

Scale	df	t
Time Competence (T _c)	2574	1.02
Inner-Directed (I)	2574	.33
Self-Actualizing Value (SAV)	2574	1.01
Existentiality (Ex)	2574	6.43**
Feeling Reactivity (Fr)	2574	2.66**
Spontaneity (S)	2574	1.03
Self-Regard (Sr)	2574	6.63**
Self-Acceptance (Sa)	2574	3.14**
Nature of Man (Nc)	2574	1.05
Synergy (Sy)	2574	7.00**
Acceptance of Aggression (A)	2574	1.84*
Intimate Contact (C)	2574	2.54**

* $p < .05$

** $p < .01$

Figure 5. Profiles of subjects enrolled in selected occupational programs.

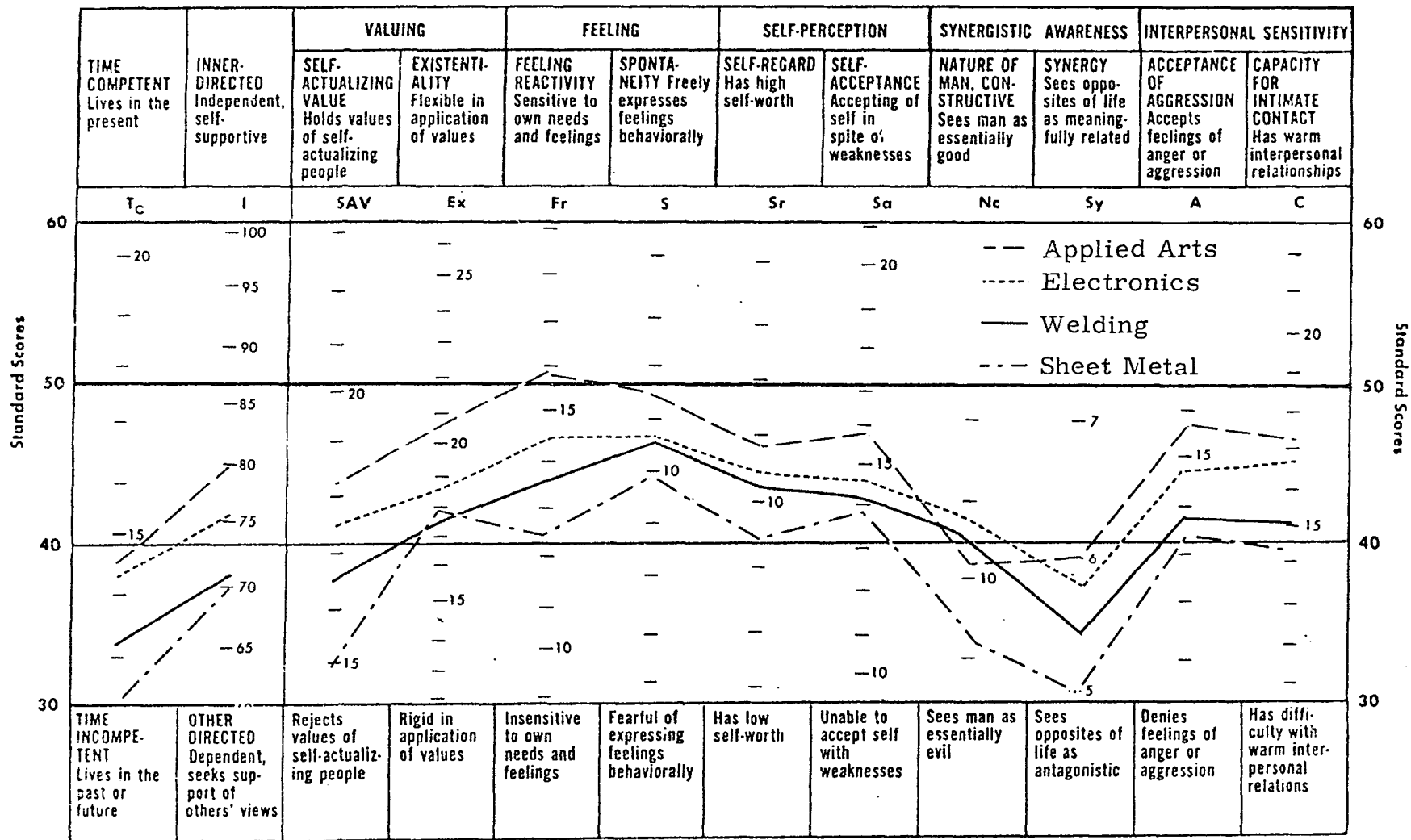
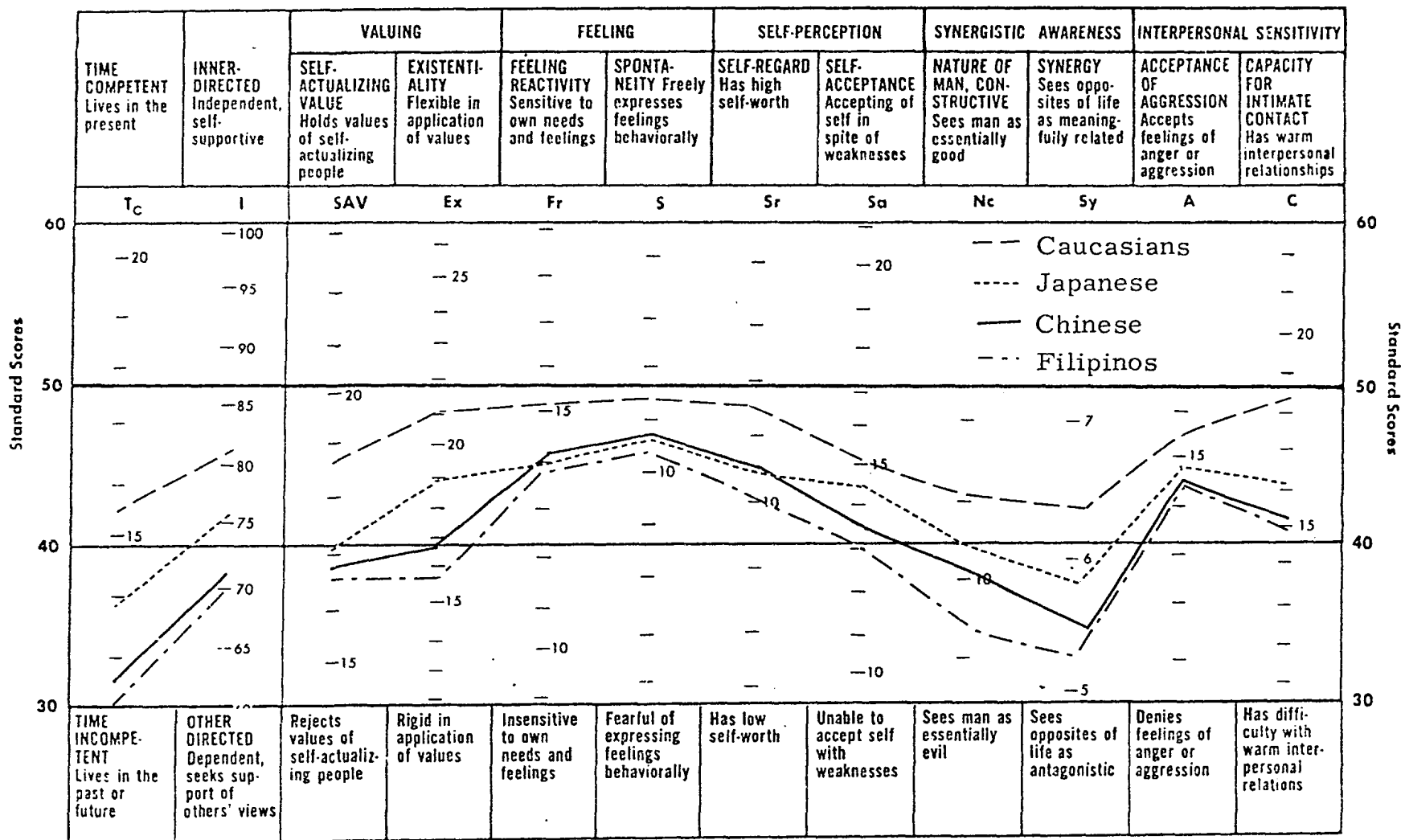


Figure 6. Profiles of subjects by selected ethnic groups.



of persistence, major, and age, based upon the 12 scales of the Personal Orientation Inventory. The scales where significant differences pertained are presented in Tables 6 through 13. Additional data can be found in Appendix A.

Significant differences were found on seven scales: Time Competence, Inner-Directed Support, Self-Actualizing Values, Existentiality, Self-Regard, Synergy, and Capacity for Intimate Contact (Tables 6 through 13).

The general hypothesis of this study, that students who score low on a measure of self-actualization do not persist in their first chosen major field of study, is not supported by the data. Figure 7 illustrates the similarity of the scores between persisters and non-persisters.

 Insert Figure 7 about here

Two specific hypotheses were supported by the data. As predicted, older students had higher self-actualization scores than younger students on the scales of Time-Competence, ($F = 4.64$, $p < .05$); Inner-Directed Control, ($F = 3.96$, $p < .05$); Self-Actualizing Values, ($F = 4.78$, $p < .05$); Self-Regard, ($F = 27.86$, $p < .01$); and Synergy, ($F = 6.83$, $p < .01$). The general pattern of scores for this hypothesis are plotted in Figure 9. Furthermore, liberal arts students had

Figure 7. Profiles of mean scores of the POI for persisters and non-persisters.

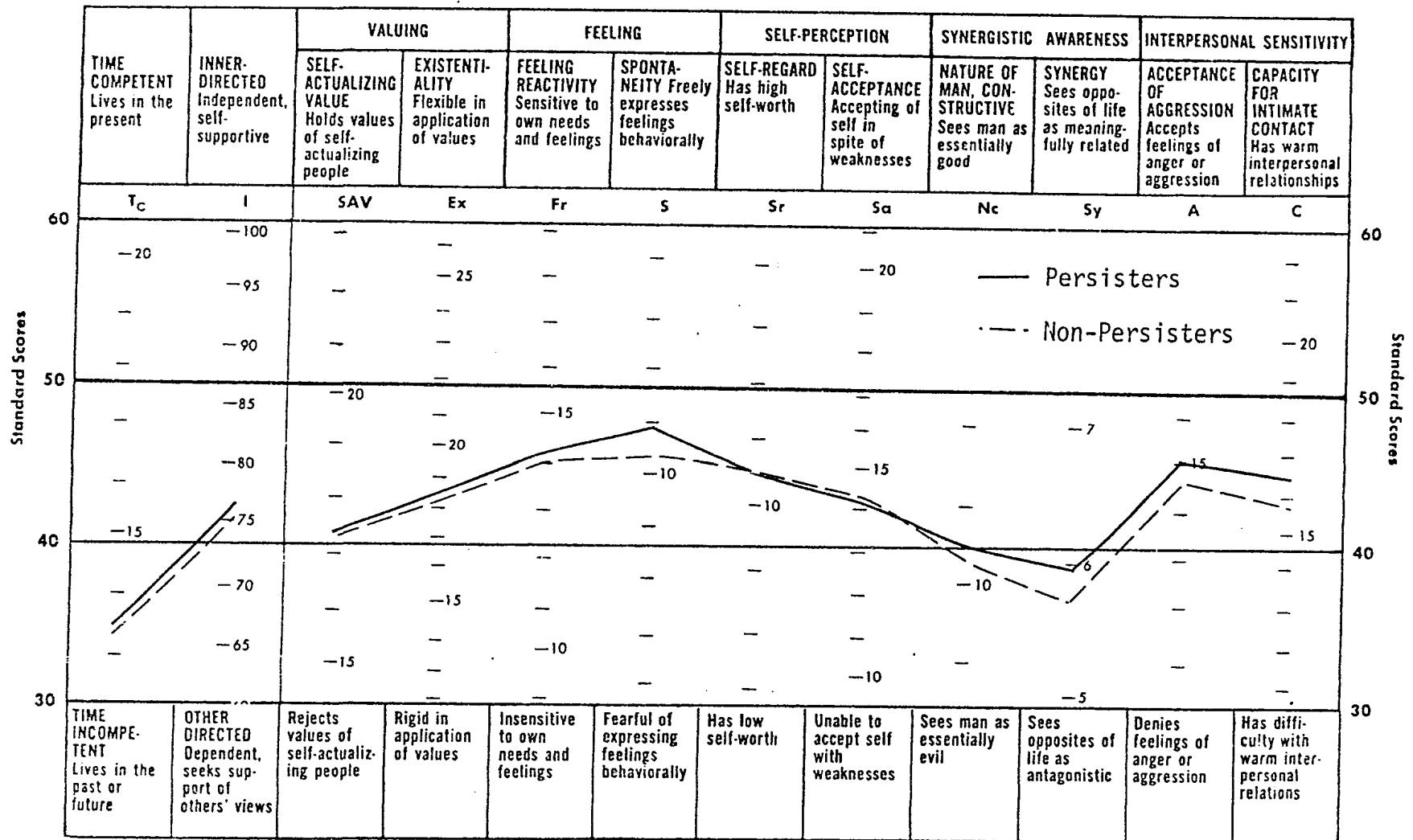


Table 6

Analysis of Variance of the Time Competence Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	.63	.06
Between Age Groups	1	49.55	4.64*
Between Majors	1	8.43	.79
Interaction: Persistence x Age Groups	1	.89	.08
Interaction: Persistence x Major	1	4.63	.43
Interaction: Age Groups x Major	1	1.36	.13
Interaction: Persistence x Age Groups x Major	1	1.77	.17
Within Groups	522	10.68	

* $p < .05$

Table 7

Analysis of Variance of the Inner Directed Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	49.78	.50
Between Age Groups	1	392.80	3.96*
Between Majors	1	826.42	8.33**
Interaction: Persistence x Age Group	1	.89	.00
Interaction: Persistence x Major	1	32.47	.32
Interaction: Age Groups x Major	1	19.84	.20
Interaction: Persistence x Age Groups x Major	1	614.05	6.19*
Within Groups	522	99.11	

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

Table 8

Analysis of Variance of the Self-Actualizing Value Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	.16	.01
Between Age Groups	1	48.68	4.78*
Between Majors	1	9.42	.92
Interaction: Persistence x Age Group	1	.14	.01
Interaction: Persistence x Major	1	12.66	1.24
Interaction: Age Group x Major	1	1.71	.16
Interaction: Persistence x Age Group x Major	1	6.31	.62
Within Groups	522	10.17	

* $p < .05$.

Table 9

Analysis of Variance of the Existentiality Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	2.05	.09
Between Age Groups	1	9.75	.43
Between Majors	1	119.06	5.28*
Interaction: Persistence x Age Groups	1	7.08	.31
Interaction: Persistence x Major	1	1.08	.04
Interaction: Age Groups x Major	1	33.52	1.48
Interaction: Persistence x Age Groups x Major	1	51.96	2.30
Within Groups	522	22.51	

* $p < .05$.

Table 10

Analysis of Variance of the Self Regard Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	.01	.00
Between Age Groups	1	164.98	27.86**
Between Majors	1	53.50	9.03**
Interaction: Persistence x Age Groups	1	5.86	.99
Interaction: Persistence x Major	1	.23	.03
Interaction: Age Groups x Major	1	1.34	.22
Interaction: Persistence x Age Groups x Major	1	25.24	4.26*
Within Groups	522	5.92	

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

Table 11

Analysis of Variance of the Self Acceptance Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	1.13	.11
Between Age Groups	1	25.90	2.55
Between Majors	1	4.41	.43
Interaction: Persistence x Age Groups	1	2.40	.24
Interaction: Persistence x Major	1	1.06	.10
Interaction: Age Groups x Major	1	.22	.02
Interaction: Persistence x Age Groups x Major	1	74.33	7.31**
Within Groups	522	10.17	

** $p < .05$.

Table 12

Analysis of Variance of the Synergy Scores
of the POI for 3 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	2.38	1.10
Between Age Groups	1	14.71	6.83**
Between Majors	1	9.09	4.22**
Interaction: Persistence x Age Groups	1	3.11	1.44
Interaction: Persistence x Major	1	1.21	.56
Interaction: Age Groups x Major	1	3.42	1.58
Interaction: Persistence x Age Groups x Major	1	.77	.35
Within Groups	522	2.15	

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

Table 13

Analysis of Variance of the Capacity for Intimate Contact
Scores of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	15.15	1.06
Between Age Groups	1	26.65	1.66
Between Majors	1	86.19	6.06*
Interaction: Persistence x Age Groups	1	2.78	.19
Interaction: Persistence x Major	1	12.27	.86
Interaction: Age Groups x Major	1	5.21	.36
Interaction: Persistence x Age Groups x Major	1	45.29	3.18
Within Groups	522	14.22	

* $p < .05$.

higher self-actualization scores than vocational students on Inner-Directed Control, ($\underline{F} = 8.33, p < .01$); Existentiality, ($\underline{F} = 5.28, p < .05$); Self-Regard, $\underline{F} = 9.03, p < .01$); Synergy, ($\underline{F} = 4.22, p < .05$); and Capacity for Intimate Contact, ($\underline{F} = 6.06, p < .05$). Figure 8 profiles these differences and further indicates that although no statistical significance appears for the other seven scales the general pattern suggests a consistent difference throughout. In no case do the vocational students score higher than the liberal arts students.

ANALYSIS II

The following pages presents an analysis of variance for each of the POI scales which indicated a significance between eight major ethnic groups represented in the study.

Table 14
Ethnic Groups Compared on Personal Orientation
Inventory by Number and Age

Ethnic Group	Symbol	Number	Mean Age
Filipino	F	52	20.2
Chinese	Ch	69	19.6
Portuguese	P	25	19.8
Hawaiian ^a	H	82	20.0
Japanese	J	203	19.9
Caucasian	C	43	22.7
Mixed ^b	M	36	19.1
Other	O	10	21.0

^a Includes part Hawaiian

^b Other than part Hawaiian

There were significant differences between groups on eight of the 12 scales: Time-Competence, ($\underline{F} = 7.83$, $\underline{p} < .01$); Inner-Directed Control, ($\underline{F} = 4.85$, $\underline{p} < .01$); Existentiality, ($\underline{F} = 5.76$, $\underline{p} < .01$); Synergy, ($\underline{F} = 2.57$, $\underline{p} < .05$); Capacity for Intimate Contact, ($\underline{F} = 3.28$, $\underline{p} < .01$); Self-Actualizing Values, ($\underline{F} = 2.57$, $\underline{p} < .05$); Nature of Man, ($\underline{F} = 2.50$, $\underline{p} < .05$); and Self-Acceptance, ($\underline{F} = 2.15$, $\underline{p} < .05$). No specific mean differences were found on the Self-Actualizing Value scale, the Nature of Man scale, and the Self-Acceptance scale. Table 15 indicates the difference between treatment pairs on all scales according to the Newman-Keuls method.

It appears that the most consistently significant difference between ethnic groups lies between the Caucasians, Mixed, Japanese, and Hawaiians versus the Filipinos; the latter group characterized as being Time-Incompetent. This would suggest that the Filipinos primarily live in the past, with guilts, regrets, and resentments, and/or in the future, with idealized goals, plans, expectations, predictions and fears. By comparison to the Caucasians the Filipinos in addition could be described as being "other" directed (lacking internalized principles and motivations) (I: $\underline{q} = 7.34$, $\underline{p} < .05$); rigid in the application of values (Ex: $\underline{q} = 3.34$, $\underline{p} < .05$); and lacking the capacity to establish warm interpersonal relationships (C: $\underline{q} = 2.62$, $\underline{p} < .05$).

It is clear that all groups, except Mixed, differ from the

Caucasians on the "Support" scale. However, in this instance reference to the original data (Table 23, Appendix B) and compared to published data reveals that the Japanese and Hawaiians, though differing from the Caucasians, received scores which place them within the normal range for freshman students. It should be noted here that the scores obtained by the Caucasians on this scale may be a consequence of age, the difference between Caucasians and Japanese and Hawaiians being 2.8 and 2.7 years respectively. Table 14 gives the data concerning ages for the ethnic groups under consideration.

Table 15

Results of the Newman-Keuls Method of Treatment Pairs
on the 12 Scales of the Personal Orientation Inventory
for 8 Ethnic Groups

Filipino													Tc - Time Competence
Chinese													I - Inner-Directed Control
Other													Ex - Existentiality
Portuguese													Sy - Synergy
													C - Capacity for Intimate Contact
Hawaiian	Tc												
Japanese	Tc												
Mixed	Tc Ex												
Caucasians	Tc Ex I C	Tc Ex I C	Tc I	Tc Ex I Sy	C	I	I						
	F	Ch	O	P	H	J	M	C					

A similar conclusion to the above may be drawn from an examination of the means for the Chinese and Filipinos on the Capacity for Intimate Contact scale. Their scores do not suggest any particular difficulty with establishing warm interpersonal relationships. The statistical significance only supports the hypothesis that a difference exists between the Caucasians and themselves. The Caucasians scoring well above the "normal" range. Again the age variable may account for this difference.

The data (Table 29) indicate that the Chinese and Portuguese differ significantly from the Caucasians on the Existentiality scale ($q = 3.34, p < .05$; and $q = 3.22, p < .05$ respectively). The possibility that the age difference of approximately three years between the Caucasians and the other two groups may be a contributing factor in this difference, and should be considered.

According to the analysis the Portuguese also differ significantly from the Caucasians on the Synergy scale ($q = 1.07, p < .05$). An examination of Figure 6 reveals that all groups, other than Caucasians, obtained scores in the direction of non-self-actualization. It is noted here that while all groups fall within the normal limits, when evaluated according to the normative data, the Caucasians had significantly higher scores on this scale, as well as on the others.

It was hypothesized that there would be a positive relationship between degree of acculturation and scores obtained on the Personal

Orientation Inventory. In order to test this relationship eight major ethnic groups represented in the study were ranked according to the time of major group migration to the Islands. Most of the data for this ordering was obtained from the research of Lind & Schmitt (1968). Placement of the Hawaiian (part-Hawaiian) group in the ordering was established through consultation with members of the social science department at the college. The placement of the Chinese was arbitrarily made after consultation with faculty and student personnel services at the college. It was noted that the large majority of the Chinese students in the study are not descendents of the early group that migrated to Hawaii. They are for the most part later arrivals from Hong Kong. The mean score data for the ethnic groups studied are given in Table 39, Appendix B. The two main scores of the POI (Time Competence, and Inner-Directed Control) were used to test the relationship described above.

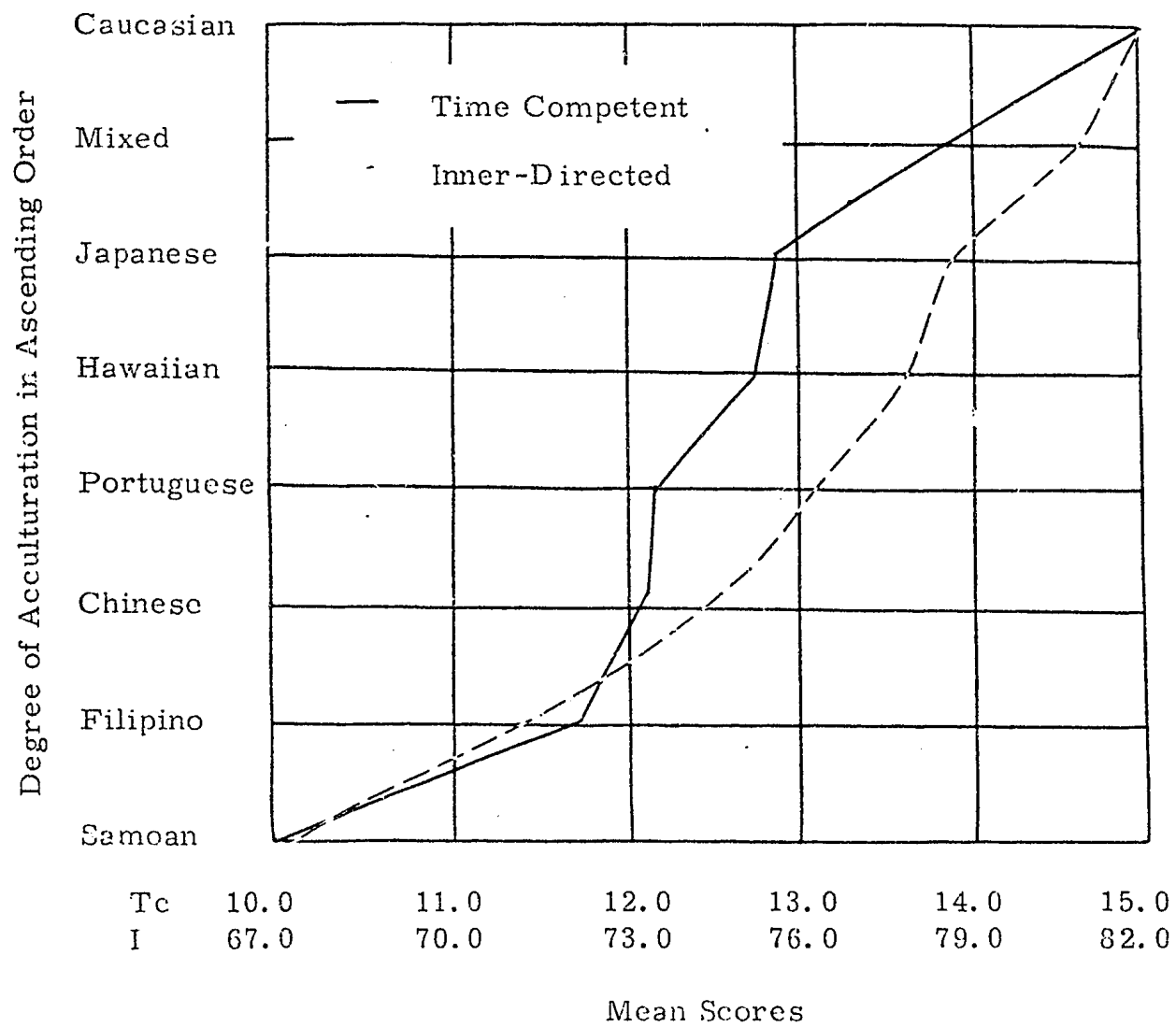
Insert Figure 8 about here

The data presented does support the hypothesis that degree of acculturation is positively related to scores obtained on the Personal Orientation Inventory.

CONCLUSIONS

This problem was an attempt to answer the question: Do first

Figure 8. The relationship between acculturation and the Time
Competent and Inner-Directed scales of the POI for eight ethnic groups.



time entering students at a community college who succeed in their first chosen field of study receive better scores on the Personal Orientation Inventory than the students who fail to complete their program? The data obtained from the POI and evaluated according to the analysis of variance suggest that at least for POI scores within the limits of the population studied and the analysis used there is no difference. The data also suggests no differences between other sources of variation (major and age) on seven of the 12 scales. There was significant difference in the "major" variable on five scales (I, Ex, Sr, S, and C) and in the "age" variable on five scales (Tc, I, SAV, Sr, and S).

In conclusion it can be stated that psychological health, as measured by the Personal Orientation Inventory, is not of a sufficient condition for the occurrence of withdrawal; that vocational choice (liberal arts or technical) is of a sufficient condition for the occurrence of better psychological health; that age is of a sufficient condition for the occurrence of better psychological health; and that there is a functional relationship between persistence, major, and age as they affect scores on the Personal Orientation Inventory.

The analysis of the Personal Orientation Inventory scores according to ethnic groups indicate that significant differences do occur between these groups. It is apparent that the Filipino groups and to a lesser degree the Chinese and Portuguese groups obtain fairly low

scores on a number of the POI scales. All groups, excepting Caucasians, appear to be somewhat Time Incompetent, with the Chinese, Filipinos, Portuguese scoring so low as to be considered non-self-actualized. The latter three groups are also characterized as being "other" directed, which may be consistent with their seeming reliance on their own culture group for support. These same groups also evidence a rejection of the values of self-actualizing people while at the same time being rather rigid in the application of their values. It is also apparent that these groups exhibit inability to accept their own weaknesses, that they tend to see man as essentially evil, and that they have difficulty in relating all objects of life in a meaningful way.

The method employed in the analysis of ethnicity (Newman-Keuls) appears to have been of questionable value. In too many instances it was not powerful enough. A follow up study using predicted orthogonal comparisons may be essential.

CHAPTER IV

Summary, Conclusions and Recommendations

SUMMARY

This study has investigated personality factors associated with self-actualization among first time entering students at a predominately trade-technical community college. An attempt was made to discover those self-actualization dimensions that differentiate between persisters and non-persisters. A further analysis was made in order to locate possible differences in self-actualization dimensions between different ethnic groups.

The subjects in the study were 529 students enrolled in various occupational programs. They are representative of ten different ethnic groups, Caucasians being in a minority. The students were administered the Personal Orientation Inventory at the beginning of the fall semester, 1971, and at the conclusion of the semester were classified with regard to length of attendance, major field of study (liberal arts or technical-vocational), and age. A subsequent division was also made on the basis of ethnic background.

The general hypothesis of the study--that students who persist will have better self-actualization scores than students who drop out--was not supported by the data. However, three of the specific hypotheses were supported. The proposition that older students would get

better self-actualization scores than younger students was supported by the Time Competence, Inner-Directed Control, Self-Actualizing Values, Synergy, and Self-Regard scales. The proposition that liberal arts students would get better self-actualization scores than technical-vocational students was supported by analysis of the Inner-Directed Control, Existentiality, Self-Regard, Synergy, and Capacity for Intimate Contact scales.

CONCLUSIONS

The preceding analysis suggests that low psychological health as measured by the Personal Orientation Inventory is not a sufficient condition for the withdrawal of first time entering students at Honolulu Community College during the initial semester enrollment period.

The analysis also suggests that students enrolled in liberal arts programs have better psychological health than do students enrolled in technical-vocational programs. This difference appears to be particularly significant on some dimensions. The technical-vocational student is characteristically much more receptive to external direction and control. He seems to be relatively rigid in his valuing system, and in relation to his cousins in the liberal arts, has low self-worth and more difficulty in establishing warm interpersonal relationships.

That age is sufficient condition for better psychological health on certain dimensions is also suggested by the analysis. This supports

Maslow's postulate that age and experience are a necessary condition for good psychological health. Older students are more time competent and also evidence a greater degree of "inner" control. Their values are more like those of self-actualizing people and they appear to have less difficulty relating objects of life in a meaningful way.

There is also a distinct difference between ethnic groups on measures of psychological health, the greatest difference appearing between Caucasians and all other groups. The Filipinos, Portuguese, and Chinese seem to have poor psychological health (non-self-actualized) on a number of scales. These four groups appear to be "other" directed, to live by non-self-actualizing values, and to be rigid in the application of their values. They also appear unable to accept their own weaknesses, to see man as essentially evil, and to have difficulty relating objects of life meaningfully.

RECOMMENDATIONS

This study has supported the hypothesis that the conglomerate multi-ethnic group of students at this community college has a wide range of values and needs and that they evidence wide divergence in their growth toward self-actualization. It would seem that this college in Hawaii has indeed a significant problem to cope with if it intends to deal with the realities of their particular situation. How best to

provide for a multi-cultural student body with all their attendant differences in a manner conducive to personal growth and development and at the same time provide means to ensure success in their vocational life both in Hawaii and nationally will demand a new approach to the education of these students.

The first step in this process is of course the attaining of a real knowledge of the students. This study is perhaps a small beginning in this direction and the following recommendations if acted upon would further add to our knowledge of our students.

1. It is recommended that this study be replicated but on a longitudinal basis. The direction of the differences obtained on all scales suggests that there may well be a personality factor(s) involved with the non-persisting student. It is felt that a one-semester enrollment period does not significantly differentiate between persisters and drop-outs. It would seem appropriate also that the study investigate the variable of persistence within and between ethnic groups.

2. It was noticed that significant differences were obtained between different technical-vocational majors. The literature offers little knowledge as to personality and vocational choice in Roe's levels four and five categories. This would appear to be an area well worth studying and such findings would be of great value in future curriculum development.

3. This study confined itself to one community college in Hawaii.

This college does have its own particular image with the community and among the high school students in the State and quite probably does not offer a fair representation of the community college student in Hawaii. It would seem advantageous to compare the students at this college with students at other community colleges and at the University of Hawaii.

4. Assuming that furthering growth toward self-actualization is a matter for concern and knowing that instructors in vocational programs have a great influence on their students it would seem important to investigate the relationship of the instructors psychological health to the students growth toward self-actualization over a period of time.

5. A most important investigation would be concerned with the growth, or development, toward self-actualization within ethnic groups. A study such as this could be accomplished at this location since individuals representing various degrees of acculturation are present.

6. No attention was given in this study to the interaction of POI scores, ethnic groups, and vocational choice. It would seem appropriate, especially since students in those groups obtaining the lowest scores tend to be enrolled in a simpler trades (Roe's level four and five), to further investigate this interaction.

7. It would seem most appropriate to investigate personality dimensions within and between ethnic groups in relation to vocational

choice with a measure other than the Personal Orientation Inventory. Perhaps a less structured, less verbally dependent instrument would be more satisfactory with the type of student enrolled in the technical-vocational programs at this college.

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APPENDIX A

Characteristics of the Self-Actualized Person¹

1. More efficient perception of reality and more comfortable relations with it.
2. Increased acceptance of self, of others, and of nature.
3. Increased spontaneity, simplicity, and naturalness.
4. Increase in problem centering.
5. Increase in detachment and desire for privacy.
6. Increased autonomy and resistance to being dominated by the culture.
7. Greater freshness of appreciation and richness of emotional reaction.
8. Higher frequency of all-absorbing experiences.
9. Increased feelings of brotherhood to man.
10. Good relationships with others.
11. More democratic beliefs.
12. Discriminates between means and ends, between good and evil.
13. Philosophical, unhostile sense of humor.
14. Greatly increased creativity.
15. Resistant to enculturation.

¹ Abraham H. Maslow, Motivation and personality. New York: Harper & Row, 1970, pp. 153-180.

Table 16

Distribution of Subjects Studied According to
Major Field of Study and by Age Group^a

Major	Group Y	Group O	Both Groups	
			Number	Percent
Liberal Arts	84	35	119	22.5
Auto Body Repair	21	17	38	7.2
Drafting	14	26	40	7.6
Auto Mechanics	31	16	47	8.9
Applied Arts	13	8	21	4.0
Aviation Mechanics	15	14	29	5.5
Carpentry	13	4	17	3.2
Baking	2	4	6	1.1
Cosmotology	32	6	38	7.2
Electronics	28	29	57	10.8
Fashion Arts	6	2	8	1.5
Electricity	18	14	32	6.0
Industrial Education	0	4	4	0.8
Machine Shop	6	2	8	1.5
Refrigeration	19	7	26	4.9
Sheet Metal	13	6	19	3.6
Welding	6	14	20	3.8
Total	321	208	529	100.0

^a Group Y designates subjects who entered college directly from high school and Group O designates subjects who entered college after at least one year out of high school. For mean age data see Table 3.

Table 17

Distribution of Subjects by Major Field
of Study and by Sex

Major	Male		Female		Total
	Number	Percent	Number	Percent	Number
Liberal Arts	85	71.4	34	28.6	119
Auto Body Repair	38	100.0	0	0.0	38
Drafting	38	95.0	2	5.0	40
Auto Mechanics	47	100.0	0	0.0	47
Applied Arts	13	62.0	8	38.0	21
Aviation Shop	29	100.0	0	0.0	29
Carpentry	17	100.0	0	0.0	17
Baking	5	83.3	1	16.7	6
Cosmotology	1	2.6	37	97.4	38
Electronics	57	100.0	0	0.0	57
Fashion Arts	1	12.5	7	87.5	8
Electricity	32	100.0	0	0.0	32
Industrial Educ.	4	100.0	0	0.0	4
Machine Shop	8	100.0	0	0.0	8
Refrigeration	26	100.0	0	0.0	26
Sheet Metal	19	100.0	0	0.0	19
Welding	20	100.0	0	0.0	20
Total	440	83.2	89	16.8	529

Table 18

Analysis of Variance of the Feeling Reactivity Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persisters and Non-Persisters	1	5.03	.58
Between Age Groups	1	19.40	2.25
Between Majors	1	3.94	.45
Interaction: Persistence x Age Groups	1	.02	.00
Interaction: Persistence x Major	1	.17	.01
Interaction: Age Groups x Major	1	8.14	.94
Interaction: Persistence x Age Groups x Major	1	25.23	2.93
Within Groups	522	8.59	

Table 19

Analysis of Variance of the Spontaneity Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	19.32	3.67
Between Age Groups	1	11.44	2.17
Between Majors	1	7.56	1.43
Interaction: Persistence x Age Groups	1	5.55	1.05
Interaction: Persistence x Major	1	1.40	.26
Interaction: Age Groups x Major	1	.19	.03
Interaction: Persistence x Age Groups x Major	1	18.73	3.55
Within Groups	522	5.26	

Table 20

Analysis of Variance of the Nature of Man Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	.99	.22
Between Age Groups	1	8.71	1.94
Between Majors	1	12.07	2.69
Interaction: Persistence x Age Groups	1	.03	.00
Interaction: Persistence x Major	1	.19	.04
Interaction: Age Groups x Major	1	5.62	1.25
Interaction: Persistence x Age Groups x Major	1	.01	.00
Within Groups	522	4.47	

Table 21

Analysis of Variance of the Acceptance of Aggression Scores
of the POI for 8 Groups of Subjects

Source of Variation	df	MS	F
Between Persistence and Non-Persistence	1	35.31	2.12
Between Age Groups	1	.29	.01
Between Majors	1	10.65	.63
Interaction: Persistence x Age Groups	1	2.31	.13
Interaction: Persistence x Major	1	7.28	.43
Interaction: Age Groups x Major	1	16.33	.98
Interaction: Persistence x Age Groups x Major	1	46.70	2.80
Within Groups	522	16.64	

Figure 9. Profiles of liberal arts students and technical-vocational students.

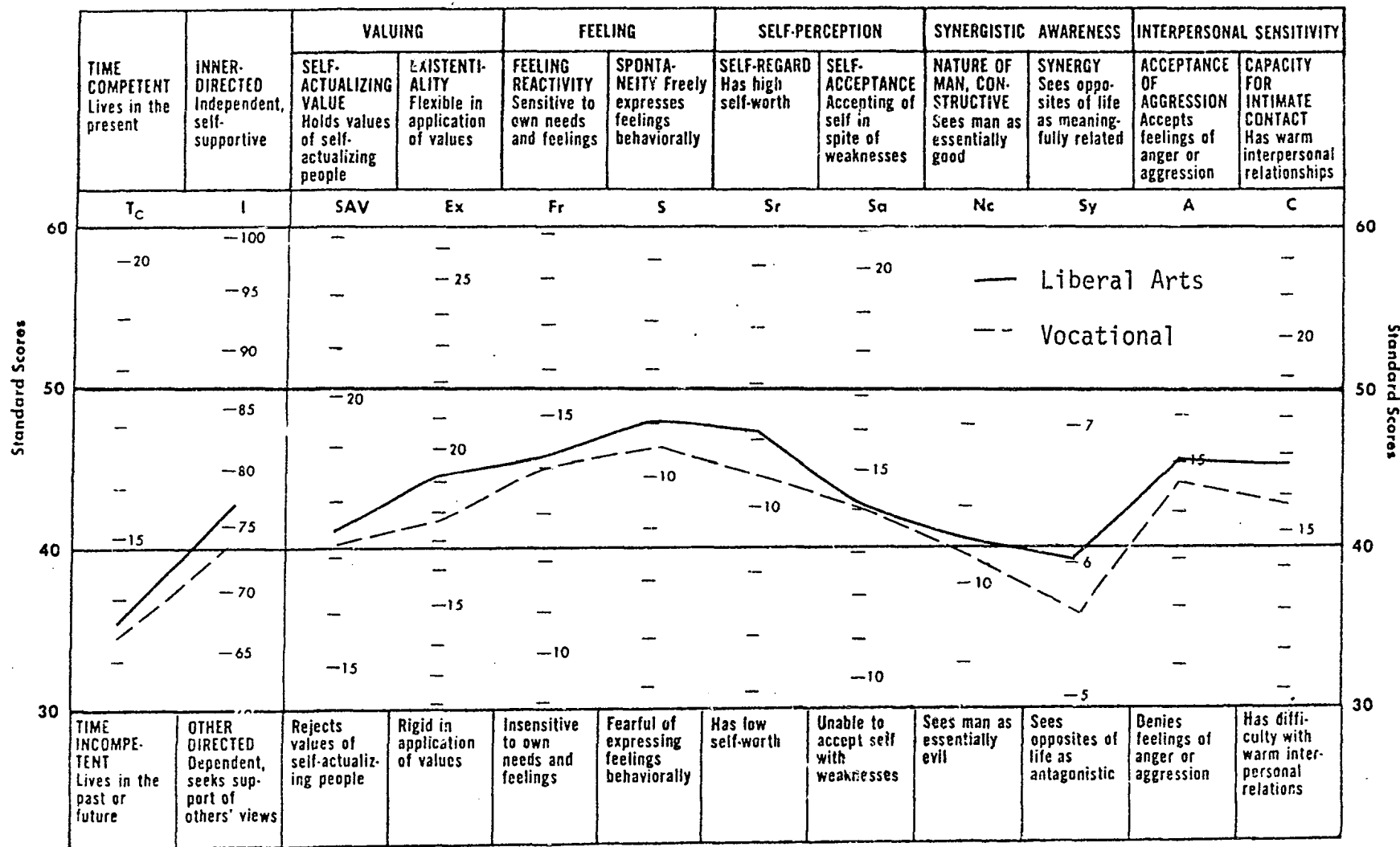


Figure 10. Profiles of subjects studied by age groups.

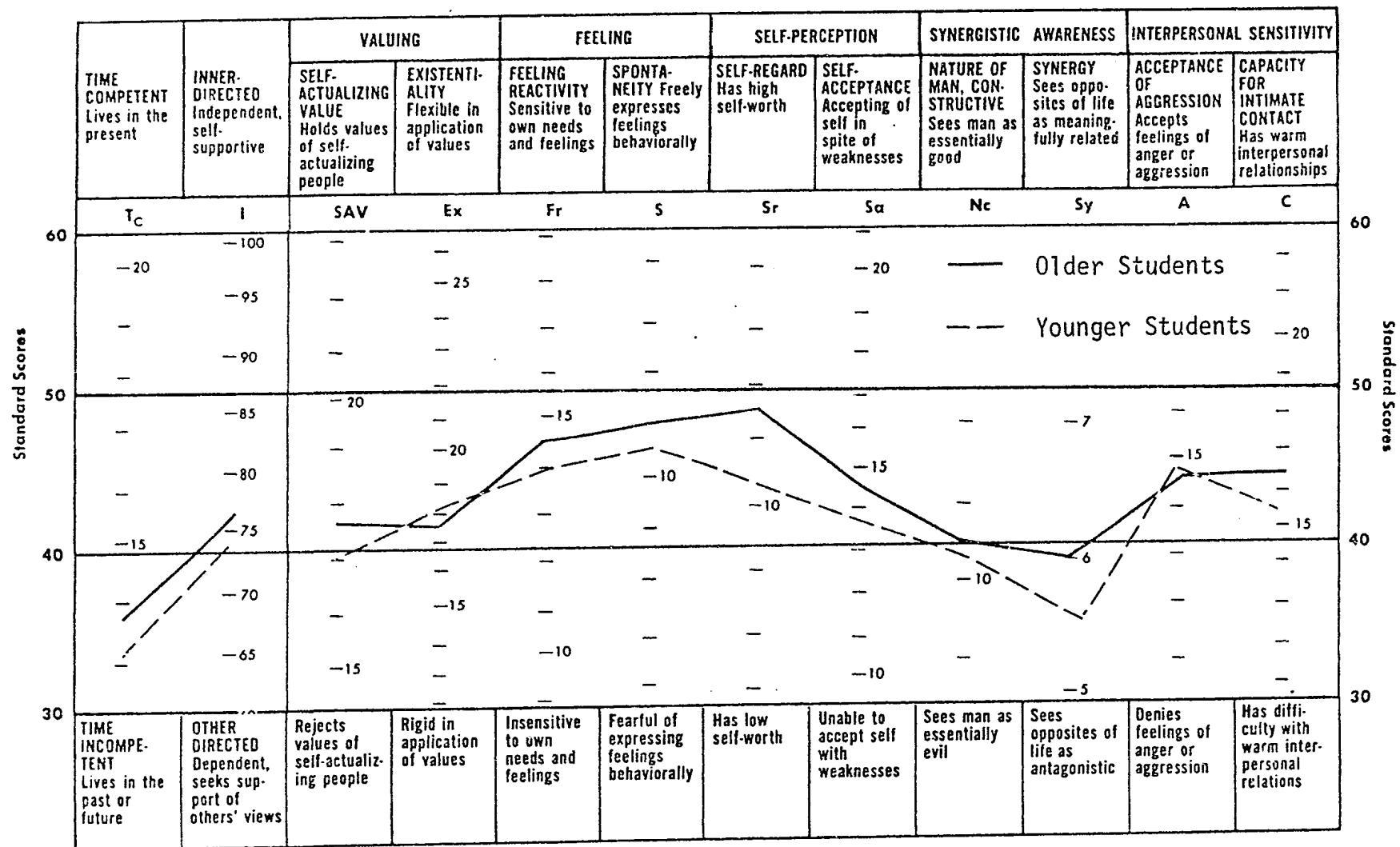


Figure 11. Profiles of younger students by major field of study.

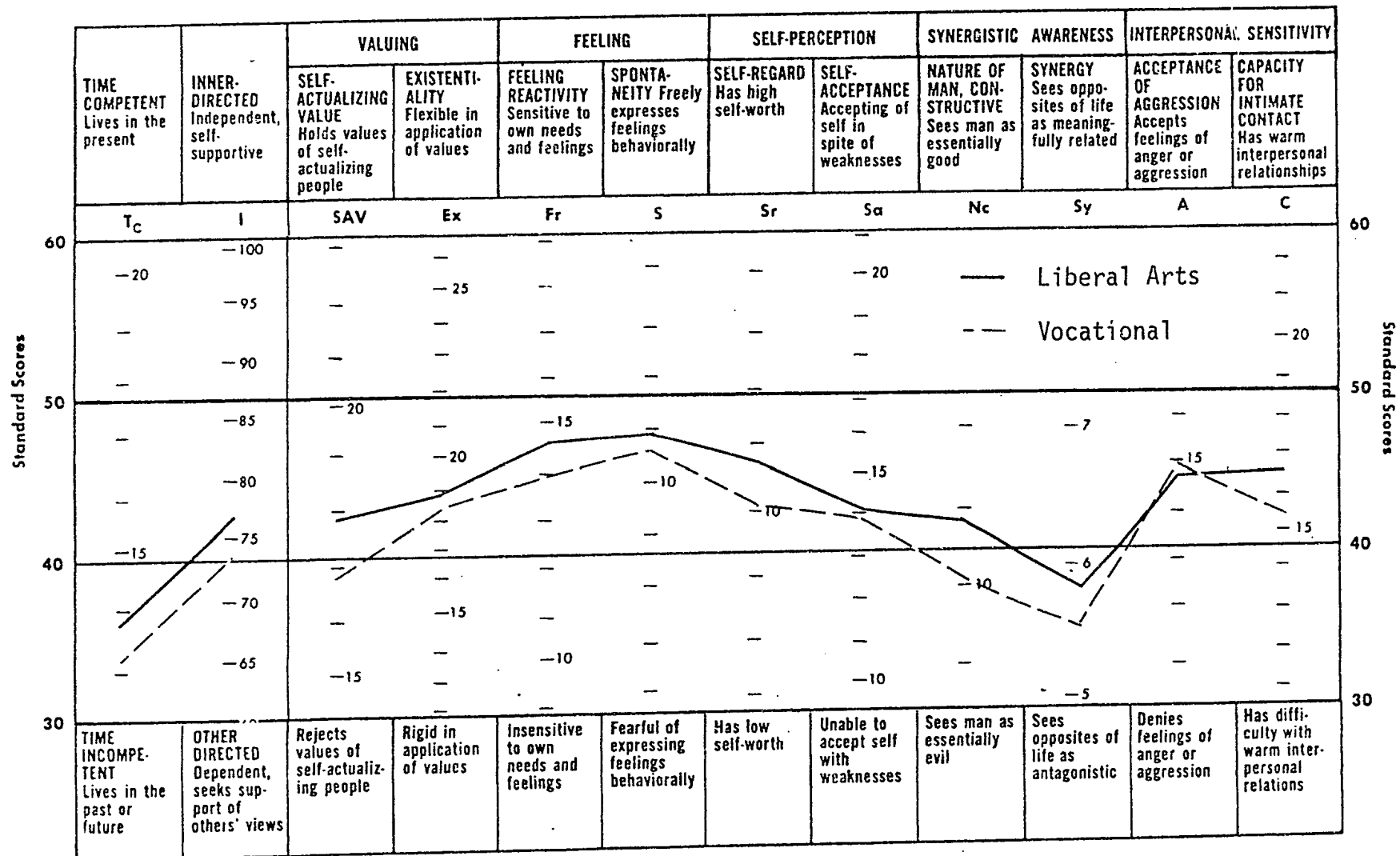
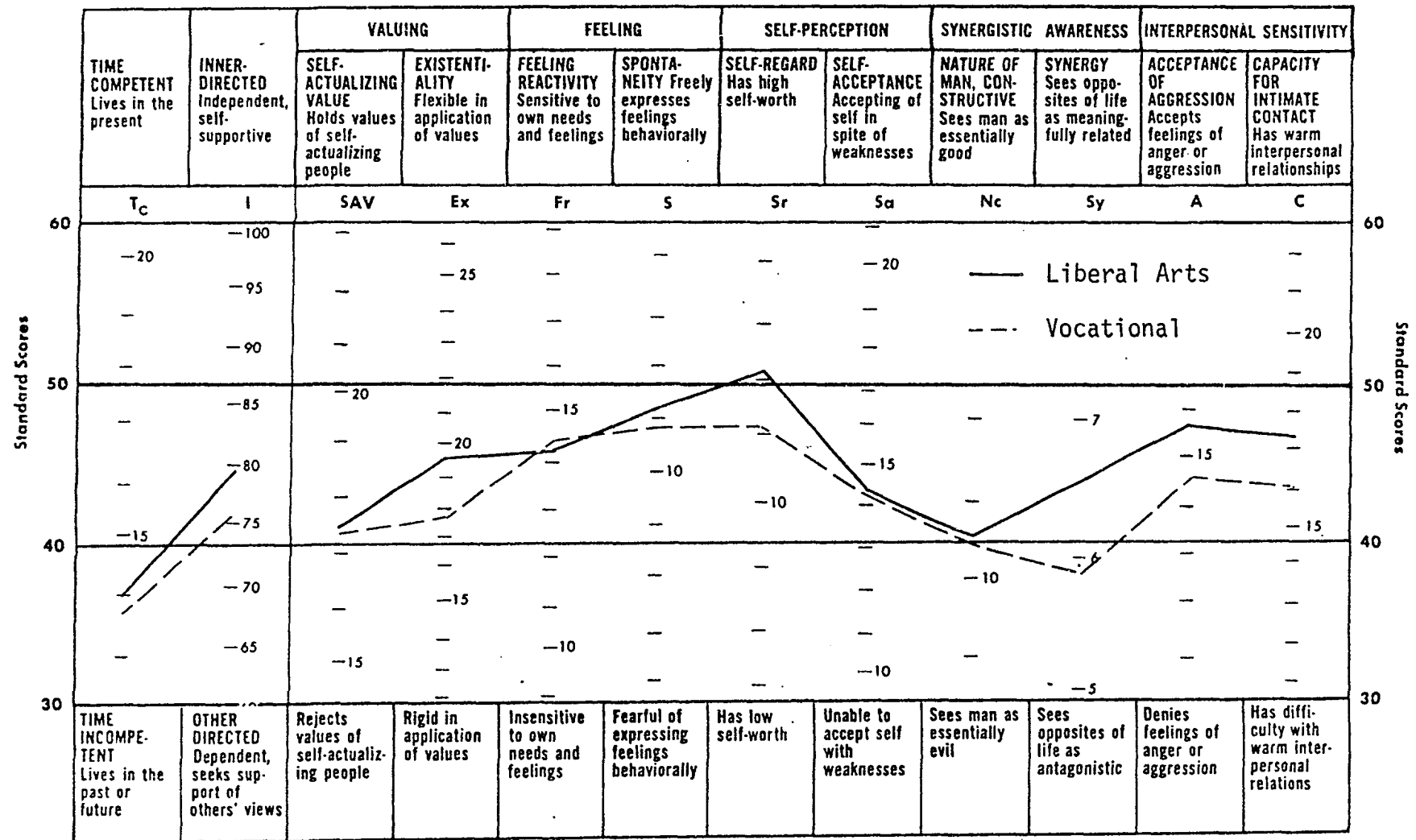


Figure 12. Profiles of older subjects by major field of study.



APPENDIX B

Figure 13. Profiles of Caucasian and Japanese subjects.

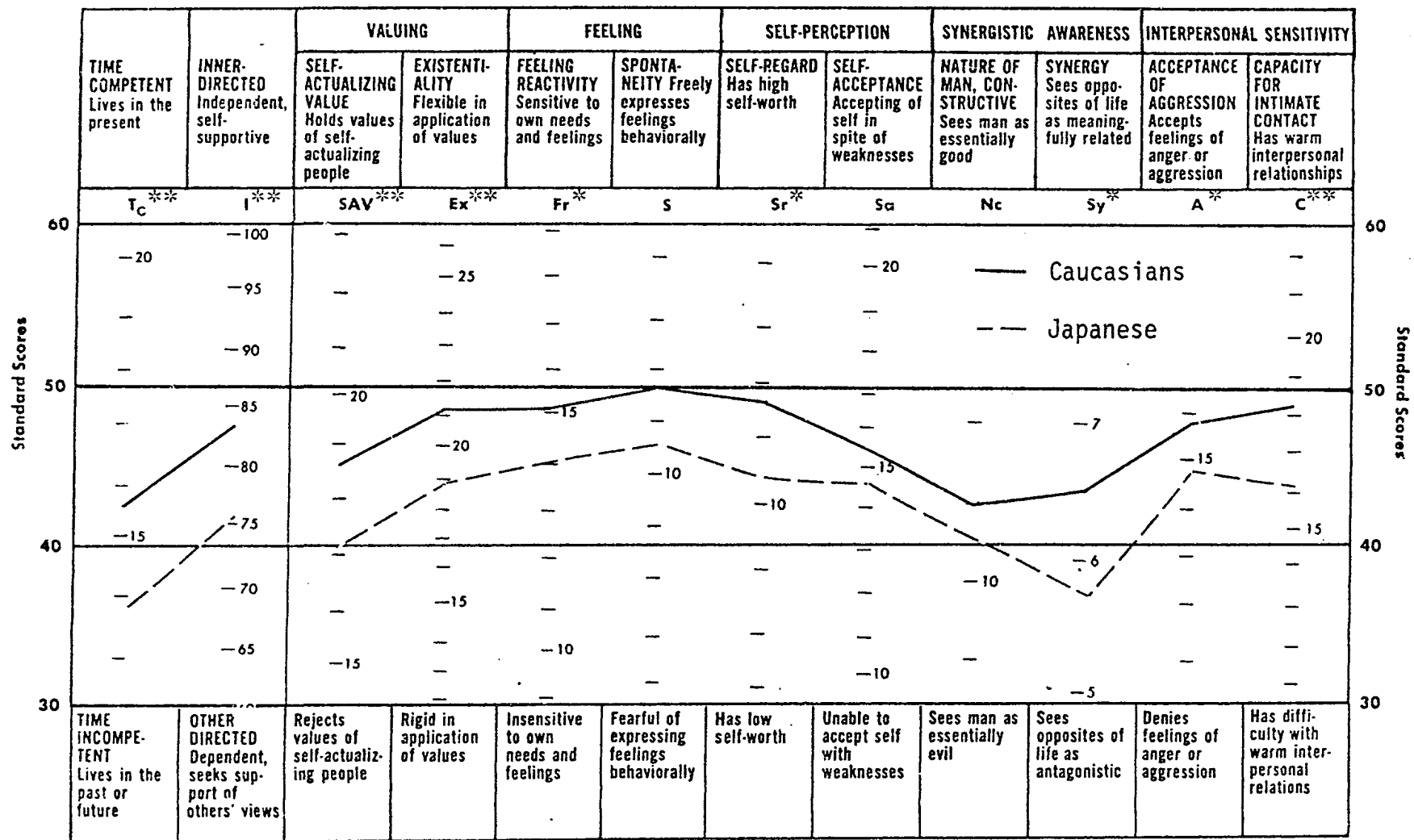


Fig. 12 Profile and significance level of Caucasian and Japanese subjects on POI scales.
 * significant at .05 level ** significant at .01 level

Table 22

Distribution of Subjects by Ethnic Background
and by Major Grouping

Ethnic Background	Liberal Arts		Vocational		Total	
	Number	Percent	Number	Percent	Number	Percent
Caucasian	17	14.3	26	6.3	43	8.1
Japanese	42	35.3	161	39.3	203	38.4
Chinese	21	17.6	48	11.7	69	13.0
Korean	1	.8	3	.7	4	.8
Negro	0	.0	1	.2	1	.2
Portuguese	4	3.4	21	5.1	25	4.7
Filipino	10	8.4	42	10.2	52	9.8
Samoan	0	.0	4	1.0	4	.8
Hawaiian ^a	19	16.0	63	15.4	82	15.5
Mixed ^b	4	3.4	32	7.8	36	6.8
Other	1	.8	9	2.2	10	1.9
Total	119	100.0	410	100.0	529	100.0

^a Includes part Hawaiian

^b Other than part Hawaiian

Table 23

Mean Scores on POI for Ten Ethnic Groups

Ethnic Groups	POI Scales											
	Tc	I	SAV	Ex	Fr	S	Sr	Sa	Nc	Sy	A	C
Caucasian	15.58	81.95	18.58	20.93	15.09	11.53	11.72	15.23	11.00	6.40	15.70	18.12
Japanese	13.79	75.69	17.07	18.68	13.99	10.66	10.61	14.45	10.65	5.80	14.52	16.15
Chinese	12.58	73.33	16.81	16.91	14.22	10.64	10.70	13.83	10.12	5.57	14.64	15.41
Korean	14.75	73.50	18.75	17.25	12.75	11.25	11.00	13.50	11.25	6.25	14.50	14.25
Portuguese	13.04	73.44	17.48	17.16	13.60	11.56	10.76	13.28	11.00	5.08	16.20	14.88
Filipino	11.37	72.17	16.67	15.92	13.92	10.54	10.27	13.63	9.67	5.58	14.54	15.17
Samoan	10.00	67.00	15.75	12.50	12.00	10.50	10.00	12.75	9.75	5.00	11.75	12.75
Hawaiian	13.68	75.11	17.18	17.96	14.39	10.77	10.78	13.67	10.63	5.94	14.66	16.12
Mixed	14.72	78.92	18.61	19.61	14.67	11.31	10.72	15.00	10.89	6.06	14.97	16.94
Other	12.80	73.80	17.20	18.00	15.00	10.50	10.30	14.20	9.90	5.90	14.90	15.80
Mean												
All Groups	13.51	75.44	17.27	18.17	14.18	10.82	10.71	14.19	10.53	5.80	14.75	16.06

Table 24

Analysis of Variance for the Time-Competence Scale
of the POI by Ethnic Group

Source	SS	df	MS	F
Between Groups	527.86	7	75.41	7.83**
Within Groups	4931.32	512	9.63	
Total	5459.17	519		

** $p < .01$

Table 25

Differences Between Pairs of Treatment Means
for the Time-Competence Scale

Ethnic Group	F	Ch	O	P	H	J	M	C
F	-	1.21	1.43	1.67	2.31*	2.42*	3.36*	4.21*
Ch	-	-	.22	.46	1.10	1.20	2.14	3.00*
O	-	-	-	.24	.88	.98	1.92	2.78*
P	-	-	-	-	.64	.75	1.68	2.54*
H	-	-	-	-	-	.11	1.04	1.90
J	-	-	-	-	-	-	.93	1.79
M	-	-	-	-	-	-	-	.95
C	-	-	-	-	-	-	-	-

* $p < .05$

Table 26

Analysis of Variance for the Inner-Directed Scale
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	3265.16	7	466.45	4.85**
Within Groups	49243.81	512	96.18	
Total	52508.96	519		

** p < .01

Table 27

Differences Between Pairs of Treatment Means
for the Inner-Directed Scale

Ethnic Group	F	Ch	P	O	H	J	M	C
F	-	1.16	1.27	1.63	2.94	3.52	6.74	9.78*
Ch	-	-	.11	.47	1.78	2.36	5.58	8.62*
P	-	-	-	.36	1.67	2.25	5.48	8.51*
O	-	-	-	-	1.31	1.89	5.12	8.15*
H	-	-	-	-	-	.58	3.81	6.84*
J	-	-	-	-	-	-	3.22	6.26*
M	-	-	-	-	-	-	-	3.04
C	-	-	-	-	-	-	-	-

* p < .05

Table 28

Analysis of Variance for the Existentiality Scale
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	855.51	7	122.22	5.76**
Within Groups	10872.49	512	21.24	
Total	11728.00	519		

**
p < .01

Table 29

Differences Between Pairs of Treatment Means
for the Existentiality Scale

Ethnic Group	F	Ch	P	H	O	J	M	C
F	-	.99	1.24	2.04	2.08	2.76	3.69*	5.01*
Ch	-	-	.25	1.05	1.09	1.78	2.70	4.02*
P	-	-	-	.80	.84	1.52	2.45	3.77*
H	-	-	-	-	.04	.72	1.65	2.97
O	-	-	-	-	-	.68	1.61	2.93
J	-	-	-	-	-	-	.93	2.25
M	-	-	-	-	-	-	-	1.32
C	-	-	-	-	-	-	-	-

*
p < .05

Table 30

Analysis of Variance for the Synergy Scale
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	38.63	7	5.52	2.57*
Within Groups	1097.96	512	2.14	
Total	1136.59	519		

* $p < .05$

Table 31

Differences Between Pairs of Treatment Means
for the Synergy Scale

Ethnic Group	P	Ch	F	J	O	H	M	C
P	-	.49	.50	.72	.82	.86	.98	1.32*
Ch	-	-	.01	.23	.33	.37	.49	.83
F	-	-	-	.22	.32	.36	.48	.82
J	-	-	-	-	.10	.14	.26	.60
O	-	-	-	-	-	.04	.16	.50
H	-	-	-	-	-	-	.12	.46
M	-	-	-	-	-	-	-	.34
C	-	-	-	-	-	-	-	-

* $p < .05$

Table 32

Analysis of Variance for the Capacity for Intimate Contact
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	317.01	7	45.29	3.28**
Within Groups	7068.01	512	13.81	
Total	7385.92	519		

**
p < .01

Table 33

Differences Between Pairs of Treatment Means
for the Capacity for Intimate Contact Scale

Ethnic Group	P	F	Ch	O	H	J	M	C
P	-	.29	.53	.92	1.24	1.27	2.06	3.24*
F	-	-	.23	.63	.95	.97	1.77	2.94*
Ch	-	-	-	.39	.72	.74	1.34	2.71*
O	-	-	-	-	.32	.35	1.14	2.32
H	-	-	-	-	-	.03	.82	1.99
J	-	-	-	-	-	-	.80	1.97
M	-	-	-	-	-	-	-	1.17
C	-	-	-	-	-	-	-	-

*
p < .05

Table 40

Analysis of Variance for the Feeling Reactivity Scale
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	73.78	7	10.54	1.22
Within Groups	4405.48	512	8.60	
Total	4479.26	519		

Table 41

Analysis of Variance for the Spontaneity Scale
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	57.00	7	8.14	1.54
Within Groups	2715.98	512	5.30	
Total	2772.98	519		

Table 42

Analysis of Variance for the Self-Regard Scale
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	58.41	7	8.34	1.32
Within Groups	3237.86	512	6.32	
Total	3296.27	519		

Table 43

Analysis of Variance for the Acceptance of Aggression Scale
of the POI by Ethnic Groups

Source	SS	df	MS	F
Between Groups	107.74	7	15.59	0.91
Within Groups	8580.88	512	16.76	
Total	8688.61	519		