

SELF-CONCEPT AS A PREDICTOR OF LEISURE BEHAVIOR

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CHAPTER I

ORIENTATION TO THE STUDY

Introduction

People's behavior is determined by many variables. Sciences dealing with human behavior such as psychology, social psychology, psychiatry, sociology, biology, and anthropology have made great strides toward developing an "if--then" science. With respect to the sciences, Rogers (1961) comments that they, ". . . have made striking progress in discerning and discovering lawful relationships such that if certain conditions exist, then certain behaviors will predictably follow" (p. 365). Specifically, "If an individual possesses measurable characteristics a, b, and c, then we can predict that there is a high probability that he will exhibit behaviors x, y, and z" (p. 366).

The study of measurable characteristics for determination of behavior is generally carried on through personality research. "It is the business of personality research to identify personality dimensions and their relationships to particular forms of behavior" (Fredenburgh, 1971, p. 486). One such personality dimension is the self factor. Roberts (1968) dealt with the self factor when he stated, "These

inner attitudes, dispositions or attributes become tendencies, characteristics and generalized modes of response by which personality is described" (p. 53). Therefore, as the individual responds to the self factor, the individual develops his own particular style of behavior. "Human behavior [or the style of behavior] whether irrational and ineffectual or realistic and self-satisfying, has meaning only as given by the self; since it is motivated either to defend or to fulfill the self" (p. 80).

Among the several psychological models of man that have been reported, the conceptual scheme which views the person as a whole is the humanistic model. "The humanistic model of man is today the most avant-garde view of human behavior" (Fredenburgh, 1971, p. 24). It is perhaps the most positive view of man as it concerns itself with the integration of the self and the perception of the world. Psychologists who subscribe and have contributed to the humanistic model are identified as Maslow (1954), Allport (1937), Murray (1953), and Rogers (1951). Of relevance is the "Self Theory" by Carl Rogers (1951). Rogers has identified 22 propositions as fundamental assumptions in his personality theory. Two of Rogers' propositions are as follows: (1) "The best vantage point for understanding behavior is from the internal frame of reference of the individual himself" (p. 494) and (2) "Most of the ways of

behaving which are adopted by the organism are those which are consistent with the concept of self" (p. 507). In his view, self-concept is a personality description of the individual as he sees himself, and as such, is the best indicator of behavior.

Specialists who have focused on the importance of self-concept as an internal frame of reference have primarily used correlation analysis. They have directed their correlational studies toward assumed influences on self-concept of such factors as socioeconomic class, age, family influences, sex, or racial/ethnic status.

Relatively few have been directed toward behavioral consequences of self-conceptions or correlations involving possibly reciprocal or circular relationships between self-conceptions and other inferred or observed variables. This relative emphasis is especially interesting in view of the fact that theorists' major purpose in introducing phenomenal variables such as self-referent constructs was to account for behavior. Obviously, this imbalance of emphasis needs to be redressed in future work. (Wylie, 1979, p. 688)

So important is the self aspect of personality that Wylie strongly advocates its use as a primary consideration when exploring behavior. Further support of this recommendation comes from Kendler (1963) who maintains that one's concept

of himself becomes his self. Despite tenacious adherence by Wylie, Kendler, and others, in support of the view that self-concept dramatically influences behavior, few studies in the field of leisure have been concerned with self-concept. Most empirical research attempting to explain leisure behavior has been directed toward the relationship between leisure behavior and demographic variables. While these studies provided valuable information, they failed to provide a comprehensive explanation of leisure behavior.

The inability of leisure researchers to provide a complete explanation of leisure behavior prompted some researchers to analyze other selected variables and ascertain their impact on leisure behavior. Some of the noteworthy studies are: The investigations of Witt and Bishop (1971) who proposed five "need" theories as an explanation of leisure behavior; Burch (1969) and Cheek (1971) who considered the socialization factor as providing a significant impact on ones leisure behavior; Hendee (1969), Burch and Wenger (1967), Safranko and Nolan (1972), and Yoesting and Burkhead (1973) who all reported relationships between early life experiences and adult leisure behavior; and, with respect to tension, Heywood (1978) and Haun (1965) cited release of tension as a variable involved with leisure behavior. These researchers who have worked on developing theories as to "why" people behave as they do during their

leisure have added limited understanding to a relatively new field of study. They have neglected to recognize self-concept as the origin from which selected variables evolve. For example, with respect to the variable "need", one may relate back to Rogers" proposition that, "As the organism strives to meet its needs in the world as it is experienced, the form which the striving takes must be a form consistent with the concept of self" (1951, p. 508). This suggests that self-concept represents the person as a whole, and that any behavior displayed in meeting "need" is merely a component of the self striving to meet the needs in life. Likewise, it is the self-concept which possesses the value hierarchy by which choice of response is made and carried out--the "goal" or "aim" being maintenance and enhancement of self, not pleasure or tension reduction. (Roberts, 1968, p. 113) Therefore, previous study may be deemed somewhat inadequate in response to why people behave as they do during their leisure.

C. F. McDowell (1976) has been one of the few authors in the leisure field to recognize the value of self-concept assessment to leisure services. Specifically, he acknowledges self-concept as playing a crucial role in leisure counseling. McDowell quoted Pietrofesa, Leonard, and Hoose (1972) to justify the need for self-concept assessment:

It may be noted that giving the client information may

often be a waste of time if he is either not ready to use it in making plans or in pursuing a particular course of action. (p. 36)

In order to assess "readiness", McDowell chose to approach the issue by determining what he termed ones leisure self-concept. "This leisure self-concept consists of the self as seen by the self, the self as seen by others and the self as one would like to be" (1974, p. 99). Any verbal or overt signs of discrepancy and conflict between the three self components indicate an unhealthy leisure mode, whereas, agreement and little conflict determines a healthy leisure mode. This endorsement for psychological testing to determine leisure self-concept before counseling and referral is one step to better serving the needs of the client. Based on the theory that an individual's self concept strongly determines readiness of action, that is, activity participation, it may be hypothesized that leisure behavior may be predicted on the basis of self-concept.

If recreators are to proclaim expertise in their field, it is of concern that specific research be conducted which will delve into every conceivable factor affecting leisure behavior. Carefully structured and meticulous study will result in a better understanding of the population to be served. This investigation was a study concerning one

specific psychological factor which may influence leisure behavior.

Statement of the Problem

The investigation entailed a study of the relationship of self-concept, as measured by the Tennessee Self Concept Scale, with past and present leisure behaviors as assessed by the McKechnie Leisure Activities Blank. Data were collected during summer II and fall semesters of the academic year, 1980, from students enrolled at Tarrant County Junior College, South Campus, Fort Worth, Texas. The sample of subjects were 300 adult men and women, 20 years of age or older, who were students in a selection of day and night classes. Subjects were also asked to declare their age, sex, and annual income level for purposes of further analysis. Completion time, including instructions, was between 20 to 60 minutes. Upon the basis of the findings, the investigator drew conclusions with respect to the relationship between self-concept and past and present leisure behavior.

Purpose of the Study

The purpose of the study was to determine the degree of relationship between self-concept and leisure behavior of 300 adult men and women 20 years of age or older. In general, it was hypothesized that: "If" certain self-concept

conditions exist, "then" certain leisure behaviors would predictably follow.

Specifically, the purpose of this study was to test the following null hypotheses at the .05 level of significance:

1. There is no significant relationship between self-concept (Total Positive) and leisure behavior (Scale Scores).
2. There is no significant relationship between leisure behavior (Scale Scores) and the three row scores as determined by the Tennessee Self Concept Scale.
3. There is no significant relationship between leisure behavior (Scale Scores) and the five column scores as determined by the Tennessee Self Concept Scale.
4. There is no significant relationship among self-concept (Total Positive), leisure behavior (Scale Scores), and age.
5. There is no significant relationship among self-concept (Total Positive), leisure behavior (Scale Scores), and sex.
6. There is no significant relationship among self-concept (Total Positive), leisure behavior (Scale Scores), and annual income level.

Definitions and/or Explanations of Terms

For purpose of clarification, the following definitions and/or explanations were established for use in this study.

1. McKechnie Leisure Activities Blank: An activity inventory which provides information on respondents' past and present leisure and recreational behaviors. The Leisure Activities Blank consists of 120 recreational activities that have high participation rates and yields six combined past and present factor scores, plus one reliability of response score. The six scales and representative activities are as follows:

a. Mechanics. Auto repair, billiards, boxing, carpentry, hunting, marksmanship, mechanics, woodworking.

b. Crafts. Ceramics, cooking, designing clothes, flower arranging, jewelry-making, knitting, needlework, weaving.

c. Intellectual. Attending concerts or plays, political activities, reading, visiting museums, writing poetry or stories, civic or conservation organizations.

d. Slow Living. Gardening, going to movies, social drinking, sunbathing, talking on telephone, visiting friends, window shopping, writing letters.

e. Sports. Badminton, baseball, basketball, football, jogging, squash, ping pong, volleyball.

f. Glamour Sports. Archery, canoeing, horseback riding, motorboating, motorcycling, mountain climbing, sailing, skiing, tennis. (McKechnie, 1973, p. 8)

A complete listing of activities may be found in Appendix A.

2. Past and Present Leisure Behavior: Those activities in which the subject has participated in the past or participates in presently. The subjects declared extent of involvement in one of the following ways: (a) "Never engage in", (b) "tried once or a few times", (c) "did regularly, but now no longer do regularly", or (d) "currently engage in regularly".

3. Self-Concept: "A term denoting the composite of ideas, attitudes, and feelings that the individual has toward himself" (Mussen & Rosensweig, 1973, p. xxii).

4. Tennessee Self Concept Scale: The Scale consists of 100 self descriptive statements which the subject uses to portray his own picture of himself. The scale is self administering for either individuals or groups and can be used with subjects age 12 or higher who have at least a sixth-grade reading level. This study examined 10 scores yielded by the Counseling Form. They are as follows:

a. Row 1. Identity - This item yields a score reflective of "What I am". The individual is

describing his best identity or what he is as he sees himself.

b. Row 2. Self Satisfaction - The score from this item reflects how the individual feels about the self he perceives.

c. Row 3. Behavior - This item yields a score which measures the individual's perception of his own behavior or the way he functions.

d. Column A. Physical Self - The score from this item represents how the individual views his body, his state of health, his physical appearance, skill, and sexuality.

e. Column B. Moral/Ethical Self - This item yields a score which describes the self with reference to moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with ones religion or lack of it.

f. Column C. Personal Self - The score from this item reflects the individual's sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationship to others.

g. Column D. Family Self - This item yields a score which reflects ones feelings of adequacy, worth, and value as a family member. It refers to the

individual's perception of self in reference to his closest and most immediate circle of associates.

h. Column E. Social Self - This is another "self as perceived in relation to others" item but pertains to "others" in a more general way. This score reflects the person's sense of adequacy and worth in his social interaction with other people in general.

i. Total Positive Score. It is the most important single score on the Counseling Form. This score reflects the overall level of self-esteem.

j. Total Variability Score. This measures the amount of response inconsistency for the entire record. High scores mean that the person's self-concept is so variable from one area to another as to reflect little unity or integration. (Fitts, 1956)

Delimitations of the Study

The completed study was subject to the following delimitations:

1. The selection of 300 adult men and women 20 years of age or older.
2. The extent to which the sample was representative of the population from which it came.
3. The extent to which all subjects in the study were truthful in their responses.

4. The validity, reliability, and objectivity of the instruments used to gather data.

Summary

The study of measurable characteristics for determination of behavior has traditionally been the direction of personality research. Study by this discipline has revealed the significance of the self as an important variable which influences behavior. Accordingly, the study of individual characteristics and their relationship with leisure behavior has been carried on through recreation and leisure research. Considering the relevance of the self and current surge of leisure research, it was demonstrated that the relationship between self-concept and leisure behavior has not captured previous attention.

Few investigators have been concerned with the self-concept dimension as a factor which influences leisure behavior. Based on the "Self Theory" by Rogers, and the recommendation by Wylie that more study be concerned with behavioral consequences of self-conceptions, this study was undertaken to explore the relationship between self-concept and leisure behavior. Founded on the idea that an individual's self-concept strongly determines readiness of action, that is, activity participation, 300 men and women, 20 years of age or older, were tested during summer II and

fall semesters of the academic year 1980.

In Chapter I of this dissertation, the orientation of the study, the introduction, the statement of the problem, the purpose of the study, the definitions and/or explanations of terms, and the delimitations of the study were presented.

A survey of related literature will be presented in Chapter II.

CHAPTER II

A REVIEW OF RELATED LITERATURE

For many years there has been considerable interest in exploring the relationship between self-concept and selected variables. (Wylie, 1961, 1979) The enormous number of studies involving self-concept necessitated substantial qualification for the selection of studies to be reviewed in this chapter. Therefore, the survey of related literature was restricted to: (1) an overview of studies in which behaviors are presumed to depend on the self-concept, and (2) an overview of studies related to factors which influence leisure behavior.

Overview of Self-Concept Studies

This overview includes studies of behaviors which are presumed to depend on the self-concept as opposed to those studies which are concerned with factors which influence the self-concept. The reviewed studies pertain to one or more of the following: (a) self-concept in learning tasks/achievement, (b) self-concept and adjustment, (c) self-concept and authoritarianism, and (d) self-concept and level of aspiration behavior.

Self-Concept in Learning Tasks/Achievement

As might be expected, the topic of self-concept and its relationship with learning tasks/achievement has been of considerable interest to investigators. The Tennessee Self Concept Scale for self-concept measurement was employed in the following two examples.

In a study by Williams and Cole (1968) the intention was to relate self-concept to several dimensions of the child's experience that were deemed fundamental to effective academic achievement. It was hypothesized that a child's conception of school would be related to his conception of himself, and might be construed as an extension of his self-concept. The series of dependent variables included conception of school, social status at school, emotional adjustment, mental ability, reading ability, reading achievement, and mathematical achievement. The sample included 60 sixth-grade students selected from a small urban school and 20 from a rural school. Each student was administered the Tennessee Self Concept Scale to determine attitude toward school, and an unpublished social esteem scale for determination of social status. In addition, emotional adjustment, intellectual ability, reading achievement, and mathematical achievement were measured by the California Test of Personality, the California Short-Form Test of

Mental Maturity, and the Reading and Arithmetic sections of the California Achievement Test Battery. The analysis of results produced few high correlations at the .001 level, but all were statistically significant. A correlation of $-.28$ was obtained at the .02 level of significance between scores on the Tennessee Self Concept Scale and the discrepancy scores on the school-concept instrument. A significant relationship of $.22$ was found at the .05 level between the self-concept measures and social esteem indices. That the self-concept is highly related to emotional adjustment was confirmed by the $.62$ coefficient at the .001 level of significance between scores on the Tennessee Self Concept Scale and those on the California Test of Personality. A significant correlation of $.31$ at the .01 level was obtained between self-concept and mental ability. In addition, the analysis revealed a $.31$ coefficient at the .01 level of significance between self-concept and reading achievement. Lastly, a $.33$ correlation coefficient at the .01 level of significance was found between self-concept and mathematical achievement. It was concluded that the most reasonable position was to infer a reciprocal cause-effect relationship between self-concept and academic achievement. A child's academic success is certainly not determined by any one variable. Intellectual ability is one determinant, however, self-esteem may prove to be another.

Achord and McCary (1975) conducted a study designed to investigate the impact of attrition on the self-concept of female nursing students. Subjects were volunteers from the 1971-1972 School of Nursing freshman class at the University of Northern Colorado. Objective data in the form of the Tennessee Self Concept Scale and the Spielberger Trait Anxiety Inventory and subjective data from personal interviews and printed questionnaires were used to analyze the impact of leaving the nursing program on individual students. A control group of 52 students who continued in the nursing program after the freshman year, and an experimental group of 26 students who withdrew from the nursing program during their freshman year were administered the instruments on a pretest and posttest basis. Analysis of covariance was used to examine the objective data yielded by the testing. Three measures of self-concept from the Tennessee Self Concept Scale were analyzed: total positive self-concept, self-satisfaction self-concept, and identity self-concept. The statistical procedure indicated that a significant difference did occur at the .05 level in the total positive self-concept scores on the posttest data of the control group and the experimental group. It was noted from examining the raw data that the total positive self-concept increased for the continuing students and decreased for the withdrawing students. The data revealed that a significant

difference also existed for the self-satisfaction self-concept scores on the posttests of the two groups. No significant difference was found in the identity self-concept data. Analysis of covariance was used also to examine the Spielberger Trait Anxiety data. No significant differences in trait anxiety were found in the control or experimental groups at the .05 level. It was concluded that, in general, attrition did have a negative impact on the students. It was noted from the posttest subjective data, however, that the withdrawing students with positive self-concepts initially were able to reorganize their educational and career goals to deal with the reality of attrition from a nursing program.

Self-Concept and Adjustment

In studies concerning adjustment it has often been attempted to relate self-concept to mental health. Summarization of these studies is difficult because various instruments for measuring level of self-concept were employed and different criteria for defining adjustment were used. The following are two selected studies concerned with self-concept and adjustment.

Collins, Burger, and Doherty (1960) compared the self-concepts of educable mentally retarded (EMR) young people attending a special education school with the self-concepts of intellectually normal young people attending a public

high school. It was hypothesized that EMR adolescents would have significantly more negative self-concepts than the nonretarded subjects. Fourteen scores from the Tennessee Self Concept Scale were used as a measure of self-concept for 42 EMR subjects and 49 nonretarded subjects. Results of this study indicated, at the .05 level, no significant differences on the self-satisfaction, behavior, physical self, or personal self scales. Differences that were significant were found on the self-criticism, identity, social self, and moral/ethical self scales. The difference on the family self scale approached significance.

Hillson and Worchell (1957) conducted a study to test two major hypotheses. The first one was that maladjusted subjects characterized by anxiety would present a depreciated self picture, report high ideals, and show a high discrepancy between self and ideal concepts. The second hypothesis was that maladjusted subjects with defensive patterns would show little discrepancy between self and ideal and would present a picture of the self similar to that of normals. Three groups of subjects were selected for this study. The normal group consisted of 47 students who were not currently under treatment for emotional disturbances and who had never been under such treatment. The group representing subjects with some overt or reported anxiety about

their condition consisted of 37 neurotic subjects currently under treatment for an emotional disturbance either on an outpatient or inpatient basis. The third group consisted of 36 schizophrenic patients none of whom had been hospitalized for more than 6 weeks. The Self-Activity inventory was used to index self-regard. It was comprised of 54 statements describing response to the arousal of hostility, achievement, sexual, and dependency needs. To measure the intensity of the responses, the subjects were asked to indicate on a 5-point scale, 1 indicating "never" to 5 indicating "always", how much of the time the activity described was like themselves, how they would like to be (Ideal), and how the activity is like other people (Other). Results of the study showed that neurotic subjects rated themselves significantly more unfavorably than did normal or schizophrenic subjects, whereas the normal and schizophrenic subjects yielded similar self-scores. On "Ideal", the neurotic group was not significantly different from the normal group, but the schizophrenic group set their level significantly lower than that of the normal group. When the effect of the self-rating was partialled out, the self-ideal discrepancy for the neurotic subjects was significantly greater than that for the normal subjects or schizophrenic subjects. There was no difference on self-ideal discrepancy between the schizophrenic group and the normal group. On the

corrected "Self-Other" discrepancy, the normal group differed significantly from the two maladjusted groups.

Self-Concept and Authoritarianism

Studies with respect to self-concept and authoritarianism have obtained conflicting results. The two following studies document this contrast: One suggests a positive relationship between self-concept and authoritarianism; the other study suggests no significant correlation between the two.

Pedersen (1969) attempted to determine the relationships that exist among three types of variables: (a) evaluations of self (self-concept and ideal self), (b) evaluations of others (generalized other, father, and mother), and (c) perceived evaluations by others (father's perception of me and mother's perception of me). The 150 subjects, who were students at Brigham Young University, were administered the Self and Others Rating Scale, a biographical data sheet, the Pedersen Personality Inventory, the California F Scale, a Manifest Anxiety Scale, and Gough's Adjective Check List. Analysis of the data yielded means, standard deviations, and correlation coefficients. A number of interesting and meaningful relationships were found within each of the following six types of correlations: (a) correlations of personality variables with concept evaluation variables, (b) correlations among concept evaluation

variables, (c) correlations of personality variables with evaluation difference variables, (d) correlations of concept evaluation variables with evaluation difference variables, (e) correlations among evaluation difference variables, and (f) correlations among personality variables.

The following are selected examples of the many significant findings. Males and females high in self-evaluation were likely to be high in self-acceptance and low in anxiety. In addition, the males were likely to be more active in church, less neurotic, more cooperative, and more extroverted than females. For both sexes a high ideal-self evaluation was not only related to high self-evaluation but also to the perception of a high evaluation by parents. People with high evaluations of other people not only tended to have high self-evaluations, but also tended to have high evaluations of parents. The individual male with a small discrepancy had high anxiety, whereas, the female was less introverted and more cooperative than the male. For males, a high mother's perception of me score tended to correlate with a low self-concept and a low ideal self. Females with a high mother's perception of me score tended to perceive that their fathers had low evaluations of them. Lastly, males who thought that their mothers had a relatively more favorable perception of them than their fathers tended to have a relatively lower evaluation of their fathers.

Koutrelakos (1968) conducted a study using 100 Protestant men between the ages of 19 and 35 years who resided in southern New Hampshire and had received less than college training. Socio-economic status was restricted to lower middle class and upper middle class. It was required that the subjects had spent the first 16 years of their lives at home with both parents and that both subjects and parents were born in the United States. Data were collected through the utilization of the Authoritarian (F) Scale, the Edwards Personal Preference Schedule, the Authoritarian Father Questionnaire, and a modified version of McGuire's Information Blank. This study, designed to test the importance of the authoritarian person's relationship with his father, did not support the predictions that the perception of similarity between self and father, and between self and ideal person, are related to authoritarian attitudes. The data were tested at the .05 level of significance. Results indicated that the authoritarian person's father was not only strict in his childbearing attitudes but also distant and neglectful. These factors contributed to the perception of father and ideal person as alike and of the subject as different from both.

Self-Concept and Level of Aspiration Behavior

A positive relationship between self-concept and level of aspiration has been postulated by many. Current studies

have tended to relate the self-concept with educational and occupational aspirations, and then further correlate these variables with others such as racial/ethnic status or socio-economic class.

Gordon (1972) found consistent and rather strong support for the hypothesis that there is a positive association between self-conception and level of aspiration toward higher education. Gordon constructed an idiosyncratic "global self-esteem" measure by combining 7 self-determination items, 2 academic competence items, 1 basic self-acceptance item, and 2 general competence items. Subjects were a 5% systematic subsample of 1,684 ninth-graders from the complete tapes of the 334,000 metropolitan northeastern ninth-graders used in the Coleman report (Coleman, 1966). Each student was administered the instrument to explore specifically the relationship of self-esteem with the variables of race, verbal ability scores, socio-economic level, family structure (strongly male, matriarchal, weakly male, neither present), and parental aspirations. Results of the study indicated that a positive relationship between self-esteem and educational aspiration exists. Further, the study suggested that regardless of social class, children with relatively less verbal skill whose parents do not urge them to high educational achievement are not driven, either by themselves or their parents, to high levels of

educational achievement. With respect to race, findings indicated that blacks have a stronger desire for education than do whites. The major conclusion of the study was that self-esteem is related to educational aspiration more strongly among those whose measured verbal ability is high than among those who scored low on verbal ability. This suggests that self-esteem may exert a "multiplier effect", giving confidence and a sense of appropriateness to students who presumably have the ability to compete in college and graduate school.

Davis (1964) considered the relationship between the educational postgraduate plans and the socio-economic level of 33,982 June, 1961, graduates from 135 colleges and universities. Motivation to attend graduate school was used as the measure of education aspiration. Students were dichotomized into high or low socio-economic levels according to the Index of Socio-Economic Status which is based on family income, father's education, and parental occupation. A measure of intellectual performance called "Academic Performance Index" was also obtained for each student. Among males, the greater percentage of those with high socio-economic status were found to be making plans for immediate graduate study, regardless of their scores on the Academic Performance Index. The greater percentage of males with low socio-economic status claimed they were postponing

graduate study or not planning to attend because of financial limitations. There were no consistent differences between the two socio-economic levels in the percentages of males who cited lack of motivation as the reason for postponing graduate study. There seemed to be no consistent effect of socio-economic status among the females except that a greater percentage cited a lack of motivation as a reason for postponing or not planning to attend graduate school. The results of the study indicated that high socio-economic status is either not consistently related to educational aspirations (in the case of the males) or that high socio-economic status may be associated with lower motivation (in the case of females).

Overview of Studies in Which Factors Influence Leisure Behavior

Generally speaking, leisure behavior may be defined as the mode of conducting oneself during leisure time. Kaplan (1975) has probably assembled the best overview of leisure behavior with respect to factors that have some bearing on how one chooses to spend one's leisure time. He divided factors which influence leisure selection into: (1) external factors and (b) internal factors. The following review of literature, arranged in chronological order, illustrates examples of studies concerned with external and internal factors which influence leisure behavior.

External Factors Which Influence Leisure Behavior

Kaplan cites seven external factors or conditions that, ". . . may, in a given situation affect the choice, use, and meaning of leisure: age, sex, income, work, place of residence, education, and time" (p. 89). Studies relevant to external factors which influence leisure behavior are abundant because such factors are easily related to activity assessments.

London and Larsen (1964) attempted to assess three major phenomena related to teachers' use of leisure: the range of leisure activities in which teachers engage and the frequency with which they engage in them; the distribution of participation in various categories of activities; and the relationship between the actual leisure activities of teachers and the leisure preferences of teachers. The sample consisted of 121 students attending a summer session class at Teachers College, Columbia University. Of this sampling, 61% were females and 39% were males. The subjects came from every geographic region of the United States with a total of 33 states being represented. All held bachelor's degrees and were pursuing advanced degrees in education. A pretested questionnaire, surveying 54 leisure activities, was administered to the subjects as a group. Respondents were instructed to indicate in which activities they participated and approximately how often they engaged

in each. Respondents then ranked the five activities they liked most and the five liked least among those in which they engaged. Responses were categorized as "Routine" if they were engaged in weekly or more often, and "Non-routine" if participation was less than weekly. The average number of "Routine" activities was 11.8, and the average number of "Non-routine" activities was 13.6. Agreement was reported between "Liked" activities and the "Routine" category, and agreement was reported between the "Disliked" activities and the "Non-routine" category. Ninety-five respondents reported "Routine" participation in some spectator activity. Fifty-nine percent of the respondents reported craft activities as "Non-routine" pursuits, which indicated that they were "Disliked" activities. The "Most Popular" activities tended to be passive, solitary, and spectator orientated, whereas, the "Least Popular" activities tended to be active, manipulative, and creative in nature. Examples of unpopular activities were dramatic acting, choral singing, and hobbies. A test of the difference between the observed and theoretical distribution of the frequencies of participation in the types of activities was significant at the .01 level. London and Larsen concluded that teachers seemed most likely to participate in activities that were orientated toward "taking it easy".

Campbell (1968) conducted a study designed to measure

the frequency of participation in 70 commonly practiced leisure time and recreational activities of four major age groups. An inventory was constructed and sent to 120 males whose names and addresses had been selected randomly from the City Directory of Austin, Texas, by use of the table of random numbers. The persons responding were asked to provide personal data by marking a limited-choice response for each item on the inventory. The responses to the leisure time inventory were subjected to a multiple discriminant analysis. This procedure determined whether the groups could be distinguished from each other on the basis of the entire profile rather than by analysis of each profile separately. Campbell concluded that man's leisure time activities change as he advances in years. As man grows older he likes fewer recreational activities, specifically, he tends to limit participation in activities which require quick reaction time, physical stamina, or endurance.

Cunningham, Montoye, Metzner, and Keller (1970) conducted a study during the years of 1962 to 1965 designed to describe the participation in active leisure pursuits of six occupational groups. The subjects were residents of Tecumseh, Michigan, and the immediate surrounding area. An activity recall questionnaire, which was designed to estimate physical activity during the preceding year, was employed to collect the data. The physical activity list was

administered to all males 16 years of age and over who were not attending school. The relationship between occupation and the participation in active leisure activities was analyzed for significance by the Chi Square method, using age as the variable for the comparison of the groups. The investigators found that 12% or more of the population participated in 8 of the active leisure activities for 0.5 hours a week per year, or more. These activities included: lawn mowing with a power mower; garden work; hunting; fishing from a boat, shore, or ice; walking; home improvement; bowling; and golfing. Few participants engaged in the other 26 activities listed. Few significant relationships were observed between occupation and participation in leisure activities with the exception of golf. In this activity there were differences for two age groups, 30 to 39 and 40 to 49 years. The individuals in the professional and technical occupations had the higher percent participation in the younger age group. The combination of the three white collar occupations, sales and clerical, managerial, and professional and technical, had the higher percent participation in the 40 to 49 age group.

McKechnie (1974) correlated results of the 120-item Leisure Activities Blank with demographic variables such as age, sex, and income, as well as with scores on the nine scales of the Environmental Response Inventory. The

Environmental Response Inventory, a personality instrument designed to assess environmental disposition, included the following scales: Pastoralism, Urbanism, Environmental Adaptation, Stimulus Seeking, Environmental Trust, Anti-quarianism, Need Privacy, Mechanical Orientation, and Col-lunality. The Leisure Activities Blank allowed respondents to indicate both the extent of past involvement in each of the activities and their intended future participation in each. Categorization of activities were: Mechanics, Crafts, Intellectual, Slow Living, Neighborhood Sports, and Glamour Sports. Following administration to 288 residents of Marin County, California, and 93 undergraduate students enrolled at Arizona State University, a number of significant correlations were found. The Mechanics factor correlated .49 with the Stimulus Seeking scale, .50 with Mechanical Orientation, and .31 with Environmental Trust. The Crafts factor correlated .36 with Antiquarianism and .58 with sex. The Intellectual factor had a number of significant correlations including: .46 with Pastoralism, -.38 with Environmental Adaptation, .48 with Stimulus Seeking, .40 with Environmental Trust, and .38 with Antiquarianism. Slow Living correlated -.23 with percent of free time spent indoors, .20 with commute distance, .23 with occupation level, and .25 with income. Sports correlated -.27 with Pastoralizm, .43 with Stimulus Seeking, and .28 with

Environmental Trust, and $-.27$ with percent of time spent indoors, $-.43$ with sex, $-.36$ with age, and $.22$ with education level. The Glamour Sports factor correlated $.41$ with Pastoralism, $.52$ with Stimulus Seeking, and $.26$ with Environmental Trust. Glamour Sports also correlated $.29$ with number of conservation organization memberships, $-.38$ with percent of leisure spent indoors, and $-.30$ with sex, $-.24$ with age, $.22$ with occupation level of spouse, and $.30$ with education level.

Internal Factors Which Influence Leisure Behavior

"Internal factors for leisure choices refer to 'personality', 'taste', 'judgment', 'will', 'desire', or 'need'" (Kaplan, 1975, p. 107). Studies concerning internal factors are becoming more prominent due to the fact that investigators are realizing the importance of psychological thrusts to leisure behavior.

Lamphear (1969) attempted to discover relationships between personality and participation in selected outdoor recreation activities. The primary hypothesis of this study was that participation in selected outdoor recreation activities is a function of the total personality. The Minnesota Multiphasic Personality Inventory was the psychometric instrument used to assess personality profiles. The Outdoor Recreation Activity Questionnaire, developed specifically for this study, was used to quantify individual

participation in 43 outdoor recreation activities. The rate of individual participation in each activity was measured in terms of activity days per year for 164 male students at the University of Georgia. From this sample population, 12 groups were obtained by subjective placement. Composite profiles were then computed for each of the resultant groups. Mean rates of participation in each of the 43 activities for the entire sample population plus each of the 12 groups were also computed. On the basis of the findings it was concluded that the manner and extent of participation in selected outdoor recreation activities is, in part, a function of personality. According to the study, relationships between personality and participation in outdoor recreation activities may be discussed in specific than in very general terms in future investigations.

Keller (1975) designed a study to identify the role of self-concept and manifest anxiety in differentiating the recreation participation of a group of disadvantaged, pre-college youth enrolled in a summer Upward Bound Program and to determine how the control variables of age, sex, and ethnic background affected these relationships. The Tennessee Self Concept Scale and the Taylor Manifest Anxiety Scale were administered to 20 black males, 20 black females, 20 white males, and 20 white females on the first day of the residential portion of the Upward Bound Program. Records

were then maintained by the leaders of various recreation activities of each student's participation in activities. There were two different measures of recreation participation: P_1 which indicated the total number of different activities the subject participated in at least once during the Upward Bound Program, and P_2 which indicated the total number of times a subject attended any of the recreation activities during the Upward Bound Program. It was hypothesized that there would be a significant positive relationship between self-concept and recreation participation, that is, the more positive the self-concept the greater the recreation participation. This hypothesis was supported by the obtained data. Both P_1 and P_2 were found to be significantly correlated with self-concept, although the correlation coefficients were low. There was little difference in the self-concept of males and females, or of blacks and whites. It was further hypothesized that there would be a significant negative correlation between anxiety and recreation participation, that is, the greater the anxiety, the lower the recreation participation. This hypothesis was not supported by the obtained data. The scores from the Taylor Manifest Anxiety Scale were not found to correlate significantly with either P_1 or P_2 . Lastly, it was hypothesized that the younger Upward Bound subjects would have higher

recreation participation scores than the older Upward Bound subjects, and that the white Upward Bound subjects would have higher recreation participation scores than the black Upward Bound subjects. Neither hypothesis was supported. Indications were, however, that the male Upward Bound subjects did have higher recreation participation scores than female Upward Bound subjects.

Howard (1976) assessed the relationship between selected variables of personality and leisure activity preferences using multivariate statistical procedures. The Leisure Activity Questionnaire was used to collect data on the preferences of 139 high school students for 24 leisure activities. The Personality Research Form, based on Murray's Need-Press Theory, provided scores which measured 14 personality needs relevant to a wide variety of human functioning. Hypotheses tested were: (a) a significant relationship exists between leisure activity preferences and selected variables of personality, (b) factors or independent dimensions of leisure activities can be extracted from the reported leisure activity preferences of the sample subjects, and (c) significant differences exist between the discriminant means of each of the leisure activity factors. The data were analyzed using three multivariate statistical procedures: canonical analysis, factor analysis, and discriminant analysis. The first hypothesis was tested by a canonical analysis model with

results subjected to a Chi Square test. Scores from the Personality Research Form were correlated for the 139 subjects. Four statistically significant correlations were obtained at the .01 or .05 level thereby supporting the hypothesis. The second hypothesis was tested by a factor analysis model in which a principal components solution and an orthogonal rotation of the factor matrix was performed. Four factors were extracted, accounting for 52% of the common factor variance. The activities with the highest loadings for the Outdoor Nature factor were hiking, backpacking, camping out overnight, boating, and canoeing. The Sports factor displayed highest loadings on playing football, basketball, softball, tennis, and attending sports events. The Aesthetic factor had one highest loading for playing tennis. The Leisure Detachment factor revealed negative loadings for all but two of the activities analyzed. In an effort to interpret and describe the identified factor, the factor scores were then correlated with the 14 Personality Research Form variables. While a number of the correlations were significant, they were for the most part, of insufficient magnitude to have predictive value. On the basis of the findings, it was concluded that: personality has a substantial influence on an individual's choice of leisure activities; that different leisure activities appear to attract individuals with different needs; and, that people with

similar personalities have a tendency to make same type of leisure activity choices.

Iwanski (1977) investigated the relationship between self-concept, as measured by the Laurelton Self-Concept Scale, and leisure preferences of 27 mentally retarded men. The Ruda Leisure Preference Checklist was used to determine the number of activities liked by each subject, and an original Iwanski Pictorial Leisure Preference Inventory was used to force subjects to rank 18 activities from most liked to least liked. In order to examine the hypothesis that there was no significant relationship between number of leisure preferences and self-concept, a Spearman rho correlation was computed. The results were not significant at the .05 level. The Wilcoxon Matched-Pairs Signed Ranks test was used to examine the hypothesis that there was no significant difference between preference for community recreation and preference for dormitory recreation choices. A significant difference at the .001 level was found which tended to support the idea that mentally retarded clients were eager to leave the safety of their dormitory environment to participate in such activities as bowling, movies, and picnics in the city park. Spearman Rank Difference correlation was used to determine if there were significant relationships between choice of dormitory or community recreation. None of the correlation coefficients were significant at the .05

level. For this sample of 27 subjects, there was only a chance relationship between high positive self-concept and preference for community activities. Almost all subjects, regardless of self-concept score, ranked community activities higher than dormitory ones when forced to choose between pairs of pictures.

London, Crandall, and Fitzgibbons (1977) demonstrated the technique of clustering leisure activities in order to consider individual differences in the perceived needs that the activities satisfy. Complete data were collected from 83 students enrolled in an introductory course in organizational behavior in the Department of Business Administration at a large midwestern state university. A paper-and-pencil instrument was designed to measure the presence of need-satisfying attributes in a set of 30 leisure activities and selected occupations. A three-mode factor analysis was used to examine the relationships among the three "modes": Activities, Needs, and Individuals. The factor analysis of the 30 activities resulted in three factors which accounted for 55% of the total variance. The three factors were termed Sports, Cultural-Passive, and Productive-Intellectual. With respect to Needs, three factors were extracted from the analysis of the 15 Need ratings, accounting for 63% of the variance. These factors were Feedback, Liking, and Positive Interpersonal Involvement. The results of a three-mode

factor analysis clearly demonstrated individual differences in perceptions of leisure activities. The first individual difference factor appeared to represent people who viewed Productive-Intellectual and Sports activities as high in Feedback while Cultural-Passive activities were viewed as low in Feedback. The second individual factor described individuals who did not like leisure activities as much as the other respondents for this group. "Liking" for Sports was higher than "Liking" for other activity factors, also all types of leisure were perceived as low in both Feedback and Positive Interpersonal Involvement. The third individual factor was similar to the first except that it represented persons who "Liked" Sports the most and saw Sports as high in Positive Interpersonal Involvement. Based on these findings, it was concluded that it is possible to differentiate individuals within a group on the basis of their perceptions of leisure activities.

Summary

A review of related literature indicated that numerous attempts have been made to relate self-concept with selected variables. The voluminous number of existing studies compelled the investigator to confine the selection of studies to be reviewed. Therefore, the research cited in this review of literature is indicative of the recent interest in

psychological assessment with respect to: (1) behaviors which are presumed to depend on self-concept, and (2) psychological factors which influence leisure behavior.

The review of literature indicates that the present study was not duplicated by other investigators. However, the review did provide the investigator with studies that helped give direction in the development of the present study.

In Chapter III of this dissertation, the procedures followed in the development of the study will be presented.

CHAPTER III

PROCEDURES FOLLOWED IN THE DEVELOPMENT OF THE STUDY

Introduction

The purpose of the study was to determine the relationship between self-concept and leisure behavior. In Chapter III the procedures for the development of the study are presented.

Preliminary Procedures

A tentative outline for the study was developed following a survey, study, and assimilation of information from the available documentary sources of data. As a requirement for the Doctor of Philosophy Degree, the outline was presented and discussed at a dissertation committee meeting at the Texas Woman's University. Suggestions received at the committee meeting were considered by the investigator and upon revision and approval, the outline of the study was filed in the Office of the Provost of the Graduate School at the Texas Woman's University.

Procedures for the Selection of the Instruments and Selection of the Subjects

Criteria for the selection of instruments were that:
(a) One instrument would be used to determine self-concept,

and one instrument would determine leisure behavior; (b) completion time of both instruments would not exceed 60 minutes; (c) the required reading level would be no higher than ninth grade; (d) obtained data from the instruments would reveal needed information for testing of the hypotheses; (e) both instruments would report acceptable established reliability and validity; and (f) little psychological interpretation would be required on the part of the investigator. An examination of self-concept scales and leisure behavior assessment inventories was conducted and the 100-item Tennessee Self Concept Scale and the 120-item Leisure Activities Blank were selected based upon the criteria.

Following selection of the instruments, a pilot study was conducted for instructional practice and constructive suggestions for improvement. Ten students volunteered their assistance in the pilot study. Suggestions concerning the sequential order in which instructions were given were the primary results of the pilot study.

Approval from the Human Subjects Committee of the Texas Woman's University and from the Tarrant County Junior College District was obtained (Appendix B). The two instruments were administered to 300 students at Tarrant County Junior College, South Campus, Fort Worth, Texas, during the academic semesters of summer II and fall, 1980. Enrollment at the South Campus averages 3,400 students during summer

sessions, and 8,500 students during long terms. Some 80% of the students work, with about half of the students holding down full time jobs while attending college. Over 50% of the students attend classes at night, and the average student age tends to fluctuate between 26 to 29 years. Approximately 71% of the student population is over 20 years of age, and nearly 29% are over 30 years of age. The subjects used for the study were students, 20 years of age or older, who voluntarily offered their assistance. They were from a selection of day and night classes which were as follows: Nutrition, Microbiology, Reading, Introduction to Psychology, Human Relations, Physical Education, Personality, Futuristics, and Non-Destructive Technology. The selection of classes was based on: (a) The instructor's cooperation to relinquish class for 1 hour; (b) the total enrollment of the class due to a limited number of test booklets; (c) the hour of day or night the class met so as to obtain a representative number of day and night students; (d) the college division the class represented so as not to bias the sample toward any occupation; and (e) the ability to work the class into the testing schedule.

Procedures for the Collection of Data

A standardized verbal explanation of the study, requirements for the subjects, and instructions for completion

of the instruments were established and consistently used. (Appendix C) The investigator gave the students the opportunity to ask questions concerning any segment of the testing procedure. The written consent form was then read out loud by the investigator. Those students who voluntarily agreed to serve as subjects signed, and dated, the consent form. Both the signature of the subject and the signature of the investigator were witnessed either by another subject or a faculty member. (A copy of the consent form may be found in Appendix D.) Each subject kept a copy of the consent form and one copy was retained by the investigator in accordance with the policy for use of subjects at the Texas Woman's University.

Those subjects who agreed to participate in the study were asked to declare their sex, age, and annual income level. Income level was categorized according to the original McKechnie study (1972). The Tennessee Self Concept Scale and the Leisure Activities Blank were then administered by the investigator. Collection of these data began August 31, 1980, and was completed September 10, 1980.

Procedures for Treatment of the Data

The investigator ascertained which tests were filled out correctly, and organized them in order according to coded sequence. The instruments were hand scored by the

investigator, and the data were transferred onto paper. Raw data, found in Appendix E, were treated statistically to describe the self-concept and leisure behavior of the subjects. The range, mean, standard deviation, standard error of the mean, mode, median, and skewness were calculated for nine items of the Tennessee Self Concept Scale and the six scales of the Leisure Activities Blank. Pearson product-moment correlation was used to examine the relationships between the items of the Tennessee Self Concept Scale and scales of the Leisure Activities Blank. Pearson product-moment correlation was used, also, to determine relationships among self-concept, leisure behavior, and the variables of sex, age, and income level. A multivariate technique, canonical analysis, was employed to indicate how two sets of variables within each set contribute to the relationship. Canonical analysis combines information from all of the variables, thereby increasing both the probability of finding a significant correlation and the accuracy of predictions. It was considered the most appropriate method for analyzing the complex nature of self-concept and leisure behavior. All tests were computed to test for significance at the .05 level.

Preparation of the Final Written Report

All findings were analyzed, interpreted, and summarized in order to draw appropriate conclusions for the study. Implications of the findings and recommendations for future studies were included in the written report which was submitted to the dissertation committee for suggestions. The report was revised in accordance with the recommendations. The final report was submitted to the Office of the Provost of the Graduate School at the Texas Woman's University.

Summary

Following the development, presentation, and approval of the tentative outline for the study, the selected instruments were subjected to a pilot study for purposes of instructional practice and constructive suggestions for improvement. The two instruments were then administered to 300 adult men and women 20 years of age and older. Students who voluntarily consented to act as subjects were from a selection of classes at Tarrant County Junior College, South Campus, Fort Worth, Texas. Data were collected during the academic semesters of summer II and fall, 1980.

The Tennessee Self Concept Scale was used to determine self-concept and the McKechnie Leisure Activities Blank was selected to assess leisure behavior. Subjects were asked,

also, to declare their age, sex, and annual income level for purposes of further analysis.

In Chapter IV of this dissertation the findings of the study will be presented.

CHAPTER IV

PRESENTATION OF THE FINDINGS

Introduction

The purpose of the study was to determine the relationship between self-concept and leisure behavior. The data were collected through the administration of the Tennessee Self Concept Scale and the Leisure Activities Blank to 300 students attending Tarrant County Junior College, South Campus, Fort Worth, Texas. Students who voluntarily participated as subjects for the study were 20 years of age or older and were from a selection of day and night classes which included: Nutrition, Microbiology, Reading, Introduction to Psychology, Human Relations, Physical Education, Personality, Futuristics, and Non-Destructive Technology. Completion of the two instruments by the subjects yielded scores which determined the degree of relationship between self-concept and leisure behavior.

The purpose of this chapter is to present the findings of the study. Data obtained from completion of the instruments concerning self-concept and leisure behavior are presented in tabular and narrative form.

Description of the Subjects

The subjects used in this study were males and females who were enrolled as students summer II and fall terms of the academic year, 1980. Of the 300 students who served as subjects, 296 completed at least one of the testing instruments correctly. Table 1 shows the percentage of male and female subjects.

Table 1
Percentage According to Sex

Sex	Frequency	Percentage
Male	142	48.00
Female	154	52.00
Total	296	100.00

$\underline{n} = 296.$

A study of Table 1 reveals that female subjects outnumber male subjects by 4%. Of the total sample, 48% were males and 52% were females.

Table 2 shows the measures of central tendency, variability, and symmetry according to age. The statistics are descriptive of 296 subjects.

Table 2

Measures of Central Tendency, Variability,
and Symmetry According to Age

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
20-64	28.68	8.27	.48	20	26.57	1.49

n = 296.

A study of Table 2 reveals that the subjects ranged in age from 20 to 64 years with an average age of 28.68. This average is the same as reported by the Tarrant County Junior College District Research Department for all students enrolled at Tarrant County Junior College. The median age of 26.57 represents the point above which and below which one-half the ages fell. The mode, or the age with the highest frequency, was 20.

Further inspection of the table indicates the heterogeneity of the group as the measures of central tendency fell relatively far apart numerically. With ages ranging from 20 to 64, a standard deviation of 8.27 would be considered average for a large sample size of 296.

The relationship of the mean to the median reveals a positively skewed frequency distribution. This is attributed to the advanced age of 64 at the top of the range.

Table 3 shows the percentages describing the sample

with respect to yearly income level. Of the total sample, data for 296 subjects were reported. For the purposes of the study, yearly income levels were divided according to the categories used in the McKechnie study (1972).

Table 3
Percentage According to Income

Income Level	Frequency	Percentage
Less than \$6,000	51	17.2
\$6,000 - \$10,000	50	16.9
\$10,000 - \$15,000	60	20.3
\$15,000 - \$20,000	49	16.6
\$20,000 - \$30,000	58	19.6
More than \$30,000	28	9.5
Total	296	100.1

$\underline{n}$ = 296.

A study of Table 3 shows that only 9.5% of the subjects reported income levels above \$30,000 a year. Representation in the remaining five categories was, however, of almost equal frequency.

The descriptive information with respect to income reveals that 54.4% of the sample may be considered to be in middle to lower income levels. Subjects in middle to upper

income level categories represented 45.7% of the total 296 subjects. It can be assumed that because the most frequently reported age of the subjects was 20; the potential income of the majority of the subjects has not yet been realized.

Measures of central tendency, variability, and symmetry which describe the subjects' response to the three Row items of the Tennessee Self Concept Scale are presented in Tables 4, 5, and 6. Five subjects did not respond correctly to these items, therefore, data for 295 subjects are reported.

Table 4

Performance of the Sample on Row 1 of the
Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE_m</u>	Mode	Median	Skewness
76-149	124.93	12.06	.70	127	126.88	-1.07

n = 295.

Table 4 presents the descriptive statistics for Row 1 of the Tennessee Self Concept Scale. The Row 1 item yields scores which represent an internal frame of reference within which the subject is describing himself. This item conveys the primary message of: "This is what I am."

A study of the measures of central tendency and variability for Row 1 reveals a range of scores from 76 to 149. The average score was 124.93. This score is equivalent to the 45th percentile as indicated by the Tennessee Self Concept Profile Sheet which shows, in general, that subjects in this sample were unsure of their identity. The most frequent score was 127, and the score at mid-point was 126.88.

A standard deviation of 12.06 is rather large, and indicated a wide dispersion in the set of scores. This also disclosed the heterogeneity within the sample.

Table 5 presents the descriptive statistics for Row 2 of the Tennessee Self Concept Scale. The Row 2 item yields scores which represent an internal frame of reference within which the subject is conveying the message of: "This is how I feel about myself."

Table 5

Performance of the Sample on Row 2 of the
Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
54-141	103.61	14.67	.85	104	102.71	-.17

n = 295.

A study of the measures of central tendency and variability for Row 2 reveals a range of scores from 54 to 141. The average score was 103.61. According to the Tennessee Self Concept Profile Sheet, this score is at the 50th percentile. This further indicates that subjects in this sample, in general, were self-satisfied with the way they felt about themselves. The mode of the distribution was 104, and the median score was 102.71.

The wide dispersion of scores as indicated by the standard deviation of 14.67 again disclosed heterogeneity within the sample. The slight amount of negative skewness may be attributed to the low score of 54 at the bottom of the scale.

Table 6 presents the descriptive statistics for Row 3 of the Tennessee Self Concept Scale. This item conveys, from the subjects' internal frame of reference, the message of: "This is what I do."

A study of the measures of central tendency and variability for Row 3 reveals a range of scores from 58 to 143. The mean score was 111.74 which is equivalent to the 40th percentile on the profile sheet. This indicated that the majority of subjects were not positive about the way they perceived what they did or the way they acted. The score reported the greatest number of times was 109, and the midpoint score for Row 3 was 111.23.

Table 6

Performance of the Sample on Row 3 of the
Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
58-143	111.74	12.30	.72	109	111.23	-.34

n = 295.

The large standard deviation of 12.30 shows the wide dispersion of scores and reveals the heterogeneity within the sample. A slight negative skewness is disclosed which may be attributed to the low score of 58 at the bottom of the range.

Measures of central tendency, variability, and symmetry which describe subjects' response to the five Column items of the Tennessee Self Concept Scale are presented in Tables 7, 8, 9, 10, and 11. The scores for Columns A through E represent an external frame of reference from which the individual is describing himself. Five subjects did not respond correctly to these items, therefore, data for 295 subjects are reported.

Table 7 presents the descriptive statistics for Column A of the Tennessee Self Concept Scale. This item yields scores representative of how the individual perceives his body, his state of health, his physical appearance, skills,

God, feelings of being a "good" or "bad" person, and satisfaction with ones religion or lack of it.

Table 8

Performance of the Sample on Column B of the
Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
26-89	69.36	8.49	.49	70	70.10	-.83

n = 295.

A study of Table 8 reveals that the scores for Column B ranged from 26 to 89. A mean score of 69.36 is equal to the 45th percentile on the profile sheet. Again, the average score of this sample is below the 50th percentile indicating a relatively low self-concept with respect to the moral/ethical self. The amount of negative skewness indicates that the majority of scores are closer to the bottom of the range.

Table 9 presents the descriptive statistics for Column C of the Tennessee Self Concept Scale. This item yields scores which reflect ones sense of personal worth, feelings of adequacy as a person, and evaluation of personality apart from ones body or relationships with others.

A study of Table 9 shows a range of scores from 27 to

87. Conversion of the mean score of 66.00 to the 54th percentile indicates positive perception of personal worth and adequacy as a person.

Table 9

Performance of the Sample on Column C of the
Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
27-87	66.00	8.17	.48	64	65.53	-.73

n = 295.

Further study of Table 9 shows that the most frequent score was 64, and the median score was 65.53. The negative skewness may be attributed to the low score of 27 at the bottom of the range.

Table 10 presents the descriptive statistics for Column D of the Tennessee Self Concept Scale. This item yields scores which reflect ones feelings of adequacy, worth, and value as a family member. This item refers to the individual's perception of self in reference to his closest and most immediate circle of associates.

Table 10

Performance of the Sample on Column D of the
Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
45-88	69.95	8.66	.50	67	70.77	-.39

n = 295.

A study of Table 10 reveals that the scores ranged from 45 to 88 with 69.95 shown to be the mean score. According to the Tennessee Self Concept Profile Sheet, the mean score of 69.95 is equivalent to the 48th percentile. This would indicate that, in general, this sample may be characterized by a negative perception of their family self. A multimodal distribution gave an average mode of 67, and 70.77 is reported to be the mid-point of all scores. For this size of sample, a standard deviation of 8.66 is once again considered average. The slight amount of negative skewness is attributed to the score of 45 at the bottom of the range.

Table 11 presents the descriptive statistics for Column E of the Tennessee Self Concept Scale. This item yields scores which reflect ones sense of adequacy and worth in ones social interaction with other people.

Table 11

Performance of the Sample on Column E of the
Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
34-90	67.41	8.69	.51	65	67.46	-.47

n = 295.

A study of Table 11 reveals that scores for Column E ranged from 34 to 90. The mean score of 67.41 is in the 43rd percentile of the profile sheet for the Tennessee Self Concept Scale. Therefore, the average score for this sample is below the 50th percentile and indicates a negative perception with respect to social self. The slight amount of negative skewness is attributed to the score of 34 at the bottom of the range.

Table 12 presents descriptive statistics concerning the Total Positive item on the Tennessee Self Concept Scale. The score which this item yields is considered the most important single score on the Counseling Form. It reflects the overall level of self-esteem of the individual. Data for 295 subjects are reported.

Table 12

Performance of the Sample on the Total Positive
of the Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
197-431	340.28	34.35	2.00	318	339.08	-.43

n = 295.

A study of Table 12 reveals that the subjects' scores on the Total Positive item ranged from 197 to 431. The average Total Positive score on the Tennessee Self Concept scale was 340.28. This score is equivalent to the 45th percentile on the Tennessee Self Concept Scale Profile Sheet which in turn indicates a negative total self-concept.

Further study of the table discloses the heterogeneity of the sample. The standard deviation of 34.35 shows a wide measure of variability or dispersion in the scores for the sample. The relationship of the mean to the median reveals a slight degree of negative skewness. This is attributed to a radical score of 197 at the bottom of the range.

Table 13 presents the range, mean, standard deviation, standard error of the mean, mode, median, and skewness for the Total Variability item on the Tennessee Self Concept Scale. This item yields scores which represent the total amount of variability for the entire record. High scores

indicate that the person's self-concept is so variable from one area to another as to reflect little unity or integration. Data for 295 subjects are reported.

Table 13

Performance of the Sample on Total Variability
of the Tennessee Self Concept Scale

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
19-88	47.01	13.29	.77	38	45.18	.58

n = 295.

A study of Table 13 reveals that the subjects' scores on Total Variability ranged from 19 to 88. The average Total Variability score on the Tennessee Self Concept Scale was 47.01. This score is equivalent to the 45th percentile on the Tennessee Self Concept Scale Profile Sheet. Well integrated people generally score below the mean (50th percentile) on this item but above the first percentile. Therefore, subjects in this sample may be considered to have been consistent from one area of self-perception to another. The positive skewness of .58 would be caused by the wide range of scores with the high score of 88 at the top of the range.

Measures of central tendency, variability, and

symmetry which describe the subjects' response to the six scales of the Leisure Activities Blank are presented in Tables 14, 15, 16, 17, 18, and 19. Six subjects did not respond correctly to this inventory, therefore, data for 294 subjects are reported.

Table 14 shows the range, mean, standard deviation, standard error of the mean, mode, median, and skewness for the Mechanics scale of the Leisure Activities Blank. This scale represents activities such as auto repair, carpentry, and woodworking.

Table 14
Performance of the Sample on the Mechanics
Scale of the Leisure Activities Blank

Range	Mean	<u>SD</u>	<u>SE_m</u>	Mode	Median	Skewness
24-75	42.54	12.17	.71	31	39.79	.57

n = 294.

A study of Table 14 reveals that the measures of central tendency fall relatively far apart numerically for the Mechanics scale. The average score on the Mechanics scale was 42.54. The heterogeneity of the sample concerning Mechanics is shown by the measures of variability. The scores ranged from 24 to 75. A standard deviation of 12.17

is relatively large even for this size of group. The relationship of the mean to the median reveals a .57 degree of positive skewness which is possibly attributed to the high score of 75 at the top of the range.

Table 15 presents the descriptive statistics for the Crafts scale of the Leisure Activities Blank. This scale represents activities such as ceramics, cooking, and weaving.

Table 15

Performance of the Sample on the Crafts Scale
of the Leisure Activities Blank

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
18-54	31.16	8.16	.48	32	30.27	.51

n = 294.

A study of Table 15 reveals that the average performance on the Crafts scale was 31.16. The mid-point score was 30.27, and the most frequent score was 32. The measures of variability show that the scores ranged from 18 to 54. A standard deviation of 8.16 is considered relatively small for this size sample. A .51 degree of positive skewness is indicated, which again, would be attributed to the wide range of scores with the high score of 54 at the top of the

range.

Table 16 presents the descriptive statistics for the Intellectual scale of the Leisure Activities Blank. This scale represents activities such as reading, attending plays, and writing poetry.

Table 16

Performance of the Sample on the Intellectual
Scale of the Leisure Activities Blank

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
17-54	32.05	7.01	.41	29	31.43	.33

n = 294.

A study of Table 16 reveals a mean score of 32.05, a median score of 31.43, and a modal score of 29. A standard deviation of 7.01 is small for a sample size of 294. A small .33 degree of positive skewness is found due to the high score of 54 at the top of the range.

Table 17 presents the range, mean, standard deviation, standard error of the mean, mode, median, and skewness for the Slow Living scale of the Leisure Activities Blank. This scale represents activities such as sunbathing, gardening, and talking on the telephone.

Table 17

Performance of the Sample on the Slow Living
Scale of the Leisure Activities Blank

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
30-80	57.34	9.07	.53	54	58.88	-.54

n = 294.

A study of Table 17 reveals that the average score for the Slow Living scale was 57.34. The measures of variability disclose the heterogeneity of the sample with respect to the Slow Living scale. The scores ranged from 30 to 80, and a standard deviation of 9.07 tends to show the wide dispersion of scores in the distribution. A $-.54$ degree of negative skewness is shown due to the low score of 30 at the bottom of the range.

Table 18 presents the descriptive statistics for the Sports scale of the Leisure Activities Blank. This scale represents activities such as badminton, baseball, and jogging.

Table 18

Performance of the Sample on the Sports Scale
of the Leisure Activities Blank

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
14-53	29.89	5.90	.34	33	29.79	.36

n = 294.

A study of Table 18 reveals that the mean score, or average score, for the Sports scale was 29.89. The mean score of 29.89 is very close to the median score of 29.79 which accounts for the .36 degree of positive skewness. The scores ranged from 14 to 53. The reported standard deviation of 5.90 is small for a sample size of 294 and indicated that the scores tended to cluster around the mean. The small standard error of the mean, .34, indicated the reliability of the mean in terms of replication of the scale from the same population.

Table 19 presents the range, mean, standard deviation, standard error of the mean, mode, median, and skewness for the Glamour Sports scale of the Leisure Activities Blank. This scale represents such activities as mountain climbing, sailing, and skiing.

Table 19

Performance of the Sample on the Glamour Sports
Scale of the Leisure Activities Blank

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
15-52	26.82	7.34	.43	21	25.50	.75

n = 294.

A study of Table 19 reveals a mean score of 26.82, a median score of 25.50, and a modal score of 21. The standard deviation of 7.34 is considered average for the sample size of 294. In relation to the other scales, Glamour Sports showed the greatest amount, .75, of positive skewness. This may be attributed to the very high score of 52 at the top of the range.

Measures of central tendency, variability, and symmetry which describe the reliability of response by the subjects on the Leisure Activities Blank are presented in Table 20. This scale yields a score which determines if the respondent answered in a purposeful and accurate manner. Data for 294 subjects are reported.

Table 20

Reliability of Response on the Leisure
Activities Blank

Range	Mean	<u>SD</u>	<u>SE</u> _m	Mode	Median	Skewness
43-60	54.79	3.55	.21	57	55.31	-.77

n = 294.

A study of Table 20 reveals a mean reliability score of 54.79. Reliability scores below 45 are considered suspect. The average response to the Leisure Activities Blank by this sample appears reliable.

Further study of Table 20 discloses a median score of 55.31, and a modal score of 57. A standard deviation of 3.55 is very small for a sample of 294 subjects. The -.77 degree of negative skewness is found due to the low score of 43 at the bottom of the range.

Further analysis of the raw data was required in order to test the relationships involved in the six hypotheses statements. Tables 21 through 26 present Pearson correlation coefficients which indicate whether the relationships were significant.

Table 21 presents the correlation coefficients for the relationship between self-concept and leisure behavior.

This table shows the relationship between the Total Positive of the Tennessee Self Concept Scale with the six scales of the Leisure Activities Blank. Data for 293 subjects are presented.

Table 21
Correlation of Total Positive (Self-Concept)
with Leisure Behavior (Scales)

Scale	Total Positive	Exact Probability	Significance Level
Mechanics	.05	.209	
Crafts	.12	.017	.05
Intellectual	.22	.001	.001
Slow Living	.17	.002	.01
Sports	.16	.003	.01
Glamour Sports	.21	.001	.001

n = 293.

Inspection of Table 21 supports the hypothesis of a relationship between self-concept and leisure behavior. Using the Total Positive as the overall measure of self-concept, significant relationships were found at the .001 level, the .01 level, and the .05 level. The resulting significant coefficients were .22 with the Intellectual

scale, and .21 with the Glamour Sports scale at the .001 level. Significant coefficients at the .01 level were .17 with the Slow Living scale, and .16 with the Sports scale. Significant at the .05 level was a .12 coefficient with the Crafts scale. No significant relationship was found between Total Positive and the Mechanics scale.

Table 22 presents the Pearson correlation coefficients representative of the relationship between leisure behavior and the three Row items of the Tennessee Self Concept Scale. Data for 293 subjects are presented.

A study of Table 22 reveals significant correlations at the .001 level and the .01 level between the scales of the Leisure Activities Blank and Row 1 of the Tennessee Self Concept Scale. Row 1 indicates how the individual conveys the message of "This is what I am" from an internal frame of reference. Significant coefficients at the .001 level that were found are .19 with the Intellectual scale, .23 with the Slow Living scale, .22 with the Sports scale, and .19 with the Glamour Sports scale. At the .01 level, Row 1 correlated .14 with Crafts. No significant relationship was found between Row 1 and Mechanics.

Row 2 represents how the individual conveys the message of "This is how I feel about myself" from an internal frame of reference. A coefficient found significant at the

Table 22
Correlation of Leisure Behavior (Scales)
with Row Items

Scale	Row 1	Exact Proba- bility	Sig. Level	Row 2	Exact Proba- bility	Sig. Level	Row 3	Exact Proba- bility	Sig. Level
Mechanics	.05	.180		.04	.249		.03	.291	
Crafts	.14	.007	.01	.06	.176		.14	.009	.01
Intellectual	.19	.001	.001	.18	.001	.001	.21	.001	.001
Slow Living	.23	.001	.001	.08	.079		.15	.006	.01
Sports	.22	.001	.001	.05	.224		.18	.001	.001
Glamour Sports	.19	.001	.001	.16	.003	.01	.21	.001	.001

n = 293.

.001 level was .18 with the Intellectual scale, and at the .01 level, a coefficient of .16 was significant with the Glamour Sports scale.

Further study of Table 22 reveals the relationship between the leisure scales and Row 3 of the Tennessee Self Concept Scale. Row 3 represents how the individual conveys the message of "This is what I do" from an internal frame of reference. The resulting significant coefficients were .21 with the Intellectual scale, .18 with the Sports scale, and .21 with the Glamour Sports scale at the .001 level. Significant coefficients at the .01 level that were found were .14 with Crafts, and .15 with the Slow Living scale. No significant relationship was found between Row 3 and Mechanics.

Table 23 presents the correlation coefficients representative of the relationship between leisure behavior and the five Column items of the Tennessee Self Concept Scale. The number of subjects reported for use in this table was 293.

A study of Table 23 reveals significant correlations at the .001 level, the .01 level, and the .05 level between the scales of the Leisure Activities Blank and the Columns of the Tennessee Self Concept Scale. Column A represents how the individual views his physical self from an external

Table 23
Correlation of Leisure Behavior (Scales)
with Column Items

Scale	Col. A	Exact Proba- bility	Sig. Level	Col. B	Exact Proba- bility	Sig. Level	Col. C	Exact Proba- bility	Sig. Level
Mechanics	.15	.006	.01	.06	.159		.08	.085	
Crafts	.05	.179		.14	.01	.01	.09	.072	
Intellectual	.09	.072		.22	.001	.001	.20	.001	.001
Slow Living	.08	.088		.12	.017	.05	.10	.040	.05
Sports	.22	.001	.001	.04	.270		.17	.002	.01
Glamour Sports	.19	.001	.001	.11	.035	.05	.21	.001	.001

n = 293.

Table 23 Continued

Scale	Col. D	Exact Proba- bility	Sig. Level	Col. E	Exact Proba- bility	Sig. Level
Mechanics	.05	.194		.08	.093	
Crafts	.16	.004	.01	.16	.004	.01
Intellectual	.11	.026	.05	.26	.001	.001
Slow Living	.15	.007	.01	.22	.001	.001
Sports	.05	.217		.18	.001	.001
Glamour Sports	.13	.012	.05	.22	.001	.001

n = 293.

frame of reference. The resulting significant coefficients were .22 with the Sports scale, and .19 with the Glamour Sports scale at the .001 level. A significant relationship at the .01 level was indicated with a .15 coefficient for the Mechanics scale. Of interest is the fact that Column A is the only item on the Tennessee Self Concept Scale to reveal a significant relationship with the Mechanics scale. No significant relationship was found between Column A and the scales of Crafts, Intellectual, and Slow Living.

The moral/ethical self, as viewed from an external frame of reference, is represented by Column B. One highly significant relationship between Column B and Intellectual scale is shown with a .22 coefficient significant at the .001 level. A coefficient significant at the .01 level with Column B is .14 with the scale of Crafts. Coefficients of .12 for the Slow Living scale and .11 for the Glamour Sports scale were significant at the .05 level. No significant relationship was found between Column B and the scales of Mechanics and Sports.

Column C on the Tennessee Self Concept Scale reflects the personal self as viewed by the individual from an external frame of reference. Two highly significant relationships were found between Column C and scales of the Leisure Activities Blank. At the .001 level, coefficients of .20

for the Intellectual scale and .21 for the Glamour Sports scale were highly significant. A coefficient significant at the .01 level with Column C was .17 with the Sports scale, and significant at the .05 level was the coefficient .10 with the Slow Living scale. No significant relationship was found between the scales of Mechanics or Crafts with Column C.

The continuation of Table 23 reveals the relationship between leisure behavior and Column D and Column E of the Tennessee Self Concept Scale. The family self, as viewed from an external frame of reference, is presented by Column D. The resulting coefficients significant at the .01 level were .16 with the Crafts scale and .15 with the Slow Living scale. Significant coefficients at the .05 level that were found were .11 with the Intellectual scale and .13 with the Glamour Sports scale. No significant relationship was found between Column D and the Mechanics or Sports scales.

Column E on the Tennessee Self Concept Scale reflects the social self as viewed by the individual from an external frame of reference. Relationships at the .001 level were disclosed between Column E and four scales by the highly significant coefficients of .26 for Intellectual, .22 for Slow Living, .18 for Sports, and .22 for Glamour Sports. A coefficient significant at the .01 level with

Column E is .16 with the scale of Crafts. No significant relationship was found between the Mechanics scale and Column E.

Hypothesized in the study was the idea that selected demographic variables would significantly relate to self-concept and leisure behavior. Tables 24, 25, and 26 present Pearson correlation coefficients representative of the relationships among self-concept, leisure behavior, and the variables of age, sex, and income level. The Total Positive item from the Tennessee Self Concept Scale was used as the measure of self-concept, and the six scales of the Leisure Activities Blank were used to determine leisure behavior.

Table 24 presents the Pearson correlation coefficients representative of the relationship among self-concept, leisure behavior, and age. The relationship between age and Total Positive involved 295 subjects. The relationship between age and the scales of the Leisure Activities Blank involved 294 subjects.

Table 24

Correlation Among Self-Concept (Total Positive),
Leisure Behavior (Scales), and Age

Scale	Age	Exact Probability	Significance Level
Total Positive	.03	.317	
Mechanics	-.05	.201	
Crafts	.08	.082	
Intellectual	.05	.210	
Slow Living	.002	.484	
Sports	-.15	.006	.01
Glamour Sports	-.17	.002	.01

Note. Scales n = 294. Total Positive n = 295.

A study of Table 24 reveals that the variable age had little significant relationship with leisure behavior. An inverse relationship of significance was shown, however, between age and the scales of Sports and Glamour Sports. At the .01 level, a significant correlation coefficient of $-.15$ was reported with the Sports scale, and $-.17$ was reported with the Glamour Sports scale. Age appears to have no significant relationship with Total Positive, or the leisure scales of Mechanics, crafts, Intellectual, and Slow Living.

Table 25 presents the Pearson bivariate correlation coefficients representative of the relationship among self-concept, leisure behavior, and sex. The relationship between sex and Total Positive involved 295 subjects. The relationship between sex and the leisure scales involved 294 subjects.

Table 25

Correlation Among Self-Concept (Total Positive),
Leisure Behavior (Scales), and Sex

Scale	Sex	Exact Probability	Significance Level
Total Positive	.10	.047	.05
Mechanics	-.69	.001	.001
Crafts	.55	.001	.001
Intellectual	.02	.353	
Slow Living	.20	.001	.001
Sports	-.27	.001	.001
Glamour Sports	-.16	.003	.01

Note. Scales n = 294. Total Positive n = 295.

A study of Table 25 reveals significant relationships at the .001 level with positive coefficients of .55 with the Crafts scale, and .20 with the Slow Living scale and

the variable sex. At the .001 level, sex correlated inversely $-.69$ with the Mechanics scale, and $-.27$ with the Sports scale. A correlation coefficient of $.10$ was found between sex and Total Positive significant at the .05 level. An inverse coefficient of $-.16$ was found to be significant at the .01 level between sex and Glamour Sports. No significant relationship was found between sex and the Intellectual scale.

Table 26 presents the Pearson correlation coefficients representative of the relationship among self-concept, leisure behavior, and income level. The relationship between income level and Total Positive involved 295 subjects, and the relationship between income level and the leisure scales involved 294 subjects.

Table 26 discloses only two significant relationships with respect to self-concept, leisure behavior, and income level. At the .01 level, a significant coefficient of $.14$ was found between income level and Total Positive, and a significant coefficient of $.15$ was found between income level and the Mechanics scale. No significant relationship was found between income level and the scales of Crafts, Intellectual, Slow Living, Sports, or Glamour Sports.

Table 26

Correlation Among Self-Concept (Total Positive),
Leisure Behavior (Scales), and Income Level

Scale	Income Level	Exact Probability	Significance Level
Total Positive	.14	.010	.01
Mechanics	.15	.006	.01
Crafts	-.02	.367	
Intellectual	.04	.263	
Slow Living	.02	.375	
Sports	-.003	.481	
Glamour Sports	.03	.305	

Note. Scales $n = 294$. Total Positive $n = 295$.

Further analysis was required in order to discern the predictive value of the data. The general idea that self-concept may be a predictor of leisure behavior necessitated a multivariate statistical procedure. Canonical analysis was used to determine the degree of confidence which could be placed in the overall hypothesis that self-concept and leisure behavior are significantly related. Canonical analysis raw data may be found in Appendix H.

Table 27 presents canonical correlation coefficients and significance levels for seven canonical variates (R).

These variates, Rc1 through Rc7, were revealed following canonical analysis of the coefficients yielded by Pearson product-moment correlation of the variables (items) of the Tennessee Self Concept Scale with the variables (items) of the Leisure Activities Blank. Canonical correlation involved data for 293 subjects.

Table 27

Canonical Correlations between Self-Concept Scores
and Leisure Behavior Scores

R (Variate)	Canonical Correlation Coefficient	Significance Level
Rc1	.421	.001
Rc2	.347	.001
Rc3	.271	.05
Rc4	.256	.075
Rc5	.186	.429
Rc6	.106	.726
Rc7	.086	.555

n = 293.

As the data in Table 27 indicates, three statistically significant correlations were obtained. The first canonical correlation coefficient (Rc1) was .421, significant at the

.001 level. The second canonical correlation coefficient (Rc2) was .347, significant at the .001 level. The third canonical correlation coefficient (Rc3) was significant at the .05 level with a reported coefficient of .271. The remaining four canonical correlation coefficients were not found significant.

Table 28 presents the coefficients for the canonical variables (items) of the Tennessee Self Concept Scale. A coefficient is indicated with respect to the two canonical variates (Rc1 and Rc2) found significant at the .001 level and one canonical variate (Rc3) found significant at the .05 level in Table 27.

A study of Table 28 reveals those coefficients in the canonical variates (Canvar 1, 2, and 3) which possess sufficient loading for consideration in the identification of three distinct profiles. Variables, or items, and respective coefficients from the Tennessee Self Concept Scale with the required degree of significance in Canvar 1 are: 1.882 for Row 1 (identity), 1.330 for Row 2 (self satisfaction), 1.400 for Row 3 (behavior), -1.847 for Column A (physical self), and -1.382 for Column C (personal self). Canvar 2 shows five coefficients with high loadings. The coefficients and representative variables are: 2.543 for Row 1 (identity), 1.771 for Row 2 (self satisfaction), 2.531 for Row 3 (behavior), -1.689 for Column B (moral/ethical self),

and -1.846 for Column D (family self). Canvar 3 reveals that all the coefficients indicate high loadings, therefore, all variables, or items, are considered in profile analysis: 5.978 for Row 1 (identity), 7.630 for Row 2 (self satisfaction), 6.875 for Row 3 (behavior), -4.823 for Column A (physical self), -4.084 for Column B (moral/ethical self), -4.056 for Column C (personal self), -4.531 for Column D (family self), and -4.747 for Column E (social self).

Table 28
Coefficients for Canonical Variables of the
Tennessee Self Concept Scale

Item	Canvar 1	Canvar 2	Canvar 3
Row 1	1.882*	2.543*	5.978*
Row 2	1.330*	1.711*	7.630*
Row 3	1.400*	2.531*	6.875*
Column A	-1.847*	-1.093	-4.823*
Column B	-0.521	-1.689*	-4.084*
Column C	-1.382*	-1.055	-4.056*
Column D	-0.570	-1.846*	-4.531*
Column E	-0.485	-1.156	-4.747*

Note. $n = 293$.

*Possesses sufficient loading for profile consideration.

Table 29 presents the coefficients for the canonical variables, or scales, of the Leisure Activities Blank. A coefficient is indicated with respect to the three canonical variates found significant at the .001 or .05 level in Table 27.

Table 29
Coefficients for Canonical Variables of the
Leisure Activities Blank

Scale	Canvar 1	Canvar 2	Canvar 3
Mechanics	-.235	-.240	-.487*
Crafts	.555*	-.004	.214
Intellectual	.244	-.054	.288
Slow Living	-.117	.310	.130
Sports	-.348*	.907*	.506*
Glamour Sports	.540*	.101	-.968*

Note. $n = 293$.

*Possesses sufficient loading for profile consideration.

The canonical coefficients for the canonical variables, or scales, of the Leisure Activities Blank are shown in Table 29. A study of Table 29 reveals that Canvar 1 (canonical variate 1) yields three coefficients great enough in

magnitude to be considered in profile identification: .555 for the scale of Crafts, $-.348$ for the scale of Sports, and .54 for the scale of Glamour Sports. Canvar 2 reports the coefficient of .907 for the scale of Sports as the only variable, or scale, which possesses a loading high enough for profile consideration. Variables, or scales, from the Leisure Activities Blank that display coefficients with high loadings for Canvar 3 are: $-.487$ for the scale of Mechanics, .506 for the scale of Sports, and $-.968$ for the scale of Glamour Sports.

Summary

In this chapter, the results of the investigation to determine the degree of relationship between self-concept and leisure behavior were presented. Selected items of the Tennessee Self Concept Scale were used to collect data with respect to self-concept, and the Leisure Activities Blank provided scores which measured subjects participation in six scales of leisure behavior.

A tabular and narrative presentation, descriptive of 296 subjects, revealed that 48% were male and 52% were female. The subjects' ages ranged from 20 to 64 years with a mean of 28.68 years, and 20.3% of the subjects possessed a yearly income of \$10,000 to \$15,000.

The wide dispersions of response to the nine items of

the Tennessee Self Concept Scale revealed the heterogeneity of the sample. With respect to how the subjects described themselves from an internal and external frame of reference, all mean scores were below the 50th percentile as indicated by the Tennessee Self Concept Profile Sheet with the exception of Row 2 (self satisfaction) and Column C (personal self). These percentile scores reveal a low overall self-concept, however, positive feelings about the self as perceived by the individual and a positive sense of personal worth are disclosed. The average Total Variability score was equivalent to the 45th percentile on the profile sheet which indicated consistency of response from one area of self-perception to another. The mean reliability score was 54.79. Reliability scores below 45 are considered suspect, therefore, reliability of response by this sample is considered reliable.

Measurement of relationship was calculated using the Pearson product-moment correlation coefficient to test the six hypotheses statements. Several significant correlations were found.

The idea that self-concept and leisure behavior are significantly related was supported by the data. Total Positive of the Tennessee Self Concept Scale correlated significantly with the scales of Intellectual, Glamour Sports,

Slow Living, Sports, and Crafts of the Leisure Activities Blank. Only the scale of Mechanics did not show significant relationship with Total Positive.

The correlation of the scales of the Leisure Activities Blank with the Row and Column items of the Tennessee Self Concept Scale added further support to the existence of relationship between self-concept and leisure behavior. Each Row item showed relationships with two or more of the scales at the .01 level of significance. Each Column item indicated relationship at the .05 level of significance with three or more of the scales.

Correlation among self-concept, leisure behavior, and three demographic variables revealed income level to be most significantly related, at the .01 level, with self-concept. Sex showed relationship with self-concept at the .05 level of significance, and age was found to have no significant relationship with self-concept. Sex appeared to be most significantly related to leisure behavior. Significant relationships between sex and five scales of the Leisure Activities Blank were disclosed. Age showed significant relationship with two scales, and income level significantly correlated with only one scale.

Canonical analysis was used to discern the predictive value of the data. This multivariate analysis revealed two

statistically significant correlations at the .001 level, and one statistically significant correlation at the .05 level.

Items of the Tennessee Self Concept Scale which possessed sufficient loading for profile consideration for Canonical Variate 1 were: Row 1 (identity), Row 2 (self satisfaction), Row 3 (behavior), Column A (physical self), and Column C (personal self). Items for Canonical Variate 2 were: Row 1 (identity), Row 2 (self satisfaction), Row 3 (behavior), Column B (moral/ethical self), and Column D (family self). Items for Canonical Variate 3 were: Row 1 (identity), Row 2 (self satisfaction), Row 3 (behavior), Column A (physical self), Column B (moral/ethical self), Column C (personal self), Column D (family self), and Column E (social self).

Scales of the Leisure Activities Blank which possessed sufficient loading for profile consideration for Canonical Variate 1 were: Crafts, Sports, and Glamour Sports. Only Sports possessed a high enough coefficient for Canonical Variate 2, and scales for Canonical Variate 3 were Mechanics, Sports, and Glamour Sports.

A summary of the findings, conclusions based upon the findings, and recommendations for further studies will be presented in Chapter V of this dissertation.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

There are few research studies of the relationship between psychological variables and leisure behavior. Despite many years of investigation of measurable psychological characteristics for determination of behavior, leisure researchers have been inclined to focus on the relationship between leisure behavior and demographic variables such as age, sex, or occupation. Only within the last decade have studies emerged in which the relationships between leisure behavior and psychological factors such as personality, need, or satisfaction been examined.

The present study was undertaken to assess the relationship between leisure behavior and the psychological factor of self-concept. The Leisure Activities Blank was used to collect data concerning leisure behavior. Self-concept was measured by the Tennessee Self Concept Scale. During the academic semesters summer II and fall, 1980, 300 students at Tarrant County Junior College, Fort Worth, Texas, voluntarily participated as subjects. The students who served as subjects were males and females, 20 years of age

or older, from a selection of day and night classes which included: Nutrition, Microbiology, Reading, Introduction to Psychology, Human Relations, Physical Education, Personality, Futuristics, and Non-Destructive Technology.

Summary of the Findings

Of the 300 initial subjects, 4 subjects did not respond correctly to either instrument; 1 subject responded incorrectly to the Tennessee Self Concept Scale, and 2 subjects responded incorrectly to the Leisure Activities Blank. The wide dispersion of scores on both the Tennessee Self Concept Scale and the Leisure Activities Blank indicated a heterogeneous sample of which 48% were males and 52% were females. The subjects ranged in age from 20 to 64 years, and the largest percentage of subjects possessed an annual income of \$10,000 to \$15,000. The following are the major findings based upon the data obtained from responses to the two instruments.

1. Mean scores on the three Row items of the Tennessee Self Concept Scale indicated that, in general, subjects were not positive about their identity or behavior. The average score for identity was in the 45th percentile, and the average score for behavior was in the 40th percentile. They were, however, satisfied with how they felt about the self they perceived. The average score for the self

satisfaction item was at the 50th percentile. According to the Tennessee Self Concept Scale Manual, "an individual may have very low scores on identity and behavior yet score high on self satisfaction. This may be caused by an individual setting very low standards and expectations for himself" (Fitts, 1965, p. 2).

2. With the exception of Column C (personal self), all mean scores for the Column items (physical self, moral/ethical self, family self, and social self) were below the 50th percentile as indicated on the Tennessee Self Concept Profile Sheet. This discloses relatively low self-concepts with respect to the "self" items. Only on Column C (personal self) did subjects indicate a positive perception of themselves.

3. The average Total Variability score on the Tennessee Self Concept Scale was equivalent to the 45th percentile on the profile sheet. This indicated that subjects in this sample were consistent in response from one area of self-perception to another.

4. The average reliability score on the Leisure Activities Blank was 54.79. According to the Leisure Activities Blank Manual, the average response to this instrument is considered reliable.

5. Data obtained to test the first hypothesis

disclosed a significant relationship between self-concept and leisure behavior. When the Total Positive scores of the Tennessee Self Concept Scale were correlated with the scores on the six scales of the Leisure Activities Blank, it was found that a person's self-concept and the scales of Intellectual and Glamour Sports related significantly at the .001 level. Further relationships of significance existed between Total Positive and the scales of Slow Living and Sports at the .01 level. Total Positive correlated with the scale of Crafts at the .05 level of significance. Total Positive did not, however, correlate significantly with the scale of Mechanics.

6. Correlation of scores on the scales of the Leisure Activities Blank with the scores on the Row items of the Tennessee Self Concept Scale provided data to test the second hypothesis. All three Row items were found significantly related to at least two scales of the Leisure Activities Blank. Row 1 (identity) correlated significantly at the .001 level with the scales of Intellectual, Slow Living, Sports, and Glamour Sports. Significant at the .01 level with Row 1 was the scale of Crafts. Row 2 (self satisfaction) correlated significantly at the .001 level with the scale of Intellectual and at the .01 level with Glamour Sports. Row 3 (behavior) related significantly at the .001

level with the scales of Intellectual, Sports, and Glamour Sports. At the .01 level of significance, Row 3 was related to the scales of Crafts and Slow Living. The scale of Mechanics was the only scale which was not found significantly related to Row items.

7. Correlation of scale scores of the Leisure Activities Blank with Column item scores of the Tennessee Self Concept Scale provided data to test the third hypothesis. A significant relationship at the .001 level was found between Column A (physical self) and the scales of Sports and Glamour Sports. Column A correlated significantly at the .01 level with the scale of Mechanics. Column B (moral/ethical self) correlated at the .001 level of significance with the scale of Intellectual; at the .01 level with the scale of Crafts; and at the .05 level with the scales of Slow Living and Glamour Sports. Column C (personal self) significantly related to the scales of Intellectual and Glamour Sports at the .001 level; with Sports at the .01 level; and with the scale of Slow Living at the .05 level. Column D (family self) correlated significantly at the .01 level with the scales of Crafts and Slow Living, and at the .05 level with the scales of Intellectual and Glamour Sports. Column E (social self) was found to be significantly related at the .001 level with the scales of

Intellectual, Slow Living, and Glamour Sports, and at the .01 level with the scale of Crafts.

8. When looking at the fourth hypothesis concerning the relationship among self-concept, leisure behavior, and age, it was found that age did not show a significant relationship with self-concept. Age did, however, correlate significantly at the .01 level with the leisure scale of Sports, and at the .01 level with the scale of Glamour Sports.

9. Significance of the relationship among self-concept, leisure behavior, and sex was the concern of the fifth hypothesis. A significant relationship at the .001 level was found between sex and the scales of Mechanics, Crafts, Slow Living, and Sports. At the .01 level of significance, a relationship was found between sex and the scale of Glamour Sports. Sex and Total Positive correlated significantly at the .05 level.

10. When looking at the sixth hypothesis concerning the relationship among self-concept, leisure behavior, and income level, significance of relationship was found at the .01 level among income level, self-concept, and the scale of Mechanics.

11. The use of canonical analysis revealed two statistically significant correlations (variates) at the .001

level and one at the .05 level. These findings substantiate the overall statement that self-concept is significantly related to leisure behavior. The multivariate analysis further demonstrated the predictive value of self-concept to leisure behavior through the identification of items of the Tennessee Self Concept Scale, and scales of the Leisure Activities Blank with loadings sufficient for profile consideration. The canonical variates may be regarded as indicating that there are three independent ways in which self-concept is related to leisure behavior. This means that there are at least three distinct dimensions, or profiles, which self-concept and leisure behavior share.

A. Analysis of the data for Profile 1 indicated that: Individuals who score high on Row 1 (identity), Row 2 (self satisfaction), Row 3 (behavior), and low on Column A (physical self) and Column C (personal self) of the Tennessee Self Concept Scale will in turn predictably score high on the scales of Crafts and Glamour Sports, and low on the scale of Sports of the Leisure Activities Blank. Profile 1 appears as follows:

Tennessee Self Concept

High - Identity

High - Self Satisfaction

High - Behavior

Leisure Activities Blank

High - Crafts

Low - Sports

High - Glamour Sports

Low - Physical Self

Low - Personal Self

Characteristics revealed in Profile 1 include very positive internal feelings with respect to: (a) This is what I am, (b) This is how I feel about myself, and (c) This is what I do. On the other hand, negative perceptions, from an external frame of reference, are indicated regarding physical appearance, state of health, skills, and sexuality. Negative perceptions include also: The sense of personal worth, feelings of adequacy as a person, and evaluation of personality apart from the body or with respect to relationships to others. These findings disclose that a person who possesses these five self-concept characteristics will predictably engage in Craft and Glamour Sport related activities, but will not actively pursue Sport related activities.

B. Self-concept as a predictor of leisure behavior is further demonstrated in Profile 2. As a result of canonical analysis, the findings indicate that: Individuals who score high on Row 1 (identity), Row 2 (self satisfaction), Row 3 (behavior), and low on Column B (moral/ethical self) and Column D (family self) of the Tennessee Self Concept Scale will in turn predictably score high on the Sports scale of the Leisure Activities Blank. Profile 2 appears as follows:

Tennessee Self ConceptLeisure Activities Blank

High - Identity

High - Sports

High - Self Satisfaction

High - Behavior

Low - Moral/Ethical Self

Low - Family Self

The positive internal feelings characterisite of Profile 2 are the same as those found in Profile 1 concerning: (a) This is what I am, (b) This is how I feel about myself, and (c) This is what I do. However, negative perceptions are disclosed with respect to moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with religion or lack of it. Negative perceptions with respect to the family self indicate feelings of being inadequate, unworthy, and of little value as a family member. These findings show, for Profile 2, that a person who possesses these self-concept characteristics will predictably engage in Sport related activities.

C. Self-concept and leisure behavior share yet another dimension as is portrayed in Profile 3. The results of canonical analysis for Profile 3 are that: Individuals who score high on all three of the Row items (identity, self satisfaction, and behavior) and score low on all of the Column items (physical self, moral/ethical self,

personal self, family self, and social self), of the Tennessee Self Concept Scale will in turn score high on the Sports scale and low on the scales of Mechanics and Glamour Sports of the Leisure Activities Blank. Profile 3 appears as follows:

Tennessee Self Concept

High - Identity
 High - Self Satisfaction
 High - Behavior
 Low - Physical Self
 Low - Moral/Ethical Self
 Low - Personal Self
 Low - Family Self
 Low - Social Self

Leisure Activities Blank

High - Sports
 Low - Mechanics
 Low - Glamour Sports

Profile 3 indicates strong positive feelings from an internal frame of reference with respect to: (a) This is what I am, (b) This is how I feel about myself, and (c) This is what I do. Profile 3 also indicates negative perceptions from an external frame of reference concerning the "self" items. These findings suggest that a person who possesses these self-concept characteristics will predictably engage in Sport related activities, but will not actively pursue Mechanic nor Glamour Sport related activities.

12. The three profiles may also be interpreted in a

converse manner with regard to "high" or "low" of significant items or scales. Each profile would then be described as follows:

Profile 1

Tennessee Self Concept:

Low - Identity

Low - Self Satisfaction

Low - Behavior

High - Physical Self

High - Personal Self

Leisure Activities Blank:

Low - Crafts

High - Sports

Low - Glamour Sports

Profile 2

Tennessee Self Concept:

Low - Identity

Low - Self Satisfaction

Low - Behavior

High - Moral/Ethical Self

High - Family Self

Leisure Activities Blank:

Low - Sports

Profile 3

Tennessee Self Concept:

Low - Identity

Low - Self Satisfaction

Low - Behavior

High - Physical Self

High - Moral/Ethical Self

Leisure Activities Blank:

High - Mechanics

High - Glamour Sports

Low - Sports

High - Personal Self

High - Family Self

High - Social Self

Conclusions

Results of the study lend support to the idea that there is a significant relationship between self-concept and leisure behavior. Based upon the findings, null hypotheses 1 through 3, which were concerned with the significance of relationship between self-concept and leisure behavior, were rejected. Hypotheses 4 through 6, which were concerned with the relationships among self-concept, leisure behavior, and the variables of age, sex, and income level were accepted.

The general idea that "if" certain self-concept conditions exist, "then" certain leisure behaviors would predictably follow was tested through the use of canonical analysis. Two statistically significant canonical variate correlations were obtained at the .001 level, and one canonical variate was found statistically significant at the .05 level. The theory of self-concept as a predictor of leisure behavior is, therefore, supported.

Discussion

In any study there are qualifications and limitations

that should be considered in the interpretation of the results obtained. One such factor involves the subjects used in the study. While the sample appeared to be representative of the population from which it came, it is questionable that the same results would occur with a sample comprised of subjects with higher annual income levels. Income level was found to correlate with self-concept at the .05 level of significance, therefore, duplication of this study using a "wealthier" population might yield varied results, particularly with respect to profile consideration.

Another factor to consider are the instruments used to gather data. Extensive use has served to establish the validity and reliability of the Tennessee Self Concept Scale. The Leisure Activities Blank has not had a great deal of previous use, therefore, the validity and reliability of this instrument is suspect with respect to measurement of leisure behavior.

Statistical analysis must always be considered in the interpretation of the findings. It has been suggested that one important reason for the less than conclusive findings of previous research can be attributed to the limited statistical procedures used. (Howard, 1976) "The ordinary (product moment) correlation between two random variables is by now very familiar. The canonical correlation

coefficient generalizes the notion even further to correlation between two random vectors" (Press, 1972, p. 331). No doubt, canonical analysis requires considerably more computational work, but with easy access to computers, this can hardly be called an obstacle.

The use of Pearson product-moment correlation did provide an affirmative answer to the primary question posed by this investigation: Are self-concept and leisure behavior significantly related? The canonical correlation analysis summarized this complex relationship, and allowed for further generalization of the idea. It revealed three distinct ways in which self-concept and leisure behavior relate. In fact, the extent of the significance departure from chance found in this study suggests that self-concept has substantial value in predicting leisure behavior.

The most important finding of this study is that individuals with similar self-concepts tend to display the same type of leisure behavior. This supports Rogers' contention that: "If an individual possesses measurable characteristics a, b, and c, then we can predict that there is a high probability that he will exhibit behaviors x, y, and z" (1961, p. 366). It should be noted, however, that it would be in error to infer that an individual identified in one distinct self-concept profile would never prefer to exhibit

other leisure behaviors not identified in this study.

A significant relationship was shown to exist between self-concept and leisure behavior, but the fundamental question of cause and effect remains unsolved. While this piece of research was not directed toward cause-effect relationships, the problem remains for future investigations. For example, the question has not been answered whether a high score on the scale of Sports is a direct result of self-concept or merely a result of other variable dimensions.

Findings of this study indicate the probability that expansion of the theory that self-concept has value in predicting leisure behavior may prove worthwhile. The most appropriate inference that can be drawn from this investigation is that each individual who possesses self-concept characteristics as identified by the profiles, will in turn predictably exhibit selected leisure behavior(s) as identified by the profiles.

A utilitarian extension of this finding concerns the provision of leisure counseling services. The continued exploration of why people behave as they do during leisure, and further development and refinement of predictive devices may result in better methods of avocational guidance.

Recommendations for Further Studies

Having completed the research for this specific study, and in view of the findings of the study, the suggestions for further research are as follows:

1. The continued search for valid and reliable instruments and methods for identification of self-concept.
2. The continued search for valid and reliable instruments and methods for identification of leisure behavior.
3. The continued research with respect to psychological characteristics which compel persons to exhibit specific leisure behaviors.
4. The continued research involving profile identification with respect to leisure behavior.

APPENDICES

APPENDIX A
LEISURE ACTIVITIES BLANK SCALES AND
REPRESENTATIVE ACTIVITIES

LEISURE ACTIVITIES BLANK SCALES AND
REPRESENTATIVE ACTIVITIES

1. Mechanics (ME): Amateur radio, auto racing, auto repairing, billiards/pool, boxing, camping, carpentry, electronics, fishing fresh water, fishing salt water, flying/gliding, football, horseshoes, hunting, kite flying, marksmanship, mechanics, metalwork, model building, playing poker, volunteer fire fighting, weight lifting, wrestling, woodworking.

2. Crafts (CR): Ceramics/pottery, collecting coins or other items, cooking/baking, crossword puzzles, dancing, designing clothes, flower arranging, folk dancing, home decorating, jewelry making, jigsaw puzzles, knitting/crocheting, leatherworking, needlework, painting/drawing, sculpture, sewing, weaving.

3. Intellectual (IN): Acting/dramatics, attending concerts, backpacking, chess, civic organizations, conservation/ecology organizations, darkroom work, going to plays/lectures, hiking/walking, playing a musical instrument, political activities, reading books or poetry, singing, traveling abroad, visiting museums, writing poetry or stories.

4. Slow Living (SL): Social dancing, dining out, driving/motoring, exercising, gardening, going to movies,

listening to radio, listening to records, reading newspapers or magazines, sightseeing, social drinking, sunbathing, taking snapshots, talking on telephone, visiting friends, watching TV shows, watching team sports, window-shopping, writing letters.

5. Sports (SP): Badminton, baseball/softball, basketball, bicycling, bowling, checkers, football, golf, jogging, kite flying, shuffleboard, squash/handball, table tennis/ping pong, volleyball.

6. Glamour Sports (GS): Archery, canoeing, horseback riding, ice skating, motorboating, motorcycling, mountain climbing, rowing/boating, sailing, skiing, skindiving, surfboarding, swimming, tennis, waterskiing. (McKechnie, 1973, p. 17)

APPENDIX B

LETTER OF CONSENT FROM TARRANT COUNTY JUNIOR COLLEGE

MEMO TO: Dr. Rushing

FROM: Horace Griffitts *jh*

SUBJECT: Carol Miller (South Campus) Dissertation Study

I have reviewed Carol's dissertation prospectus, which has TWU Committee approval.

She needs to administer two instruments to about 300 TCJC South Campus students in Summer II semester. She is arranging with Drs. Pirkey and Johnson for population to be tested.

I recommend approval on this study that involves self-concept relationships to leisure-time activities.

slt

*OK.
7/17/80
John Rushing*

cc: Miller
Pirkey
Johnson
Worden

APPENDIX C

VERBAL EXPLANATION AND INSTRUCTIONS

VERBAL EXPLANATION AND INSTRUCTIONS

A. Introduction

Several students at Tarrant County Junior College, South Campus, are being asked to participate in a doctoral study concerning self-concept and leisure behavior. You are asked to complete two tests: (a) the Tennessee Self Concept Scale, and (b) the Leisure Activities Blank. These should take approximately 45 minutes to complete.

This is voluntary, and you are free to withdraw your consent at any time. Your name is not to be signed on any test form, therefore, your privacy is protected. You are, however, requested to indicate your age, sex, and annual income level. Income will be coded as follows: (A) less than \$6,000; (B) \$6,000 to \$10,000; (C) \$10,000 to \$15,000; (D) \$15,000 to \$20,000; (E) \$20,000 to \$30,000; (F) more than \$30,000. Those of you who are 20 years of age or older, and volunteer to participate are asked to remain in the classroom. Those of you who do not qualify or do not wish to participate may leave the classroom.

B. Consent Form

Each subject is given two copies.

The investigator reads the consent form out loud.

Answering of any questions regarding the form.

Each subject signs both copies and has a fellow student or faculty member witness the signature by signing his/her name.

Each subject keeps one copy, and the other copy is returned to the investigator.

C. Explanation of How to Complete the Tests

Instructions were taken directly from the manuals for the Tennessee Self Concept Scale and the Leisure Activities Blank.

Answering of any questions regarding the tests or answer sheets.

D. Request for truthfulness on the part of the subjects' responses

APPENDIX D
WRITTEN CONSENT FORM

Consent Form
TEXAS WOMAN'S UNIVERSITY
HUMAN SUBJECTS REVIEW COMMITTEE

Title of Project: _____

Consent to Act as A Subject for Research and Investigation:

I have received an oral description of this study, including a fair explanation of the procedures and their purpose, any associated discomforts or risks, and a description of the possible benefits. An offer has been made to me to answer all questions about the study. I understand that my name will not be used in any release of the data and that I am free to withdraw at any time. I further understand that no medical service or compensation is provided to subjects by the university as a result of injury from participation in research.

Signature Date

Witness Date

Certification by Person Explaining the Study:

This is to certify that I have fully informed and explained to the above named person a description of the listed elements of informed consent.

Signature Date

Position

Witness Date

One copy of this form, signed and witnessed, must be given to each subject. A second copy must be retained by the investigator for filing with the Chairman of the Human Subjects Review Committee. A third copy may be made for the investigator's files.

APPENDIX E

RAW DATA

Table A

Raw Data: Age, Sex, Income Level, and Response to the
Tennessee Self-Concept Scale

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale									Total V	Total P
				Rows			Columns							
				1	2	3	A	B	C	D	E			
1	F	35	E	134	126	128	79	80	74	80	75	36	388	
2	F	29	F	144	122	139	83	82	75	84	81	36	405	
3	M	20	F	134	98	111	74	74	65	67	63	57	343	
4	M	29	C	124	117	112	82	58	72	72	69	46	353	
5	M	23	A	116	97	105	78	64	53	64	59	49	318	
6	M	22	C	107	111	102	52	77	61	75	55	59	320	
7	M	23	C	124	106	111	73	70	69	62	67	31	341	
8	M	20	A	125	103	107	72	59	64	71	69	41	335	
9	M	28	C	137	123	129	88	74	75	80	72	61	389	
10	F	24	A	100	94	86	50	63	55	59	53	31	280	
11	F	28	F	116	104	103	61	69	62	72	59	34	323	
12	F	20	A	138	136	133	75	84	85	83	80	30	408	
13	F	23	A	128	102	113	68	72	64	73	66	44	343	
14	F	43	F	104	94	103	60	74	52	59	56	45	301	
15	F	22	C	127	120	92	68	67	61	70	73	56	339	
16	F	25	A	138	116	124	75	72	77	77	77	48	378	
17	F	27	D	124	117	101	59	70	63	72	78	58	342	
18	M	21	B	118	98	102	66	65	65	58	64	37	318	
19	M	27	B	131	110	125	72	79	72	74	69	41	366	
20	M	45	D	134	100	115	64	71	70	68	76	53	349	
21	M	47	E	127	121	116	76	75	70	72	71	35	364	
22	M	31	E	129	115	115	75	73	70	74	67	30	359	
23	M	25	B	130	131	125	72	78	75	88	73	46	386	
24	M	28	A	133	105	127	72	79	63	69	82	69	365	
25	M	26	D	123	111	119	84	70	74	60	65	46	353	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale									Total V	Total P
				1	Rows		Columns				E			
					2	3	A	B	C	D				
26	M	26	D	120	104	104	66	60	67	68	67	32	328	
27	M	21	A	139	109	111	68	65	70	83	73	60	359	
28	M	20	A	118	104	104	66	68	64	66	62	37	326	
29	F	29	D	115	94	109	70	65	59	54	70	38	318	
30	F	41	F	135	126	125	81	76	75	75	79	31	386	
31	M	30	E	109	90	102	62	61	60	62	56	32	301	
32	F	20	A	138	98	111	65	73	68	77	64	60	347	
33	F	22	D	137	126	114	79	77	65	81	75	45	377	
34	M	25	D	134	128	121	74	71	82	83	83	45	383	
35	F	47	D	120	90	100	53	66	60	67	64	58	310	
36	M	27	D	125	98	110	69	62	64	64	74	57	333	
37	F	44	F	142	128	128	82	83	74	84	75	41	398	
38	F	26	E	131	116	126	76	68	71	81	77	38	373	
39	F	22	A	124	104	116	60	79	66	72	67	44	344	
40	M	27	E	102	73	95	59	31	54	74	52	83	270	
41	M	37	D	126	94	112	57	72	64	71	68	51	332	
42	M	33	C	132	66	97	59	61	69	63	53	82	295	
43	F	32	E	124	115	109	62	81	68	63	74	55	348	
44	F	31	E	106	124	112	57	73	72	62	78	49	342	
45	M	30	D	116	103	110	74	62	65	61	67	40	329	
46														
47														
48	M	25	C	123	91	100	75	54	62	64	59	67	314	
49	F	31	B	131	100	108	64	67	72	65	71	47	339	
50	M	37	B	115	100	96	56	60	66	60	69	40	311	
51	F	20	C	129	106	102	57	62	64	80	74	62	337	
52	F	34	D	85	54	58	55	26	27	55	34	70	197	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale								Total V	Total P
				1	2	3	A	B	C	D	E		
53	F	30	C	128	90	109	71	68	63	63	62	68	327
54	F	35	F	129	111	118	60	73	75	73	77	43	358
55	F	36	E	127	102	109	67	70	66	73	62	38	338
56	F	21	C	87	87	82	50	56	53	51	46	37	256
57	M	27	D	118	96	116	63	63	64	66	74	47	330
58	M	28	D	116	94	108	62	75	55	69	57	60	318
59	F	34	F	118	101	108	64	67	62	69	65	30	327
60	F	33	F	123	114	115	60	76	71	75	70	37	352
61	M	44	C	132	128	130	68	87	75	82	78	37	390
62	F	36	E	131	124	124	76	77	75	76	75	19	379
63	F	30	E	139	123	127	77	81	76	78	77	37	389
64	M	33	E	109	83	98	57	62	54	59	58	37	290
65	M	27	D	120	91	94	65	48	59	70	63	61	305
66	M	21	A	132	109	120	78	73	68	68	74	42	361
67	F	28	C	132	114	133	64	76	77	80	82	51	379
68	F	31	E	124	116	130	70	73	71	82	74	36	370
69	M	28	E	127	76	114	55	75	65	67	55	82	317
70	M	29	E	130	81	122	71	63	61	70	68	87	333
71	M	26	D	130	104	91	63	75	64	52	71	67	325
72	M	36	E	127	113	120	78	73	69	70	70	39	360
73	M	49	A	106	110	100	67	68	62	60	59	38	316
74	F	30	B	119	98	104	60	60	65	75	61	44	321
75	M	32	E	110	78	107	67	56	47	63	62	57	295
76	F	21	B	109	89	107	60	67	64	55	59	45	305
77	F	21	A	134	118	129	83	73	76	72	77	31	381
78	F	21	B	130	101	121	70	71	69	75	66	42	351
79	F	20	B	139	125	130	73	78	81	79	83	39	394

Table A Con't.

Subject	Sex	Age	In-	Tennessee Self-Concept Scale									Total V	Total P
				come	Rows			Columns						
					1	2	3	A	B	C	D	E		
80	M	23	A	135	118	120	69	81	71	79	73	34	373	
81	M	28	D	135	91	116	66	72	68	70	66	60	342	
82	F	20	A	149	133	136	81	82	81	85	89	30	418	
83	M	26	F	126	84	111	63	56	65	67	70	70	321	
84	F	28	B	135	87	120	67	74	69	70	62	73	342	
85	F	21	F	133	89	122	70	72	61	73	68	60	344	
86	M	22	D	113	80	90	56	58	58	55	56	40	283	
87	M	24	C	121	96	107	67	59	68	65	65	43	324	
88	F	22	B	128	100	110	69	63	66	71	69	53	338	
89	M	22	C	113	95	116	63	60	64	68	69	44	324	
90	M	23	B	131	107	115	75	68	63	76	71	57	353	
91	F	21	A	129	112	107	65	76	61	72	74	78	348	
92	F	21	A	118	92	100	60	63	60	60	67	36	310	
93	F	21	A	135	93	117	67	74	65	74	65	57	345	
94	M	22	B	104	107	121	63	61	68	76	64	49	332	
95	M	22	B	82	109	90	49	55	62	53	62	60	281	
96	F	53	C	129	91	114	63	67	62	74	68	52	334	
97	F	22	A	124	96	117	71	74	67	64	61	46	337	
98	F	21	C	110	96	104	56	61	54	74	65	39	310	
99	F	24	E	128	103	110	68	64	62	79	68	45	341	
100	M	28	E	132	88	114	66	75	73	56	64	72	334	
101	F	26	B	131	92	108	61	68	63	73	66	55	331	
102	F	22	E	125	114	128	77	73	73	67	77	34	367	
103	M	24	A	106	108	104	61	72	62	61	62	43	318	
104	F	22	D	134	107	123	71	74	71	77	70	40	363	
105	M	24	D	122	89	117	71	68	66	57	66	58	328	
106	F	23	C	141	125	123	80	74	75	82	78	35	389	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale									Total V	Total P
				Rows			Columns							
				1	2	3	A	B	C	D	E			
107	F	27	A	136	126	126	77	79	77	78	77	22	388	
108	M	48	E	143	101	116	75	69	71	69	76	60	360	
109	M	27	C	128	95	109	72	61	70	66	63	58	332	
110	M	29	D	132	71	105	71	62	48	64	63	88	308	
111	M	25	B	136	102	118	75	68	64	77	72	57	356	
112	M	23	A	121	110	114	69	68	72	71	65	28	345	
113	F	22	B	137	124	124	80	79	73	75	78	24	385	
114	M	23	A	138	118	126	70	74	86	75	77	23	382	
115	M	26	F	127	100	117	66	63	69	76	70	23	344	
116	F	26	C	129	112	120	70	89	75	58	69	49	361	
117	F	20	B	127	101	103	66	70	65	67	63	39	331	
118	F	21	B	133	115	108	70	72	63	77	74	46	356	
119	M	22	B	118	99	114	64	67	62	74	64	33	331	
120	M	44	E	136	118	120	81	65	75	76	77	41	374	
121	F	23	C	118	82	109	64	57	67	69	52	61	309	
122	M	20	C	137	85	116	73	62	61	71	71	71	338	
123	M	26	C	109	102	92	69	63	62	58	51	45	303	
124	M	20	C	121	93	104	75	58	61	58	66	48	318	
125	F	34	E	133	130	122	74	79	78	82	72	29	385	
126	M	32	E	132	92	98	59	71	68	63	61	63	322	
127	F	22	A	124	93	115	64	69	67	63	69	64	332	
128	M	30	E	142	122	127	81	76	78	81	75	30	391	
129	F	38	F	120	121	133	67	80	75	73	79	42	374	
130	M	22	B	98	85	91	58	49	59	56	52	38	274	
131	M	20	B	139	137	143	87	87	79	80	86	40	419	
132	M	21	B	96	60	73	48	61	32	51	37	65	229	
133	M	29	E	136	100	97	66	61	65	72	69	53	333	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale								Total V	Total P
				1	Rows 2	3	A	Columns B	C	D	E		
134													
135	F	30	F	138	135	129	75	74	84	88	81	31	402
136	F	24	B	125	85	104	67	62	60	66	59	61	314
137	M	27	D	117	99	113	73	66	62	61	67	34	329
138	M	20	C	113	97	107	64	57	67	66	63	41	317
139	F	40	F	133	87	114	66	74	63	66	65	63	334
140	F	29	C	110	101	109	61	63	63	70	63	31	320
141	F	20	B	118	106	108	66	67	63	72	64	29	332
142	F	44	E	134	115	131	73	80	76	72	79	33	380
143	F	23	A	134	124	122	75	73	70	79	83	39	380
144	M	21	B	119	108	118	72	68	67	69	69	22	345
145	F	34	C	129	109	133	78	78	61	77	77	49	371
146	M	28	E	140	96	118	77	63	69	75	70	70	354
147	M	34	F	116	110	96	68	71	60	62	61	47	322
148	M	20	C	149	141	141	85	89	85	82	90	28	431
149	F	22	C	126	96	117	60	70	69	70	70	43	339
150	F	26	A	123	119	104	75	70	63	77	61	63	346
151	F	31	B	121	98	108	55	67	66	74	65	42	327
152	F	21	A	124	87	86	57	61	62	57	60	47	297
153	M	22	C	132	113	122	77	74	74	70	72	39	367
154	M	24	B	117	101	101	65	61	63	69	61	36	319
155	M	33	A	98	95	95	39	77	53	64	55	55	288
156	F	34	E	131	121	123	75	76	66	82	76	44	375
157	M	29	C	138	116	111	80	74	70	63	78	25	365
158	M	35	D	134	102	112	80	69	69	67	63	65	348
159	F	51	D										
160	F	29	C	131	107	108	68	72	70	70	66	42	346

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale									Total V	Total P
				1	Rows		A	Columns						
					2	3		B	C	D	E			
161	M	31	E	100	85	85	59	65	52	49	45	42	270	
162	F	20	D	136	120	122	72	77	76	77	76	28	378	
163	F	27	E	127	102	109	63	71	65	70	69	37	338	
164	F	20	A	127	89	104	64	58	63	76	59	59	320	
165	F	23	C	139	127	126	72	78	74	86	82	39	392	
166	M	31	A	109	74	97	64	53	57	52	54	59	280	
167	F	43	E	136	101	114	71	72	63	71	74	65	351	
168	M	20	B	118	113	110	69	71	74	60	67	52	341	
169														
170	F	24	E	129	97	109	63	68	67	68	69	45	335	
171	F	20	A	128	109	111	74	71	64	72	67	35	348	
172	M	26	E	127	100	111	71	68	66	67	66	47	338	
173	F	24	C	131	77	105	63	66	52	71	61	76	313	
174	M	34	C	119	129	118	77	80	67	69	73	52	366	
175	F	30	B	124	91	111	71	67	61	53	74	83	326	
176	M	26	D	121	112	114	64	73	70	72	68	45	347	
177	F	30	E	141	116	128	79	80	72	76	78	38	385	
178	F	29	C	129	104	112	73	77	65	75	55	52	345	
179	F	30	E	127	109	117	68	72	69	78	66	43	353	
180	F	40	F	129	110	105	64	72	65	72	71	38	344	
181	F	32	E	129	106	109	59	71	69	74	71	47	344	
182	F	35	D	111	90	101	60	72	48	55	67	51	302	
183	M	29	E	109	99	100	64	62	63	58	61	27	308	
184	F	20	B	133	103	119	76	75	71	73	60	49	355	
185	F	22	D	104	83	98	55	57	52	67	54	38	285	
186	F	21	C	140	128	129	78	77	80	83	79	37	397	
187	F	25	C	133	97	112	70	67	65	75	65	57	342	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale									Total V	Total P
				1	Rows			Columns						
					2	3	A	B	C	D	E			
188	F	25	A	131	97	110	73	71	66	63	65	53	338	
189	F	26	A	137	123	135	74	87	81	77	76	43	395	
190	F	42	D	131	83	121	64	67	66	68	70	60	335	
191	F	20	A	106	78	93	57	55	60	52	53	47	277	
192	F	23	D	99	96	104	65	58	59	57	60	37	299	
193	F	25	A	122	98	106	63	60	62	73	68	43	326	
194	F	39	A	122	99	106	66	68	58	65	70	45	327	
195	F	21	A	127	95	103	62	77	63	61	62	57	325	
196	F	20	A	137	114	117	71	70	73	79	75	47	368	
197	F	52	F	137	118	122	72	77	70	80	78	35	377	
198	F	20	A	141	128	137	81	83	76	82	84	23	406	
199	F	41	D	127	103	109	71	73	67	67	61	51	339	
200	F	33	E	139	109	117	72	72	70	82	69	48	365	
201	F	24	B	130	97	112	59	72	65	71	72	50	339	
202	F	30	B	115	88	106	60	66	61	63	59	44	309	
203	F	26	A	125	105	105	73	68	64	60	60	53	335	
204	F	32	F	131	120	108	75	70	67	82	65	43	359	
205	M	23	C	134	114	123	82	67	74	84	64	46	371	
206	M	24	C	123	94	106	70	61	63	67	62	41	323	
207	M	21	D	115	93	99	66	62	67	53	59	37	307	
208	M	24	D	131	104	117	69	68	71	75	69	51	352	
209	M	34	E	120	110	111	66	70	64	81	60	52	341	
210	F	25	B	120	102	94	61	73	58	61	63	61	316	
211	F	22	C	119	98	115	56	71	65	73	67	48	332	
212	M	28	C	121	92	97	63	55	60	62	70	47	310	
213	M	29	E	131	104	123	83	71	64	69	71	56	358	
214	M	21	C	110	108	109	70	64	65	69	59	23	327	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale									Total V	Total P
				1	Rows		Columns							
					2	3	A	B	C	D	E			
215	F	20	A	134	102	119	80	69	69	68	69	62	355	
216	M	27	E	144	111	127	79	75	80	76	72	44	382	
217	F	31	B	125	98	108	66	69	64	73	59	47	331	
218	M	21	C	145	122	129	83	74	76	82	81	42	396	
219	M	32	E	129	109	121	67	70	78	70	74	38	359	
220	F	27	C	122	102	100	70	61	60	72	61	40	324	
221	F	49	C	112	93	94	54	63	58	70	54	62	299	
222	F	31	D	132	116	105	70	81	67	69	66	48	353	
223	F	31	B	123	104	107	63	69	66	72	64	37	334	
224	F	33	C	134	118	125	78	82	73	74	70	44	377	
225	F	34	B	129	104	121	71	77	57	78	71	59	354	
226	F	21	B	125	103	113	65	70	66	75	65	38	341	
227	F	25	A	119	106	110	66	66	65	71	67	24	335	
228	F	42	D	131	113	123	68	82	69	79	69	51	367	
229	M	25	E	125	118	120	65	77	78	82	71	36	363	
230	F	28	B	125	101	109	56	75	64	74	66	46	335	
231	M	21	A	139	127	129	80	76	74	84	81	43	395	
232	F	28	C	121	108	111	73	65	64	73	65	27	340	
233	F	21	A	124	108	112	71	71	65	74	63	40	344	
234	M	34	C	135	111	118	67	74	67	76	80	44	364	
235	F	23	D	135	114	118	68	77	64	83	75	48	367	
236	F	25	C	126	102	120	70	64	73	66	75	51	348	
237	F	23	A	139	106	117	64	69	71	80	78	69	362	
238	M	24	C	128	91	109	78	54	61	72	63	65	328	
239	F	28	B	126	99	109	55	69	66	81	63	61	334	
240	M	21	B	97	101	93	61	66	58	55	51	30	291	
241	F	40	F	138	128	133	83	77	77	78	84	31	399	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale									Total V	Total P
				1	2	3	A	B	C	D	E			
242	F	49	C	119	90	112	58	71	60	71	61	47	321	
243	F	20	A	76	64	75	35	47	36	60	37	58	215	
244	F	26	C	108	101	98	62	64	68	55	58	49	307	
245	M	48	D	136	116	124	77	81	75	69	74	46	376	
246	M	25	F	129	86	105	51	65	58	71	75	71	320	
247	M	49	E	126	108	117	65	73	66	76	71	31	351	
248	F	22	E	142	114	133	75	75	74	84	81	46	389	
249	F	26	E	134	122	127	67	76	79	84	77	34	383	
250	F	37	F	120	91	107	59	64	62	69	64	39	318	
251	F	29	B	113	82	109	54	62	59	58	71	58	304	
252	F	20	D	134	105	125	65	74	73	77	75	43	364	
253	F	30	C	123	89	118	60	85	66	59	70	79	330	
254	M	29	A	120	79	108	59	76	47	69	56	71	307	
255	F	39	B	123	110	106	72	69	64	74	60	35	339	
256	F	42	D	135	85	111	51	84	69	65	62	83	331	
257	F	42	B	120	84	109	57	76	55	73	52	74	313	
258	F	61	D	133	98	121	62	75	67	76	72	54	352	
259	M	22	E	130	100	110	57	75	68	71	69	53	340	
260	M	20	C	132	94	112	73	77	64	70	64	54	338	
261	M	22	A	123	104	101	68	67	64	60	69	43	328	
262	F	30	B	120	69	90	50	55	50	59	65	71	279	
263	F	33	C	139	130	131	74	83	77	83	78	25	400	
264	F	24	D	124	104	105	61	73	66	68	65	42	333	
265	M	20	E	141	134	138	79	78	87	88	81	39	413	
266	F	50	C	89	75	91	45	67	47	48	48	52	255	
267	F	26	B	122	99	108	65	61	60	76	67	44	329	
268	M	31	D	123	90	98	70	57	62	57	65	46	311	

Table A Con't.

Subject	Sex	Age	In- come	Tennessee Self-Concept Scale								Total V	Total P
				1	2	3	A	B	C	D	E		
269	F	23	B	108	85	88	65	51	50	59	56	55	281
270	F	33	E	127	101	114	62	70	72	71	67	65	342
271	M	23	C	144	108	109	79	66	71	71	74	58	361
272	M	32	D	135	102	114	71	66	71	71	72	48	351
273	M	34	F	130	111	114	76	70	68	77	64	38	355
274	M	55	E	123	97	106	61	68	63	70	64	40	326
275	M	29	D	127	119	116	74	77	65	77	69	47	362
276	M	41	E	110	96	99	56	54	60	76	59	54	305
277	M	25	C	115	104	100	62	70	64	67	56	51	319
278	M	23	C	109	96	104	73	64	63	51	58	42	309
279	M	22	D	118	91	105	66	60	62	64	62	38	314
280	M	25	E	135	100	92	68	63	66	64	66	65	327
281	M	44	F	141	123	138	78	83	81	80	80	27	402
282	M	33	C	113	105	109	58	63	65	67	74	28	327
283	M	33	E	120	102	111	60	70	53	66	79	47	333
284	M	27	E	131	122	121	78	72	74	84	66	45	374
285	M	32	D	136	113	118	76	76	66	77	72	44	367
286	M	64	E	122	88	104	61	62	60	66	65	42	314
287	M	27	A	91	101	97	58	82	57	47	45	54	289
288	M	24	F	116	98	104	65	58	64	67	64	45	318
289	M	58	F	126	120	122	77	83	67	73	68	35	368
290	M	33	F	130	102	116	71	72	67	67	71	53	343
291	M	25	D	127	120	119	77	75	75	71	68	44	366
292	M	42	E	146	129	135	85	83	81	80	81	36	410
293	M	28	D	88	69	88	44	56	40	52	53	49	245
294	M	26	B	127	104	113	68	70	67	67	72	38	344
295	M	25	D	118	117	114	71	70	64	76	68	22	349

Table A Con't.

Subject	Sex	Age	In-	Tennessee Self-Concept Scale									Total V	Total P
				come	Rows			Columns						
					1	2	3	A	B	C	D	E		
296	M	29	B	97	92	95	59	58	57	45	65	60	284	
297	M	35	C	117	104	95	58	66	63	67	62	41	316	
298	M	31	F	126	103	101	59	70	65	71	65	42	330	
299	M	22	B	133	106	105	75	70	71	56	72	51	344	
300	M	26	E	123	99	109	74	70	64	69	54	51	331	

Table B

Raw Data: Response to the Leisure Activities Blank

Subject	Mechanics	Crafts	Intellectual	Slow Living	Sports	Glamour Sports	Validity
1	26	41	32	62	27	22	58
2	39	33	39	66	28	32	58
3							
4	34	18	17	35	22	18	51
5	44	32	29	66	36	27	55
6	36	18	35	54	25	20	58
7	66	31	39	63	38	41	52
8	67	33	37	69	35	36	52
9	36	20	20	36	23	19	49
10	32	35	37	40	17	19	49
11	27	38	29	53	22	20	60
12	31	31	31	61	33	21	58
13	32	35	27	66	29	22	59
14	33	39	35	63	25	18	58
15	31	25	29	54	27	24	56
16	40	44	45	67	31	35	57
17	33	26	29	59	30	23	57
18	40	22	35	56	36	25	54
19	35	30	41	55	33	29	51
20	58	26	39	53	38	37	52
21	48	30	36	53	31	26	55
22	62	20	36	52	30	37	52
23	54	22	32	52	32	36	54
24	51	33	47	61	36	38	49
25	51	28	31	54	33	24	51
26	52	25	36	50	25	27	56

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living Sports	Glamour Sports	Validity	
27	45	35	38	69	34	23	60
28	46	31	34	66	31	21	59
29	30	29	26	57	26	25	58
30	29	41	27	54	25	20	51
31	39	18	21	43	28	24	50
32	31	43	43	68	33	18	56
33	33	36	29	70	29	29	59
34							
35	32	43	34	67	24	19	58
36	56	32	29	56	33	21	56
37	37	35	33	68	26	23	60
38	37	42	33	73	33	40	59
39	34	27	24	63	28	24	60
40	64	46	43	62	40	37	49
41	75	46	48	72	46	38	57
42	51	27	34	68	38	23	59
43	34	36	43	65	29	28	56
44	36	43	43	62	32	24	57
45	40	22	26	46	31	27	51
46							
47							
48	39	18	19	52	23	17	58
49	37	38	40	60	31	21	59
50	38	27	27	47	29	24	54
51	36	48	31	70	32	19	58
52	24	26	29	50	21	18	58
53	30	39	33	57	26	17	58
54	41	41	38	64	31	26	56

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living Sports	Glamour Sports	Validity
55	31	28	21	48	26	54
56	25	23	22	31	14	51
57	33	23	35	52	24	57
58	51	32	33	60	29	52
59	35	33	33	62	26	57
60	34	49	33	68	27	58
61	48	26	28	58	29	58
62	33	29	34	51	29	55
63	42	54	41	61	29	50
64	46	26	27	62	34	57
65	61	44	29	61	40	51
66	68	33	27	54	32	55
67	29	37	37	62	27	58
68	31	46	30	72	30	60
69	47	32	39	59	33	55
70	40	23	27	51	27	55
71	53	28	30	52	27	55
72	41	23	31	59	29	57
73	44	33	23	52	32	51
74	30	34	28	56	23	57
75	54	25	36	60	29	53
76	34	30	33	55	35	57
77	39	47	36	71	37	52
78	26	23	27	62	22	58
79	53	27	33	68	42	60
80	54	27	32	72	40	56
81	62	29	37	56	34	50
82	34	27	29	64	32	56

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living Sports	Glamour Sports	Validity
83	31	20	23	61	35	59
84	26	26	22	51	30	58
85	34	45	34	64	32	57
86	56	32	42	66	43	58
87	64	29	41	63	37	50
88	33	32	29	63	28	58
89	49	32	34	51	33	53
90	32	20	20	39	27	51
91	31	23	40	64	32	57
92	32	35	40	66	32	54
93	36	32	33	49	26	53
94	35	19	24	42	28	52
95	56	26	42	68	33	60
96	28	41	28	59	23	58
97	27	26	30	66	32	59
98	32	37	31	54	26	53
99	32	29	25	60	32	60
100	46	25	39	59	38	53
101	31	38	33	58	20	58
102	39	24	28	50	25	46
103	44	24	38	60	28	54
104	38	29	34	63	36	59
105	37	19	24	51	37	53
106	30	32	27	55	23	55
107	49	47	36	62	37	53
108	51	26	31	71	34	59
109	50	35	33	65	34	51
110	69	24	45	55	53	51

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living	Sports	Glamour Sports	Validity
111	37	30	33	54	33	18	52
112	52	19	33	59	27	41	57
113	36	30	40	52	35	26	53
114	46	30	40	53	33	42	52
115	38	21	29	49	27	18	56
116	56	43	40	70	46	40	48
117	30	28	29	63	28	21	60
118	28	26	24	65	25	26	57
119	57	24	34	61	36	38	58
120	60	30	44	64	27	39	55
121	26	35	23	43	27	15	48
122	61	38	36	74	33	44	59
123	43	28	22	53	26	20	57
124	53	24	29	54	33	21	52
125	35	28	24	46	30	27	53
126	58	27	31	59	28	27	54
127	26	21	22	51	24	21	56
128	62	32	45	68	40	43	55
129	39	41	51	54	32	31	51
130	29	22	22	30	26	20	44
131	43	20	27	33	30	25	45
132	49	28	30	56	34	24	59
133	56	26	25	65	32	23	58
134							
135	51	37	45	64	31	35	54
136	43	35	31	66	33	20	57
137	57	35	37	56	22	27	50
138	42	32	31	45	31	22	49

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living	Sports	Glamour Sports	Validity
139	36	39	32	66	35	27	59
140	30	40	29	51	25	23	54
141	30	35	28	48	19	21	53
142	62	42	48	61	28	52	47
143	37	28	37	58	31	28	55
144	57	31	28	55	40	30	55
145	34	36	38	76	27	21	55
146	45	25	32	37	27	23	47
147	64	35	47	63	24	27	51
148	53	18	36	53	36	23	55
149	51	44	39	66	32	27	58
150	28	30	39	52	24	17	55
151	53	47	43	80	33	31	55
152	38	49	37	73	38	39	56
153	73	39	48	66	39	47	43
154	47	23	34	56	24	22	58
155	64	39	47	67	31	30	50
156	44	32	24	46	24	21	52
157	40	25	39	60	31	19	59
158	41	20	24	51	42	18	47
159	35	45	32	51	25	17	52
160	34	50	32	60	26	31	52
161	46	21	28	52	34	32	54
162	37	50	39	71	30	29	59
163	38	39	41	76	33	36	59
164	41	30	33	60	30	30	56
165	30	30	27	66	28	33	58
166	46	18	26	55	48	41	54

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living Sports	Glamour Sports	Validity
167	48	50	44	68	31	52
168	43	29	50	61	25	56
169						
170	35	31	31	71	33	57
171	36	36	35	67	34	56
172	66	26	30	53	33	51
173	33	41	34	67	34	60
174	52	42	43	59	27	53
175	31	31	28	60	25	57
176	41	20	30	47	32	47
177	38	34	28	63	25	56
178	25	22	17	30	16	48
179	31	43	31	67	28	60
180	30	29	26	56	24	56
181	39	49	39	58	32	54
182	35	30	26	49	29	54
183	49	34	33	59	31	52
184	37	36	35	58	29	55
185	34	33	28	54	29	57
186	32	32	28	62	32	51
187	31	44	36	63	27	56
188	27	31	29	49	30	55
189	50	46	54	63	37	56
190	33	52	34	62	35	57
191	34	31	26	53	26	51
192	44	38	36	61	26	56
193	39	44	28	50	35	54
194	31	28	32	49	20	56

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living Sports	Glamour Sports	Validity
195	40	42	31	58	28	54
196	29	28	32	53	33	56
197	33	41	40	64	34	58
198	35	51	34	66	33	56
199	28	37	27	54	24	53
200	30	27	33	45	24	54
201	33	41	40	62	31	57
202	26	26	23	57	20	59
203	52	44	35	61	32	53
204	35	34	30	49	32	50
205	41	20	28	65	30	59
206	55	22	32	55	31	54
207	45	20	24	46	24	54
208	64	31	32	47	28	45
209	55	21	20	44	24	53
210	34	28	23	74	27	60
211	33	30	24	55	24	57
212	69	27	28	45	33	44
213	49	22	35	68	42	57
214	61	24	30	62	41	56
215	44	31	38	68	42	54
216	51	24	22	37	26	48
217	32	39	29	51	22	59
218	67	34	41	68	44	57
219	54	33	27	59	31	52
220	51	31	25	58	36	55
221	26	23	20	47	20	53
222	26	41	39	60	25	60

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living Sports	Glamour Sports	Validity	
223	24	28	28	61	27	18	57
224	31	26	45	53	34	28	52
225	32	31	30	60	23	18	54
226	31	38	33	54	22	17	59
227	49	50	29	54	41	37	54
228	33	32	29	51	24	24	55
229	45	22	33	53	25	28	52
230	30	29	25	47	21	20	55
231	68	29	29	52	30	32	56
232	36	32	36	58	25	28	55
233	36	43	37	66	33	30	55
234	43	21	29	51	25	34	47
235	45	30	38	67	38	35	59
236	35	28	28	64	27	29	58
237	24	24	20	42	19	19	53
238	53	25	28	66	33	19	58
239	51	33	36	65	36	31	53
240	49	22	28	48	26	28	55
241	42	40	44	68	34	22	60
242	30	32	33	59	23	22	58
243	25	28	25	38	15	15	53
244	30	32	24	48	25	21	54
245	29	18	27	40	17	26	56
246	31	22	18	31	21	23	53
247	57	24	29	67	36	35	57
248	37	37	33	61	29	29	54
249	34	39	33	57	26	27	57
250	36	34	20	60	23	18	60

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow Living Sports	Glamour Sports	Validity	
251	50	38	34	72	41	29	59
252	41	45	37	60	31	32	57
253	29	28	31	39	24	16	54
254	59	35	39	50	35	28	49
255	29	19	20	46	22	30	56
256	25	27	19	43	19	18	54
257	28	36	19	49	22	19	55
258	26	41	45	61	28	19	59
259	53	27	34	43	39	36	47
260	72	23	28	62	31	45	58
261	42	24	25	49	22	23	56
262	39	41	41	65	25	25	59
263	34	40	37	65	27	24	57
264	29	35	25	58	29	23	55
265	64	20	29	48	40	33	55
266	28	36	33	62	23	22	59
267	29	34	27	69	25	17	60
268	49	28	29	60	32	20	57
269	35	34	35	60	31	21	56
270	28	36	29	59	25	23	57
271	64	24	26	48	34	32	53
272	62	19	28	41	27	26	52
273	59	33	44	54	34	40	46
274	43	19	31	54	28	23	57
275	48	23	26	60	28	28	53
276	46	19	20	59	36	26	56
277	66	24	29	59	30	33	57
278	55	24	26	54	30	32	54

Table B Con't.

Subject	Mechanics	Crafts	Intellectual	Slow	Sports	Glamour	Validity
				Living		Sports	
279	57	20	30	60	26	34	52
280	55	24	37	58	27	31	55
281	59	25	47	64	35	25	58
282	72	32	32	59	32	41	51
283	68	25	24	59	26	27	55
284	51	29	38	51	30	28	53
285	48	24	25	49	29	22	53
286	53	32	39	64	31	24	57
287	40	21	20	44	27	21	53
288	69	29	30	61	35	44	47
289	52	27	30	54	32	22	56
290	60	26	30	67	38	21	58
291	59	28	35	61	37	30	56
292	58	32	31	62	33	25	55
293	45	20	26	44	23	31	54
294	53	28	30	65	35	26	56
295	42	21	27	46	25	20	59
296	41	22	17	38	18	18	52
297	52	23	39	50	28	31	49
298	56	24	36	68	28	33	55
299	44	31	39	66	31	22	56
300	59	22	27	60	33	38	50

APPENDIX F
PROFILE SHEET
TENNESSEE SELF CONCEPT SCALE

PROFILE SHEET

Tennessee Self Concept Scale

Counseling Form

PERCENTILE SCORES	POSITIVE SCORES (SELF ESTEEM)									VARIABILITY
	TOTAL	ROW 1	ROW 2	ROW 3	COL. A	COL. B	COL. C	COL. D	COL. E	
							90	90		
		150		150	90				90	
99.99	450					90				
	440		150							110
99.9			145	145			85			
	430		140							105
	420									100
99			135	140					85	90
	410	145					80	85		85
	400		130	135	85	85				80
95			125	130						75
90		140		130			75		80	70
	380		120		80	80		80		65
80			115	125					75	60
	370	135				75	70			55
70			110	120	75			75		50
60		130							70	
50	350		105	115		70	65	70		45
40		125			70					
30			100	110						40
	330		95		65	65	60	65		
20		120		105						35
	320		90						60	
10		115	85	100	60	60	55	60		30
	300		80	95					55	
5		110	75			55	50	55		25
	290		70		55				50	
	280	105		90			45			20
1			65	85				50		
	260	100				50			45	15
	250		60	80	50		40	45		10
	240	95								
	230		55			45				
0.1		90	50	75			35	40	40	5
	210	85		70	45					
	200									
	190	80	45	65	40		30	35	35	0
0.01		75	40	60		35				
	180									
	170	70							30	
	160	65	35	55	35			30		
	150	60	30			30	20			

APPENDIX G

CANONICAL CORRELATION AND COEFFICIENTS

Table C

Canonical Correlation and Coefficients

	Canonical Variate 1	Canonical Variate 2	Canonical Variate 3
Canonical Correlation	.42063	.34697	.27131
Eigen Value	.17693	.12039	.07361
Wilks' Lambda	.59369	.72131	.82004
Chi Square	147.81580	92.61558	56.24863
Degrees of Freedom	63	48	35
Significance	.001	.001	.05
Canonical Coefficients			
Row 1	1.88170	2.54283	5.97750
Row 2	1.33038	1.71124	7.62960
Row 3	1.40001	2.53077	6.87451
Column A	-1.84689	-1.09283	-4.82306
Column B	-0.52066	-1.68849	-4.08374
Column C	-1.38176	-1.05530	-4.01546
Column D	-0.57002	-1.84644	-4.53110
Column E	-0.48482	-1.15627	-4.74708
Total V	-0.54563	-0.12524	-0.82142
Mechanics	-0.23461	-0.23972	-0.48718
Crafts	0.55486	-0.00383	0.21422
Intellectual	0.24389	-0.05409	0.28824
Slow Living	-0.11673	0.31031	0.12989
Sports	-0.34765	0.90657	0.50548
Glamour Sports	0.53968	0.10072	-0.96837
Reliability	0.57046	-0.28338	-0.44576

BIBLIOGRAPHY

Bibliography

- Achord, C. D., & McCary, P. The impact of attrition on the self concept and anxiety level of freshman nursing students at the University of Northern Colorado. Colorado Journal of Education Research, 1975, 14, 25-6.
- Allport, G. W. Personality: A psychological interpretation. New York: Holt, 1937.
- Beard, J. G., & Ragheb, M. G. Measuring leisure satisfaction. Journal of Leisure Research, 1980, 12(1), 20-33.
- Bem, D. J., & Allen, A. On predicting some of the people some of the time: The search for cross situational consistencies in behavior. Psychological Review, 1974, 81, 506-20.
- Bloom, K. L. Age and self concept. American Journal of Psychiatry, 1961, 118, 534-8.
- Burch, W. R. The social circles of leisure: Competing explanations. Journal of Leisure Research, 1969, 1(2), 125-47.
- Burch, W. R., & Wenger, W. D. The social characteristics of participants in three styles of family camping. U.S. Forest Service Research Paper, 1967.
- Buros, O. K. (Ed.). Personality: Tests and reviews. Highland Park, N.J.: The Gryphon Press, 1970.
- Campbell, D. E. Analysis of leisure time profiles of four age groups of adult males. Research Quarterly, 1969, 40, 266-73.
- Cheek, N. H. Toward a sociology of not-work. Pacific Sociological Review, 1971, 14, 245-58.
- Coleman, J. C. Personality dynamics and effective behavior. New York: Scott, Foresman & Co., 1960.
- Collins, A., Burger, G. K., & Doherty, D. Self concept of EMR and nonretarded adolescents. American Journal of Mental Deficiency, 1960, 75, 285-9.

- Combs, A. W., & Snygg, D. Individual behavior. New York: Harper & Bros., 1959.
- Cunningham, D. A., Montoye, H. J., Metzner, H. L., & Keller, J. B. Active leisure activities as related to occupation. Journal of Leisure Research, 1970, 2(2), 104-11.
- Curtis, L. Digest of research studies on self concept. Graduate Research in Education and Related Disciplines, 1968, 3, 82-8.
- Davis, J. H. Great aspirations (Rev. ed.). Chicago: National Opinion Research Center, 1964.
- Duncan, D. J. Leisure types: Factor analyses of leisure profiles. Journal of Leisure Research, 1978, 10(2), 113-25.
- Epstein, S. The self-concept revisited: Or a theory of a theory. American Psychologist, 1973, 28, 404-16.
- Epstein, S. The stability of behavior: On predicting most of the people much of the time. Journal of Personality and Social Psychology, 1979, 37, 1097-1126.
- Epstein, S. The self-concept: A review and the proposal of an integrated theory of personality. In E. Staub (Ed.). Personality: Basic issues and current research. Englewood Cliffs, N.J.: Prentice-Hall, 1979.
- Fitts, W. H. Manual for the Tennessee Self Concept Scale. Nashville: Counselor Recordings and Tests, 1965.
- Fitts, W. H. The self concept and behavior: Overview and supplement. Nashville: Dede Wallace Center Monograph VII, 1972.
- Fitts, W. H. The self concept and performance. Nashville: Dede Wallace Center Monograph V, 1972.
- Fitts, W. H. The self concept and psychopathology. Nashville: Dede Wallace Center Monograph IV, 1972.
- Fitts, W. H., Adams, J. L., Radford, G., Richard, W. C., Thomas, B. K., Thomas, M. M., & Thompson, W. The self concept and self-actualization. Nashville: Dede Wallace Center Monograph III, 1971.

- Fitts, W. H., & Hamner, W. T. The self concept and delinquency. Nashville: Nashville Mental Health Center Monograph I, 1969.
- Fredenburgh, F. A. The psychology of personality adjustment. Menlo Park, Ca.: Cummings Publishing Co., 1971.
- Gordon, C. Looking ahead: Self-conceptions, race, and family as determinants of adolescent orientation to achievement. Washington, D.C.: American Sociological Association, 1972.
- Hall, C., & Lindzey, G. Theories of personality. New York: John Wiley & Sons, Inc., 1957.
- Haun, P. Recreation: A medical viewpoint. New York: Teachers College Press, 1965.
- Hendee, J. Rural-urban differences reflected in outdoor recreation participation. Journal of Leisure Research, 1969, 1(4), 333-41.
- Heywood, L. A. Perceived recreative experience and the relief of tension. Journal of Leisure Research, 1978, 10(2), 86-97.
- Hillson, J. S., & Worchel, P. Self concept and defensive behavior in the maladjusted. Journal of Consulting Psychology, 1975, 21, 83-8.
- Howard, D. R. Multivariate relationships between leisure activities and personality. Research Quarterly, 1976, 47, 226-37.
- Iwanski, R. A. Self concept and leisure preferences of mentally retarded adults in a community-based residential facility. Unpublished master thesis, Texas Woman's University, 1977.
- Jaccard, J. J. Predicting social behavior from personality traits. Journal of Research in Personality, 1974, 7, 358-67.
- Jersild, A. T. In search of self. New York: Bureau of Publications, Teachers College, Columbia University, 1952.

- Jervis, F. M. The meaning of a positive self-concept. Journal of Clinical Psychology, 1959, 15, 370-3.
- Jones, J. C., & Strowig, R. W. Adolescent identity and self-perception as predictors of scholastic achievement. Journal of Educational Research, 1968, 62, 78-82.
- Kaplan, M. Leisure: Theory and policy. New York: John Wiley & Sons, Inc., 1975.
- Keller, B. K. A study of self concept and manifest anxiety as predictors of recreation participation of Upward Bound students (Doctoral dissertation, New York University, 1975). Dissertation Abstracts International, 1976, 36, 6089B-6090B. (University Microfilms No. 76-12,584)
- Kendler, H. H. Basic psychology. New York: Appleton-Century-Crofts, 1963.
- Klausner, S. Z. Social class and self concept. Journal of Social Psychology, 1953, 38, 101-3.
- Knox, B. S. Effects of values-oriented counseling on leisure attitudes, career preferences, and self concept (Doctoral dissertation, Catholic University of America, 1975). Dissertation Abstracts International, 1975, 35, 7653A. (University Microfilms No. 75-12,882)
- Koutrelakos, J. Authoritarian person's perception of his relationship with his father. Perceptual and Motor Skills, 1968, 26, 967-73.
- Kshirsagar, A. M. Multivariate analysis. New York: Marcel Dekker, Inc., 1972.
- Lamphear, S. C. Personality and recreation: A study of participant behavior in selected outdoor recreation activities (Doctoral dissertation, University of Georgia, 1969). Dissertation Abstracts International, 1970, 30, 5314B. (University Microfilms No. 70-10,210)
- Lively, E. L., Dinitz, S., & Reckless, W. C. Self concept as a predictor of juvenile delinquency. American Journal of Orthopsychiatry, 1962, 32, 159-68.
- London, P., & Larsen, D. E. Teachers' use of leisure. Teachers College Record, 1964, 65, 538-45.

- Maslow, A. H. Motivation and personality. New York: Harper, 1954.
- McDowell, C. F. Toward a healthy leisure mode: Leisure counseling. Therapeutic Recreation Journal, 1974, 8(3), 96-104.
- McDowell, C. F. Leisure counseling: Selected lifestyle processes. University of Oregon: Center of Leisure Studies, 1976.
- McKechnie, G. E. Leisure Activities Blank manual. Palo Alto, Ca.: Consulting Psychologists Press, 1973.
- McKechnie, G. E. The psychological structure of leisure: Past behavior. Journal of Leisure Research, 1974, 6(1), 27-45.
- Moustakas, C. (Ed.). The self. New York: Harper & Row, 1956.
- Murry, H. A., & Kluckhohn, C. (Eds.). Personality in nature, society and culture (2nd ed.). New York: Knopf, 1953.
- Mussen, P., & Rosenzweig, M. R. Psychology: An introduction. Lexington, Ky.: D. C. Heath & Co., 1973.
- Norbec, E., Price-Williams, D., & McCord, W. M. Personality. New York: Holt, Rinehart, & Winston, Inc., 1968.
- Pedersen, D. M. Evaluation of self and others and some personality correlates. Journal of Psychology, 1969, 71, 225-44.
- Perlmutter, H. V. Relations between the self-image, the image of the foreigner, and the desire to live abroad. Journal of Psychology, 1954, 38, 131-7.
- Pietrofesa, J. J., Leonard, G. E., & Hoose, V. The authentic counselor. Chicago: Rand McNally Co., 1972.
- Pilisuk, M. Anxiety, self-acceptance, and openmindedness. Journal of Clinical Psychology, 1963, 19, 387-91.
- Press, S. J. Applied multivariate analysis. New York: Holt, Rinehart, & Winston, Inc., 1972.

- Roberts, G. L. Personal growth and adjustment. Boston: Holbrook Press, Inc., 1968.
- Rogers, C. R. Client-centered therapy. Boston: Houghton Mifflin Co., 1951.
- Rogers, C. R. On becoming a person. Boston: Houghton Mifflin Co., 1961.
- Sofranko, A. J., & Nolan, M. F. Early life experiences and adult sports participation. Journal of Leisure Research, 1972, 4(1), 6-18.
- Thompson, W. Correlates of the self concept. Nashville: Dede Wallace Center Monograph VI, 1972.
- Tuinen, M., & Ramanaiah, N. A multimethod analysis of selected self-esteem measures. Journal of Research in Personality, 1979, 13, 16-24.
- Wells, E., & Marwell, G. Self-esteem: Its conceptualization and measurement (Vol. 20). Beverly Hills, Ca.: Sage Publications, Inc., 1976.
- Williams, R. A., & Cole, S. Self-concept and school adjustment. Personnel and Guidance Journal, 1968, 46, 478-81.
- Witt, P. A., & Bishop, D. W. Situational antecedents to leisure behavior. Journal of Leisure Research, 1970, 2(1), 64-77.
- Wylie, R. C. The self concept. Lincoln, Neb.: University of Nebraska Press, 1961.
- Wylie, R. C. The self concept (Rev. ed., Vol. 2). Lincoln, Neb.: University of Nebraska Press, 1979.
- Yoesting, D. R., & Burkhead, D. L. Adult leisure behavior: An exploratory analysis. Journal of Leisure Research, 1973, 5(1), 25-36.
- Young, C. T. The relationship between degree of participation in leisure activities and self concept of older adults. Unpublished master's thesis, University of Kentucky, 1976.