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Effects of two experiential treatments on self-concept, locus of control, and assertiveness

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NOREM, KENNETH E.
EFFECTS OF TWO EXPERIENTIAL TREATMENTS ON SELF-CONCEPT, LOCUS OF CONTROL, AND ASSERTIVENESS.

IOWA STATE UNIVERSITY, PH.D., 1978

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Effects of two experiential treatments on self-concept, locus of control, and assertiveness

by

Kenneth E. Norem

A Dissertation Submitted to the

Graduate Faculty in Partial Fulfillment of

The Requirements for the Degree of

DOCTOR OF PHILOSOPHY

Department: Professional Studies
Major: Education (Counselor Education)

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1978

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INTRODUCTION

The role of the professional counselor continues to receive primary attention in the literature (Atkinson, Froman, Rome, & Mayton, 1977). In a review of four of the major professional counseling journals for the period 1970-1974[1], Gerler (1976) found a total of two hundred six articles focusing on this issue. From this sample a majority of writers recommended increasing preventative and developmental services, with one hundred sixteen suggesting that school counselors engage in some form of consultation and training. The following recommendation by Ivey and Weinstein (1970) is representative of these recommendations:

> To me, that is the model of the counselor of the future - a change agent whose specialty is psychological education, who is engaged in curriculum development, instruction and teacher training (p. 105).

Since psychological education is being advocated as a primary school counselor function, the question of definition of such education becomes paramount. Psychological education is a term which includes a wide range of activities. Ivey and Alschuler (1973) describe the counselor's role in psychological education as follows:

> Psychological education involves the counselor's taking initiative in deliberately teaching aspects of mental health to larger groups. Education, rather than remediation, is the goal (p. 589).

Gazda et al. (1973), advocates of psychological education in schools, further describe the thrust of such a program:

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[1]The journals reviewed by Gerler were: The Personnel and Guidance Journal, Counselor Education and Supervision, The School Counselor, and Elementary School Guidance and Counseling. The author questioned the exclusion by Gerler of American Psychological Association journals.

> Many of our real problems in living are interpersonal in nature. Therefore it seems reasonable to help students develop the skills necessary to establishing and maintaining effective interpersonal relationships. That is, we must help students become more socially competent ... (p. 607).

In addition to the goal of helping students develop human relations skills, three additional goals of psychological education have been proposed:

1. expansion of students' self-knowledge (Weinstein, 1973),
2. improvement in ability to problem solve (Ivey & Alschuler, 1973), and
3. preparation for jobs (Zide, 1973).

Thus, psychological education is increasingly being seen as an important function of the school counselor. Commercially and locally developed programs in psychological education have appeared on the scene creating a need to research the various programs and identify variables influencing the outcome of such programs.

Among those urging the development of outcome studies for psychological education are Sprinthall and Erickson (1974):

> It is obvious that schools, communities and indeed nations cannot afford to leave the process of psychological development to the mercy of random forces, as is now the case in many instances .... Our rationale, in general, calls for educating pupils psychologically and personally by providing significant experiences ... and integrating these experiences with a systematical analysis of them (pp. 397-398).

Simply stated, research is needed to determine which types of psychological education are most beneficial to which groups of students under what conditions.

While it seems logical that changes in couseling programs would be accompanied by systematic analysis, yet this is not the case (Anton,

1978; Lindberg, Bartell, & Estes, 1977; Mahler, 1971; Stanford, 1972). The increasing disenchantment with counselors traced by Barnette (1973) and the continuing call for counselor accountability (Anton, 1978; Shaw, 1977) underscore the need for reintegration of counseling research and practice.

The methodology commonly used in psychological education is structured training with groups (Ivey & Alschuler, 1973). Carkhuff advocated group processes as the preferred mode of working with difficulties in interpersonal functioning (1969). Patterson (1977) seemed to summarize the opinion of these writers when he commented:

> Actual experience in groups seems so clearly superior to any other method of learning in human relations that it is amazing that it has not been widely used in human relations education. There is no substitute for learning to relate to others through interacting with other people (p. 173).

Thus, the evaluation of psychological education is directed to the evaluation of various group procedures. However, comparing the average performance of two groups receiving different treatments is not enough; a statistically significant difference in the average performance of two groups does not mean that either experimental treatment was equally effective for all subjects (Chassan, 1967). Increased attention needs to be given to the client variables that moderate the outcomes of treatment (Kimball & Gelso, 1974).

Although more attention is being given to the school counselor's role in psychological education, research demonstrating that the techniques used in psychological education have a measurable, observable impact on students' attitudes is lacking (Lindberg, Bartell, & Estes, 1977).

Therefore, evaluation of psychological education in the public school setting is particularly needed.

Plans for inclusion of an assertiveness training program in the distributive education classes at Ames Senior High School in Ames, Iowa, provided the opportunity to evaluate two types of programs in psychological education. In previous years students enrolled in the distributive education classes participated in a human relations program. This program included human relations, value clarification, and goal setting activities. The assertiveness training also provides practice in human relation and goal setting activities. Of special interest in this study was the comparative impact of the two aforementioned types of psychological education programs on the subjects' self-concept, locus of control expectancy, and assertiveness.

In addition to comparing the impact of the two psychological education programs, the researcher also investigated the relative impact of these programs for females and males and for subjects with varying degrees of fear of failure. Fear of failure was selected for study to determine its effect in moderating the outcomes of the two training programs. A ring toss task used to measure fear of failure is defined later in the chapter.

Purposes of the Study

The purpose of this study was to assess the effectiveness of two psychological education programs in changing the participants' self-concept, locus of control expectancy, and assertiveness. Specifically, the study was designed to answer the following two questions.

1. Were the two psychological education programs effective in significantly changing the self-concept, locus of control expectancy, and assertiveness for subjects in the following groups:
    a. human relations training group,
    b. assertiveness training group,
    c. females,
    d. males,
    e. ring toss group one,
    f. ring toss group two, and
    g. ring toss group three?
2. Were the changes in self-concept, locus of control expectancy, and assertiveness significantly different between the human relations training group and the assertiveness training group, between females and males, and among the three ring toss groups?

To examine these questions the null hypotheses in the next section were developed. A significance level at or beyond the .05 level was selected to test the null hypotheses.

Null Hypotheses

Ho_1: As assessed by the mean pretest and mean posttest scores on the Tennessee Self-Concept Scale (TSCS), there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

Ho_2: As assessed by the mean pretest and mean posttest scores on the I-E Scale, there are no significant changes in locus of control expectancy within the treatment, sex, and ring toss groups.

Ho_3: As assessed by the mean pretest and mean posttest scores on the Rathus Assertiveness Schedule (RAS), there are no significant changes in assertiveness within the treatment, sex, and ring toss groups.

Ho_4: As assessed by the mean change scores on the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Ho_5: As assessed by the mean change scores on the I-E Scale, there are no significant differences in locus of control expectancy change between the two treatment groups, between females and males, and among the ring toss groups.

Ho_6: As assessed by the mean change scores on the RAS, there are no significant differences in assertiveness change between the two treatment groups, between females and males, and among the ring toss groups.

Definition of Terms

Following are the definitions for the two methods of psychological education and for the major constructs used in this research study.

Human Relations Training: structured training program including discussions about effective human relations on the job, value clarification activities, and goal setting activities.

Assertiveness Training: structured training program including goal setting, behavior rehearsal, and assertion training activities.

Assertive Behavior: interpersonal behavior which maintains one's personal rights without violating the rights of others (Hardaway & LaPointe, 1974).

Self-Concept: the ways in which an individual characteristically sees himself (Combs, 1962). A positive self-concept is the perception of self as adequate, or capable of performing successfully (Kelley, 1962).

Locus of Control: beliefs regarding the relationship between a person's behavior and the events which follow. A belief in internal locus of control, or an internal locus of control expectancy, is a belief that events following one's behavior are contingent upon that behavior; a belief in external locus of control (external locus of control expectancy) is a belief that events following one's behavior are due to luck, fate, or to forces that cannot be controlled (Rotter, 1966).

Fear of Failure: the perception of self as one who cannot function successfully according to one's internalized standards (Beery, 1975). In this study the subjects' performance on a ring toss task was used to assess fear of failure. Subjects attempted twenty ring tosses and subsequently estimated the number of ringers they would make on the next set of twenty tosses. The number of ringers made by each subject was subtracted from the subject's estimate. Subjects with the highest estimates compared with actual performances were considered to have the least fear of failure. Subjects with the lowest estimates compared with actual performances were considered to have the most fear of failure.

The theory and research related to the above definitions are presented in chapter two.

Delimitation

This study was limited to the students in the distributive education classes at Ames Senior High School. The participants were seniors during

the 1976-1977 school year. Caution must be used in making inferences to distributive education students in other schools or to other students in Ames Senior High School.

Another limitation of this study was the instruments used for data collection. All of the instruments used were self-report instruments. Caution must be used in assuming the validity of data collected by self-report instruments (Wylie, 1961).

REVIEW OF LITERATURE

This study assesses the changes in self-concept, locus of control, and assertiveness for students participating in two experiential psychological education programs. Subjects were also classified by sex and by their performance on a ring toss task. Performance on the ring toss task was used as a measure of the subjects' fear of failure. Included in this chapter will be a review of literature relating to self-concept, locus of control, fear of failure, assertiveness, and a review of programs that utilized group procedures similar to those used in this study. The review of relevant studies will be limited to those involving adolescents in non-clinical settings.

The Self-Concept

The concept of self has cyclically risen to levels of prominence since psychology became a science of human behavior around 1860. William James is credited with introducing the concept of self into American psychology in 1890 (Levy, 1970). He conceptualized three aspects of self: a) constituents (material, social, spiritual, and Ego), b) self-feelings, and c) the actions of self-seeking and self-preservation (James, 1890).

Charles Cooley (1902) emphasized the social aspect of self. He described the self-concept or "self-idea" as follows:

> A self-idea of this sort seems to have three principal elements: the imagination of our appearance to the other person; the imagination of his judgment of that appearance; and some sort of self-feeling, such as pride or mortification (p. 152).

During the early part of the twentieth century, the self-concept received much attention from psychologists engaged in personality theory building. Most psychologists became ardent advocates of a particular theory. As Purkey (1970) writes:

> Freudian psychologists emphasized unconscious motivation, introspectionists defended the process of introspection as a way of exploring consciousness, gestaltists believed in the value of insight and stressed the selective perceiver, and the behaviorist attempted, with surprising success, to cancel out all other schools by claiming that all systems except their own studied consciousness while only a person's tangible, observable behavior was fit for scientific inquiry (p. 4).

From the 1920's through the 1930's, behaviorism dominated American psychology and the self was ignored except by a few sociologists and psychologists (Gordon Allport, 1937; K. Goldstein, 1939; Kurt Lewin, 1935; George Mead, 1934; Henry Murray, 1938).

Mead (1934) described how the self developed through transactions with the environment. He made the distinction between the self as an object "Me", which arises in social experience, and the self as a subject, "I", which is the agent or doer. One of Mead's major contributions was the concept of the "generalized other" which he described as the combined instances of the attitudes of others toward oneself. Through the generalized other, the community becomes a determining factor in an individual's thinking.

Lewin (1935), in developing field theory, applied Gestalt principles to the study of personality and social relationships. Lewin emphasized the Gestalt position on perception: any analysis and understanding of individual behavior and personality is dependent on the context in which it is found. Within field theory, Lewin formulated a system of analyzing

the positive and negative aspects of objects and their effect on the direction of individual behavior in specific situations.

Allport (1937) emphasized the uniqueness and complexity of the individual. According to him, the individual gradually develops a unique trait structure, a growing self-awareness, and an individual set of goals, values, and aspirations. Thus, the individual is freed from bondage to his biological need; the individual develops "functional autonomy".

Murray's (1938) conception of needs was instrumental in the development of other theories, e.g., the theory of achievement motivation which will be discussed later in relation to risk taking behavior. According to Murray needs are evoked by "press": the effect an object, person, or situation has on an individual. Needs act as a force "which organizes perception, apperception, intellection, conation and action in such a way as to transform in a certain direction an existing, unsatisfying situation" (p. 124).

Goldstein (1939) viewed behavior as driven by the individual's need to develop his potentialities. Rather than explaining behavior through several needs, Goldstein hypothesized about a single drive acting in the individual: the need for self-actualization. Similar views were also advanced by Combs (1962), Maslow (1962), Rogers (1962) and Kelley (1962).

In the late 1940's, there was a resurgent interest in the self, which has continued to the present. Murphy devoted six chapters of his 1947 text on personality to the discussion of self. Others have influenced the continued development of self theory (P. A. Bertocci, 1945; S. Coopersmith, 1967; A. T. Jersild, 1952; S. M. Jourard, 1963; George Kelly, 1955; A. H. Maslow, 1954, 1956; Harry Stack Sullivan, 1953; Percival M.

Symonds, 1951). Extensive research efforts by Brookover (1959, 1964) Fitts (1970), Fitts and Hammer (1969), Thompson (1972), and Wagner (1973) contributed to the usefulness of self-concept as a construct to explain behavior.

A comprehensive review of self-theory and related studies is beyond the scope of this paper. For more extensive reviews of literature on self-concept, the reader is referred to Diggory (1966), Maccoby and Jacklin (1974), Purkey (1970), and Wylie (1961). Wylie presented a comprehensive review of self-concept studies, while more recent reviews have tended to focus on specific aspects of self or certain correlates of the self-concept. Diggory (1966) analyzed the relationship between self-evaluation, goal setting, and behavior. Purkey reviewed the relationship between self-concept and academic achievement, and Maccoby and Jacklin (1974) focused on the differences in self-concept between males and females.

The conceptualization of self used in this paper will be one consistent with that formulated by Combs (1962), Combs and Snygg (1959), Rogers (1951, 1962, 1969), and Snygg and Combs (1949). A brief summary of self-theory as presented in these sources is presented in the next section.

Phenomenological theory of self -- assumptions and definitions

The conceptualization of self by Arthur Combs, Carl Rogers, and Donald Snygg is termed phenomenological because it emphasizes the importance of conscious feeling, cognitions, and perceptions. This concept considers that behavior is determined by the individual's phenomenal field, which includes all that is experienced by the individual.

The phenomenal self gradually becomes differentiated from the perceptual field through a process of interaction with the environment, particularly through evaluational interaction with others. Thus, the individual learns to associate certain characteristics, relationships, and values with the self, and a consistent conceptual pattern -- the structure of self -- is formed. The individual is able to react as an organized whole to this phenomenal field.

The phenomenal self is extremely stable and resists change just as any organization does. Resistance to change occurs once the phenomenal self has been established because experience is interpreted in terms of that self; an individual has selective perception and interprets events to make them consistent with the phenomenal self. Experiences which are perceived as incongruent with the phenomenal self are often distorted to preserve an individual's concept of self. When the self-concept is so rigid that new experiences are closed to awareness, the individual's ability to cope effectively is impaired. The more fully functioning self is open to new experiences and is able to integrate these new experiences into the self-concept (Hayakawa, 1963; Rogers, 1962).

In addition to selective perception and interpretation of events, the individual also preserves and enhances the phenomenal self by choosing behaviors consistent with that self. This assumed relationship between the phenomenal self and behavior is of primary importance in current self-concept theory, and is basic to such evaluative terms as self-esteem, self-regard, self-acceptance, positive self-concept, negative self-concept, etc.

Self-concept, i.e., the ways in which an individual characteristically sees himself (Combs, 1962), may be positive or negative. Individuals who see themselves in a positive way (positive self-concept) will expect to be successful and will behave in ways that will bring success. Individuals who see themselves in a negative way (negative self-concept) will expect to fail and will behave in ways that will bring failure, or in ways designed to avoid situations where failure is possible.

The factors which influence the individual's conception of self, positively or negatively, will be included in the next section.

Development of the self-concept

Inherent to the self-concept theory is the premise that the self-concept develops from the kinds of experiences a person has had. "People develop feelings that they are liked, wanted, acceptable and able from having been liked, wanted, accepted and from having been successful" (Combs, 1962, p. 65).

The perception of self in a positive or negative way implies a process of self-evaluation. Sullivan (1953) referred to this process when he wrote: "... the beginning personifications of me are good-me, bad-me, and not-me." Each of these personifications originate from interpersonal relations with significant others and serve to organize experience according to associated feelings of satisfaction, anxiety, or dread.

Since the earliest, the most ongoing, and the most intense personal and interpersonal experiences generally occur within a family system,

this seems to be a logical environment to study in trying to identify antecedents of the self-concept.

After reviewing studies related to parent-child interaction, Wylie (1961) concluded that there is some evidence to support the following relationships: 1) children's self-concepts are similar to the view of themselves which they attribute to their parents, 2) a child's level of self-regard is associated with the parents' reported level of regard for him, 3) children see the like-sex parent's self-concept as being somewhat more like their own self-concept, and 4) children with self-reported maladjustment see their parents' views of them as different from each other.

Information about the effect of child-rearing behavior on self-concept was found by Coopersmith (1967) in an intensive study of eighty-five preadolescent boys. His findings were: 1) mothers of high self-esteem boys have a higher self-concept than mothers of low or moderate self-esteem boys, 2) high self-esteem boys have fathers who are more active and supportive of the mother in child-rearing practices than do low or moderate self-esteem boys, and 3) in terms of child-rearing behaviors the mixture of clear and enforced limits set for the son by the parents, but with considerable freedom or choice for the son within those limits, is associated with high self-esteem of the son.

Fitts et al. (1971) reviewed various studies showing the relationship of self-concept to parents' self-concept, perceived parental acceptance, identification with parents, family cohesiveness, total integration, and family integration. They summarized results of these studies

on parental influences in the development of self-concept with the following proposition:

> When the parent has a wholesome, consistent self-concept, he can provide a more secure environment in the form of love, attention and respect for his child. When this occurs, the child can like, value and respect himself and face the world with greater security (p. 35).

At an early age, the most significant "others" in the life of a child are his parents. However, other persons may affect the child's self-concept as he grows older. The influence of significant others (not parents) was substantiated in a study by Ludwig and Maehr (1967) using sixty-five junior high students. These students performed various simple physical tasks in front of a physical development expert. The expert then uttered either statements of approval or disapproval to the students at random, irrespective of their performance. Tests of the students' physical self-concept and general self-concept were administered prior to the evaluation by the experts and at various intervals thereafter. Increases in self-concept rating followed the approval treatment. A follow-up study by Haas and Maehr (1965) substantiated the results and also demonstrated the persistence of the changes over time.

In addition to relationships with significant others, socioeconomic level and gender have received attention from researchers interested in the development of self-concept. However, the relationship between these variables and assessments of self-concept has been elusive.

Support for the possibility that socioeconomic levels affect the development of self-concept was found by Walton (1966) in a study of forty-eight high school students. Walton divided the sample into two groups according to socioeconomic level and compared their performance

on the Tennessee Self-Concept Scale. Although no significant differences were found in total self-esteem, significant differences were found in net-conflict and total-conflict subscales. The lower socioeconomic group overaffirmed positive attributes significantly more than the upper socioeconomic group.

Soares and Soares (1971) investigated self-perceptions of both elementary and secondary school students, who were classified as advantaged and disadvantaged, by using forty bipolar traits. Self-ratings were checked, and it was found that disadvantaged children view themselves more positively than do advantaged children. Disadvantaged children also believed that others viewed them positively, whereas, the advantaged group felt others saw them more negatively.

Comparisons of self-concept between males and females also have received considerable attention; however, results of studies are sometimes contaminated with stereotypic ideas of male and female roles. Wylie (1961), in her review of self-concept studies, concluded that although there seems to be a commonly accepted stereotype of "women in general" which is less favorable than that of "men in general", we cannot state that women's self-concepts are more unfavorable than men's self-concepts.

Maccoby and Jacklin (1974) arrived at a similar conclusion after reviewing thirty-nine studies which compared males and females, ranging from age 3-88, on various assessments of self-esteem. Although no differences in self-esteem were found, differences in self-ratings of competency between the sexes were found: girls tended to rate themselves higher in the area of social competence, while boys rated themselves higher in areas of strength, dominance, or power.

In summary, research studies support the theory that an individual's concept of self originates and develops as a result of interactions with significant others. Different self-concepts have been linked with different child rearing practices, different parental self-concepts, and different levels of parental regard perceived by the child. Consistent findings of relationships between self-concept and either socioeconomic level or gender were not found.

After the concept of self is formed, an individual chooses behavior designed to enhance and preserve the self-concept. Therefore, the self-concept becomes an important factor which influences behavior. The importance of the self-concept in determining behavior will be discussed in the next section.

Importance of self-concept

Self-evaluation is the most frequently studied aspect of self-concept (Wylie, 1961), and its importance in the organization of experience is a central element in self-theory (Combs, 1962; Diggory, 1966; Kelley, 1962; Maslow, 1962; Murphy, 1947; Rogers, 1951, 1958, 1962, 1969; Sullivan, 1953). Through evaluative interaction with other, the self may be viewed in either positive or negative ways. Combs (1962) summarizes the advantages of a self-evaluation resulting in a positive concept of self:

> A positive view of self gives its owner a tremendous advantage in dealing with life.... Feeling positively about themselves, adequate persons can meet life expecting to be successful. Because they expect success, they behave, what is more, in ways that tend to bring it about (p. 52).

Maslow (1962) goes even further in stressing the importance of a positive self-concept when he states: "No psychological health is

possible unless this essential core of the person is fundamentally accepted, loved and respected by others and himself" (p. 36).

Support for the importance of a positive self-concept in bringing about successful experiences has been found in several studies which were designed to predict academic achievement from assessment of self-esteem. Wattenberg and Clifford (1964) were able to identify differences in the self-esteem of kindergarten children by securing data about the children's pictures of their families. The ratings of self-esteem were predictive of reading achievement two and one-half years later. The ratings of self-esteem were not significantly related to measured intelligence.

Leviton (1975) and Purkey (1970) have reviewed numerous studies supporting a relationship between self-concept and achievement. Purkey concluded that "a persistent and significant relationship between the self-concept and academic achievement is seen at each grade level, and that a change in one seems to be associated with change in the other" (p. 27).

Leviton (1975) reviewed fifteen studies which showed a relationship between self-concept and academic achievement. Although his critical review supported the relationship between self-concept and high achievement behavior, Leviton advocated more studies involving "normal" populations and the use of a criterion measure which is less contaminated than grade point average.

The relationship between a positive self-concept and successful achievement behavior has been demonstrated several times in various

studies. However, self-evaluation[1] could occur along a variety of dimensions and in a variety of settings. An individual may have differing concepts of his physical ability, social ability, academic ability, etc. Various terms such as self-confidence, power, attractiveness, and agility suggest different dimensions for self-evaluation. Although global assessments of self-concept do appear to be useful in predicting behavior, more specific aspects of self-evaluation may lead to a better understanding of behavior.

The remaining three constructs used in this study are locus of control, fear of failure, and assertiveness. They are related to more specific aspects of self-concept and will be described in the next sections.

Locus of Control

The construct, locus of control, was introduced by Rotter (1954) as part of his social learning theory of personality. Three basic constructs -- behavior potential, expectancy, and reinforcement -- are used by Rotter to explain or predict behavior. He states that:

> The probability a particular behavior will occur in a given situation (behavior potential) is a function of the person's expectancy that the behavior will lead to a particular reinforcement in the situation, and of the reinforcement value of that reinforcement (p. 108).

Simply stated, expectancy and reinforcement value determine the potential of a behavior response.

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[1]Various terms have been used to describe the ways in which one sees himself as a result of the self-evaluation process -- i.e., self-concept, self-esteem, self-evaluation, and self-image. It would seem that these terms mean about the same thing (Heaton & Duerfeldt, 1973; Wylie, 1961).

The expectancy construct includes the locus of control concept which is relevant to this study. Expectancy is made up of two components: the person's past history of reinforcement in the situation and generalized expectancies from other situations perceived as similar by the individual. One of the generalized expectancies, locus of control, is conceived of as an expectancy for internal versus external control of reinforcement. At one extreme are those who fail to perceive any causal relationship between their actions and the reinforcements that follow. They ascribe the reinforcements to external forces and are therefore called external controllers. At the other extreme are the internal controllers who perceive themselves and their behavior as the major determinant of the reinforcements received in any situation (Rotter, 1966).

Reviews of the locus of control variable have been presented which have described the relationship of various personality characteristics to locus of control (Joe, 1971; Lefcourt, 1966; Rotter, 1966). Joe (1971), in summarizing the findings of several correlation studies, described external controllers as being "relatively anxious, aggressive, dogmatic, and less trustful and more suspicious of others, lacking in self-confidence and insight, having low needs for social approval, and having a greater tendency to use sensitizing modes of defenses" (p. 623) than internal controllers.

The description of external controllers as lacking in self-confidence suggests a relationship between locus of control and self-evaluation. In addition to Joe (1971), Heaton and Duerfeldt (1973), Lefcourt (1966), Maccoby and Jacklin (1974), and Phares (1962) have suggested a relationship between a belief in external control and a lack of self-confidence.

Data supporting this relationship were provided by Hersch and Scheibe (1967) in a study correlating the I-E Scale scores of college students with their scores on the Adjective Check List. Internally oriented subjects were more likely to describe themselves as assertive, achieving, powerful, independent, effective, and industrious.

Theoretical justification for the relationship between an individual's evaluation of self and his belief in either internal or external control of reinforcement seems apparent from the descriptions of positive and negative self-concept presented previously. Individuals with positive self-concepts were described as persons who expected to be successful and would, therefore, behave in ways which resulted in success. It would seem that these individuals with positive self-concepts would also perceive themselves and their behavior as the major determinant of the reinforcements, i.e., have a belief in internal locus of control.

Individuals with negative self-concepts were described as persons who expected to fail and who would, therefore, behave in ways that would bring about failure or in ways that would allow them to avoid the experience of failure. It would seem that these individuals would be more likely to attribute their reinforcements to fate or chance, i.e., have a belief in external locus of control.

Support for the relationship between self-evaluation and locus of control was found in a study by Burbach and Bridgeman (1976). In this study, 274 fifth grade students were administered the Coopersmith Self-Esteem Inventory (CSEI) and the Intellectual Achievement Responsibility (IAR) scale. The IAR yields two subscale scores and a total score. One subscale score (I^+) assesses the extent to which a subject

takes responsibility for achievement successes, and the other subscale (I^-) assesses the extent to which a subject takes responsibility for achievement failure (Crandall, Katkovsky, & Crandall, 1965). A low positive relationship was found between CSEI scores and the total IAR scale (ITOT) scores for the group. When the IAR subscales were correlated with the CSEI a significant relationship was found between the I^+ scores and the CSEI scores for females and black males. The I^- scores for the white males were found to be significantly related to CSEI scores. Apparently, high self-esteem was significantly related to taking personal credit for academic successes for females and blacks, while high self-esteem for white males was significantly related to accepting blame for academic failure.

The relationship between self-evaluation and locus of control is an assumption used in this study. A belief in internal locus of control is considered to be an aspect of a positive self-concept. A belief in external locus of control is considered to be an aspect of a negative self-concept.

In the next section the factors affecting the development of internal-external locus of control will be reviewed.

Development of locus of control

As in the development of self-concept, the antecedents to the development of internal-external control expectancies are found in the parent-child relationship. In Rotter's (1966) description of the locus of control variable, he suggested that the consistency of discipline and treatment by parents would be an abvious antecedent of locus of control

expectancy. Unpredictable parents, according to Rotter, would encourage the development of attitudes of external control.

MacDonald (1971) supported Rotter's prediction in a study in which retrospective reports of parental behavior were collected from 427 undergraduate students. He found internality to be associated with nurturant, predictable parents and externality to be associated with protective parents.

The relationship between nurturant parents and internality has been replicated in several studies (Chance 1965, Shore, 1968, cited in Nowicki & Segal, 1974; Davis & Phares, 1969). In general, it has been found that a child's belief in internal control is encouraged by parent-child relationships that are primarily warm, supportive, permissive and consistent in discipline, and by parents who expect early independence behavior from their child. A child's belief in external control is encouraged by parents who are rejecting, punitive, dominating, and critical (Joe, 1971).

Some studies have attempted to distinguish between paternal and maternal relationships within the family and their effects on their children's locus of control expectancy. Katkovsky, Crandall, and Good (1967) used the Parent Behavior Rating Scale, parent interviews, and the Parent Reaction Questionnaire to collect data which were correlated with children's scores on the Intellectual Responsibility Scale (IAR). Significant correlations with the IAR scores were found more often with paternal variables than with maternal variables, which suggested that the paternal relationship had a stronger influence on the children's locus of control expectancy than the maternal relationship. A significant

negative relationship between nurturant paternal behavior and the development of internality in daughters was a somewhat unusual finding.

MacDonald (1971), using retrospective reports of parental behavior from a sample of college undergraduate students, found significant relationships for males between paternal physical punishment and internality as assessed by Rotter's I-E Scale. Internality in females was found to be significantly related to maternal achievement pressure, while maternal protectiveness and deprivation of privileges were negatively related to internality in both females and males. In contrast to the findings of Katkovsky, Crandall, and Good (1967), MacDonald (1971) found the maternal relationship more significant to locus of control than the paternal relationship.

In addition to parenting behaviors and parenting relationships, the parents' locus of control has been found to be significantly related to the child's locus of control (Nowicki & Segal, 1974). A higher similarity between the parents' locus of control and the child's locus of control seems to be present in families where parents are less severe in discipline practices and more indulgent in parent-rearing attitudes (Davis & Phares, 1969).

In summary, the development of internal locus of control expectancy has been found to be associated with supportive parental behavior and consistent parental discipline. Some cross-sex relationships (father-daughter and mother-son) may be related to locus of control; some stress in the paternal relationship may be associated with an internal locus of control expectancy. Children have a tendency to have a locus of control expectancy similar to that of their parents.

Locus of control has also been found to be associated with socio-economic level and ethnic group (Battle & Rotter, 1963; Franklin, 1963; Graves & Jessor; cited in Lefcourt, 1966). Data are consistent with the theoretical expectation that individuals who are restricted by environmental barriers and feel subjected to limited material opportunities would develop an externally oriented outlook on life.

Other correlates of locus of control have been reviewed by Joe (1971), Lefcourt (1966), and Rotter (1966). The locus of control variable has spawned a great deal of research (MacDonald, 1972) and, according to Levy (1970), it is evident that the locus of control variable plays a role in a variety of phenomena and has potential as a useful cognitive-perceptual content variable. The importance of locus of control in influencing behavior will be discussed in the next section.

Importance of locus of control

Differences in locus of control expectancy have been shown to influence behavior across a wide variety of situations (Levy, 1970; Nowicki & Segal, 1974). However, the nature of the relationship between locus of control and behavior is complex and appears to be different for males than for females. The major amount of data from studies of the relationship between locus of control and behavior has focused on achievement behavior, particularly academic achievement behavior.

Relationships between internal control and achievement behavior have been found with the following achievement criteria: persistence in task performance (Dweck & Reppucci, 1973), various achievement motivation indicators, grade point average and achievement test scores

(Crandall, Katkovsky, & Preston, 1962; McGhee & Crandall, 1968; Nowicki & Segal, 1974).

A stronger relationship between internal control and achievement test scores has been found for males than for females in several studies (Crandall, Katkovsky, & Preston, 1962; McGhee & Crandall, 1968; Nowicki & Roundtree, 1971; Nowicki & Segal, 1974). However, in one study by Crandall and Lacey (1972), a stronger relationship was found between internal control and a measure of perceptual field dependence for females, and Nowicki and Roundtree (1971) found a significant relationship between internal control and the number of activities participated in by high school females. The same was not true for males. According to Nowicki and Roundtree (1971), these sex differences may be explained by the fact that our culture rewards males more than females for academic performance, and females more than males for involvement in extracurricular activities.

These studies support Joe's (1971) conclusion that individuals with an internal control expectancy tend to exhibit more interest and effort in achievement-related activities than individuals with an external control expectancy. The relationship between the locus of control expectancy and achievement behavior appears to be different for males than for females.

In addition to the relationship with achievement behavior, internal control was found to be related to a willingness to participate in social action. In a study by Gore and Rotter (1963), blacks in a southern college were invited to participate in a march on the state capitol or take part in a freedom riders' group. Those who volunteered were found

to have a stronger internal control expectancy than those who were not interested in participating.

The studies above show consistent relationships between locus of control and behavior, especially academic achievement behavior. The significance of an internal locus of control expectancy has been emphasized, and a relationship between an individual's evaluation of self and an internal locus of control expectancy has been suggested.

In the next section the fear of failure construct will be reviewed. Also, the relationships between negative self-evaluation, external locus of control expectancy, and fear of failure will be explored.

Fear of Failure

The construct, fear of failure, is included in the literature relative to the achievement motivation theory principally in discussions concerning differing levels of aspiration (Atkinson, 1957; Atkinson & Feather, 1966; Lewin, Dembo, Festinger, & Sears, 1944). Therefore, a brief summary of achievement motivation theory will be presented before focusing on the fear of failure variable.

Atkinson (1966) has presented the following theoretical formulation to explain how individual differences in the strength of achievement-related motives influence behavior in competitive achievement situations:

> The strength of motivation to perform some act is assumed to be a multiplicative function of the strength of the motive, the expectancy (subjective probability) that the act will have as a consequence the attainment of an incentive, and the value of the incentive (p. 13).

The variables, expectancy and incentive, are similar to the variables used

by Rotter (1954) to predict behavior in specific situations.[1] An expectancy is a cognitive anticipation that a particular consequence will follow the performance of some act. Incentive represents the reinforcement value, positive or negative, of an event occurring as a consequence of some act (Atkinson, 1966).

The third variable, motive, is defined by Atkinson (1966) as a "disposition to strive for a certain kind of satisfaction" (p. 13). Motives are classified either as approach tendencies or avoidant tendencies. Approach tendencies aim to maximize satisfaction of some kind, e.g., the achievement motive may be a disposition to strive for pride in accomplishment. Avoidant tendencies aim to minimize pain; the motive of avoiding failure is included in this class of motives.

Heckhausen (1967) used the term "evaluative dispositions" to analyze differences in approach and avoidant tendencies with respect to achievement activity. An individual's evaluation of his ability to perform a particular activity results in either a success-oriented disposition or a failure-oriented disposition. In fact, the "sine qua non for the origin of the motive is cognitive maturation, which causes the outcome of performance to be referred back to the self and, thus, to be experienced as an effect of one's own competence" (p. 148).

Both approach tendencies and avoidant tendencies are usually present when an individual is presented with an achievement activity. When both

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[1]The use of these variables in Rotter's (1954) social learning theory were summarized previously under the heading "Locus of Control". Rotter also used the term "expectancy"; however, instead of the term "incentive" Rotter used the term "reinforcement value".

tendencies are aroused simultaneously, conflict results. This type of conflict is referred to as approach-avoidance conflict (Lewin, 1935) or conflict between Hope of Success and Fear of Failure (Heckhausen, 1967). Of primary interest in this study are individuals having stronger tendencies to avoid failure (a fear of failure) than to approach success.

Differences in the amount of resistance to achievement activities in the kind of goal setting activities have been found between individuals motivated more by a fear of failure than a hope for success. When the fear of failure is greater than the hope for success, subjects will resist achievement-oriented activity. Resistance to the activity will be greatest when the activity is of medium difficulty, i.e., when the probability of success is about .50 (Heckhausen, 1967).

Aspiration level experiments (Atkinson, 1966; Littig, 1966; Litwin, 1966; Sears, 1940) have shown that individuals motivated primarily by a fear of failure tend to set either extremely high or extremely low goals, while subjects motivated by a hope for success tend to set goals of moderate difficulty. Individuals fearing failure either choose goals which are so difficult they could not be expected to achieve them, or goals which are very safe and easy to attain, thus avoiding the experience of failure.

Beery (1975) has described how failure-avoidant strategies are used by students motivated by a fear of failure in an academic setting. He found these strategies to be similar to the failure-avoidant behavior employed by subjects in the aspiration level experiments referred to above. Students fearing failure either chose very easy courses or set low standards of achievement, thereby making failure unlikely, or they

set unrealistically high standards which they would not be expected to achieve. In either case the students avoid the experience of failure.

More complete descriptions of motivation theory, including analyses of the fear of failure motive, may be found in Atkinson and Feather (1966) and in Heckhausen (1967). Studies relating to the origin and development of the fear of failure motive will be reviewed in the next section.

Development of fear of failure

Antecedents for the fear of failure varible can be inferred from the findings of antecedents of the achievement motive, if we assume that a low motive for achievement is indicative of a relatively strong motive to avoid failure. Atkinson (1957) justifies this inference on the basis of a logical incompatibility between the kind of learning experiences which would contribute to the development of either an avoidant motive or an achievement motive. Atkinson argues, on a theoretical basis, that fear of failure should be relatively stronger in a group that does not show evidence of a strong motive to achieve. Atkinson also cites evidence of a negative relationship between the motive for achievement, as measured in thematic apperception (n Achievement[1]), and fear of failure, as measured by scores on the Mandler-Sarason Scale of Test Anxiety and a psychogalvanic index of manifest anxiety obtained in a test situation.

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[1]The term, n Achievement, is used to designate an assessment of the achievement motive by administering the Thematic Apperception Test and scoring the stories for achievement related material (McClelland, 1966).

As stated above, both the motive to achieve and the motive to avoid failure are assumed to be learned. If this is true, studies of the child's achievement training should reveal factors which can be linked with achievement motivation. Heckhausen (1967) states that achievement motivation develops in children between the ages of 3 and 3½ -- as soon as the child associates pleasure or disappointment with self after experiencing success or failure. Therefore, early childhood training practices would seem to be important in the development of the motive to achieve and the motive to avoid failure.

McClelland (1966) suggests that early pressure by parents for achievement will more likely result in strong generalized achievement tendencies, whereas parent pressure for achievement after the child has developed the ability to use symbols and to discriminate between various achievement behaviors is more likely to develop specific, situational achievement behavior.

Support for the relationship between early childhood training in independence behavior and high n Achievement was found by Winterbottom (1966). Mothers were interviewed to determine their expectations for independence and mastery behaviors of their children. More independence and mastery behaviors were expected at an earlier age by parents of children with high n Achievement scores than by parents of children with low n Achievement scores.

Rosen and D'Andrade (1959), observing interaction between parents and their sons in various competitive tasks, found parents of boys scoring high in n Achievement were more involved, showed more interest, were more competitive, and performed more affective acts (warmth and rejection)

than parents of boys with low n Achievement scores. Rosen concluded that fathers of boys with high n Achievement scores contributed more to their sons' independence training by allowing more autonomy, while mothers contributed more to the achievement training process. Rosen considered achievement training to be more important to the development of achievement motivation than independence training.

The severity and rigidity of parental child training practices have been studied indirectly through ratings of parental behaviors by college students, and by expert ratings of child-rearing practices in various cultures. In a study including college students and using the projective method of scoring TAT stories for n Achievement, McClelland (1955) found that students high in n Achievement tended to rate both parents as rejecting. Rejection was interpreted by McClelland as parental insistence on independence.

McClelland and Friedman (1952), in a study of Indian cultures, using an application of the projective TAT achievement measure to analyze representative folk tales, found a positive relationship between n Achievement and early, severe independence training. However, Child, Storm, and Verhoff (1966), in a similar study of a more varied sample of cultures, failed to support McClelland and Friedman's finding. In fact, Child, Storm, and Verhoff's finding showed a tendency for rigidity and nonindulgent socialization practices to be negatively related to n Achievement.

In summary, the factors instrumental in the development of fear of failure are assumed to be the same factors related to the development of a low motivation for achievement. Child-rearing practices which appear

to be related to the development of low n Achievement (fear of failure motive) are:

1. lack of parental involvement and interest in independence and achievement behaviors in their children,
2. low aspirations for child achievement behaviors by their parents, and
3. early independence and achievement training of children by their parents.

Research has been primarily directed toward the development of achievement motivation in males. Therefore, little data are available relative to the development of achievement motivation in females.

A complication in the measurement of n Achievement comes from the use of projective measures where the central figure in the boy's form of the test is male and the central figure in the girl's form of the test is female. Maccoby and Jacklin (1974) suggest that the fewer achievement themes by girls under these conditions may be due to an assumption that females are not achievers. Maccoby and Jacklin also observe that the type of task used prior to the administration of the TAT may bias the resultant scores. Certain tasks may produce stronger achievement thoughts in males, while other tasks may produce stronger achievement thoughts in females.

An analysis of twenty-three studies of achievement striving since 1967 led Maccoby and Jacklin to conclude that although there may be a difference between males and females in the way they project themselves in situations prompted by specific stimuli pictures or storied characters, a sex difference in achievement motivation cannot be documented.

The importance of the fear of failure motive will be discussed in

the next section. The relationship between fear of failure and the other constructs used in this study will be explored.

Importance of fear of failure

In the above discussion of the development of the fear of failure, the assumption was made that a low n Achievement score was indicative of fear of failure. In addition to this indirect method of determining if the fear of failure motive is present, researchers have used measures of anxiety, e.g., the Mandler-Sarason Test Anxiety Questionnaire and inventories designed to assess "resultant achievement" motivation. Resultant achievement assessment instruments, such as the Children's Achievement Scale, include certain items dealing with affect (hope or fear), direction of behavior (approach or avoidance), and preference for risk (intermediate versus easy or difficult) expressed in achievement situations (Weiner & Kukla, 1970). Fear of failure has also been assessed by computing the difference between z scores on an anxiety assessment and z scores on the traditional TAT n Achievement assessment. Numerous studies have related differences in strength and type of achievement motivation, as assessed by this measure, with various human achievement-oriented behaviors. The following achievement-related behavior has been associated more often with subjects exhibiting a fear of failure than with subjects exhibiting a strong motive to achieve:

1. less persistence in academic study (Atkinson & Litwin, 1960),
2. less growth in reading and arithmetic in homogenous classes (O'Connor, Atkinson, & Horner, 1966),
3. lower college grade point and greater tendency to drop from college (Spielberger, 1962),

4. better performance on tasks perceived as easy and poorer performance on tasks perceived as difficult (Kukla, 1974),

5. tendency to forget failure and be slower to recognize achievement-related words connoting failure (Clark, Teevan, & Ricciuti, 1966),

6. tendency to have very high or low (as opposed to moderate) discrepancy between estimates of own ability and estimates of ability required in chosen occupation (Mahone, 1966), and

7. atypical changes in aspiration following success and failure (Atkinson, 1964; Clark, Teevan, & Ricciuti, 1966; McClelland, 1966).

Individual differences in goal setting behavior and aspiration levels have been systematically studied since the 1930's (Gould, 1939; Hoppe, cited in Gould, 1939; Sears, 1940). These differences have been related to differences in achievement motivation in ways consistent with the theory of achievement motivation discussed earlier. Subjects who possess a motive to achieve success (hope for success) that is stronger than the motive to avoid failure (fear of failure) set aspirations in the intermediate zone where there is moderate risk. Subjects who possess a motive to avoid failure that is stronger than the motive to achieve success select either the easiest alternative or the alternative where there is virtually no chance for success (Atkinson, 1957, 1966).

In addition to these relationships with achievement behavior, achievement motivation has been related to locus of control and self-evaluation. Weiner and Kukla (1970) found that subjects with low resultant achievement motivation are less likely to attribute success in achievement-oriented situations to themselves (external locus of control) than students high in resultant achievement motivation. This finding was reported in two studies, one with a sample of students in grades 3 to 10

and one with a sample of college undergraduates. Teevan and Fischer (1974) also found a relationship between external locus of control expectancy and fear of failure among a sample of college students. Fear of failure was assessed by the Hostile Press Measure. A twelve item true-false questionnaire was used to assess locus of control.

A relationship between achievement motivation and self-concept was reported by Martire (1966) in a study of fifty-three male undergraduate students. An assessment of achievement motivation (n Achievement) was administered to the subjects under both neutral and achievement-oriented situations. The separate n Achievement score obtained under each condition was used to categorize all subjects into four groups:

1. subjects scoring high under both neutral and achievement-oriented conditions, (HH),

2. subjects scoring high in n Achievmeent under the neutral condition, but low in n Achievement under the achievement-oriented condition, (HL),

3. subjects scoring low in n Achievement under the neutral condition, but high in n Achievmeent under the achievement-oriented condition, (LH), and

4. subjects scoring low in n Achievement under both the neutral and achievement-oriented conditions, (LL).

Self-concept was assessed by having the subjects rate the importance of self (self-ideal) on twenty-six traits, and then rate themselves (self) on each of the traits. Although no significant differences were found between the four achievement groups on either the self-ideal or self ratings, differences were found between the HH group and the other groups when the discrepancy between self-ideal and self ratings were tested. The HH group, which scored high in n Achievement under both the neutral and achievement-oriented conditions, had a significantly greater

discrepancy between self-ideal and self ratings. Martire described the HH group as having a generalized achievement motivation and suggested that subjects in this group may have developed high achievement expectations which were difficult to meet and satisfy.

Martire also assessed the aspiration of his subjects by having them record the score they would like to make on the Scrambled Word Test and the score they expected to make on the test. The score they would have liked to make was considered a wishful level of aspiration, and the score they expected to make was considered a realistic level of aspiration. Significantly smaller wishful and realistic estimates were made by the HL group than the other three groups. The HL group, which scored high in n Achievement under the neutral condition, but low in n Achievement under the achievement-oriented condition, appeared to be anxious about failure in the achievement-oriented condition and reacted by making significantly lower aspiration estimates. Martire suggests that the lower estimates by the HL group indicate a defense against fear of failure and an attempt by these subjects to maintain their self-esteem at the highest possible level (Martire, 1966).

The relationship between fear of failure, self-concept, and locus of control constructs become apparent when examined in context with motivation theory. The strength of motivation to perform some act was defined earlier as a multiplicative function of the strength of the motive, the expectancy that the act will have as a consequence the attainment of an incentive, and the value of that incentive: Motivation = (Motive x Expectancy x Incentive).

Motive in the above formula may be either a hope for success or a

fear of failure. If fear of failure is stronger than hope for success, the resultant motivation will be to avoid an act.

The second variable, expectancy, may be either an internal or external locus of control expectancy. An expectancy of internal locus of control, i.e., a belief that one's own behavior will lead to the attainment of an incentive, contributes positively to the resultant strength of motivation to perform an act.

A study by Bellack (1975) established a link between internal locus of control expectancy and incentive in situations where external, overt reinforcement is missing and, therefore, does not provide incentive. From a group of college undergraduate students who were administered Rotter's I-E Scale, twenty-four subjects were randomly chosen from those scoring above the mean (externals) and twenty-four subjects were randomly selected from those scoring below the mean (internals). During the first phase of the study subjects were given a word recognition memory task and instructed to self-evaluate the accuracy of their responses. During the second phase of the study subjects were given a similar task and, in addition to self-evaluating their responses, they were asked to administer self-reinforcement under one of three conditions. These three conditions were: positive reinforcements for "good guesses", negative reinforcement for "bad guesses", or both positive reinforcement for "good guesses" and negative reinforcement for "bad guesses". Internals consistently gave themselves higher self-evaluations and more positive self-reinforcements than externals. Bellack concludes that individuals who have an external locus of control expectancy do not use self-reinforcement to alter or to

maintain their behavior, and are dependent on external input for evaluation of their behavior.

Thus, the constructs, fear of failure and locus of control, have been directly related to the motive and expectancy variables in achievement motivation theory, and the process of self-evaluation has been related to both fear of failure and locus of control.

Although the third variable in the theory of achievement motivation, incentive, is not directly related to the constructs used in this study, the treatments used include components relating to the incentive variable. Goal setting is a component included in each of the two treatments in this study. The goals selected by the subjects should reflect, at least partially, the incentive value accorded by the subject to achievement of the goal. However, as discussed previously, the subject's aspiration level is affected by the relative strength of the fear of failure motive compared to the hope for success motive, and subjects having an external locus of control expectancy may not be able to gain incentive (reinforcement) from their behavior in the absence of external reinforcement.

The next section will discuss assertive behavior, which is one of the goals of the two experiential treatments, and assertiveness training, which is employed in one of the treatments.

Assertiveness

Assertiveness is typically defined as behavior serving one's own interests without denying the rights of others (Alberti & Emmons, 1975; Butler, 1973; Hardaway & LaPointe, 1974; Jakubowski-Spector, 1973).

The definition of assertive behavior by Jakubowski-Spector (1973) is representative of these definitions.

> Assertive behavior is that type of interpersonal behavior in which a person stands up for her legitimate rights in such a way that the rights of others are not violated. Assertive behavior is an honest, direct and appropriate expression of one's feelings, beliefs and opinions (p. 76).

Assertive behavior is contrasted with passivity and aggression by Hardaway and LaPointe (1974) as follows:

> Passivity: giving up one's rights and needs for someone else's or for fear of offending other person(s).
>
> Aggression: getting one's needs met at the expense of another person's rights (p. 10).

In Figure 1 the effects of nonassertive (passive), assertive, and aggressive behavior are described, both in terms of the person who is acting and the person who is being interacted with. Negative effect is attributed to both passive and aggressive behavior.

The results of nonassertive behavior are described by Bandura (1973) as follows:

> Some forms of physical aggression result paradoxically from a lack of self-assertiveness. One can easily call to mind obsequious individuals who invite maltreatment through their passivity, only to respond explosively after being subjected to repeated humiliating affronts. These are the timid, indecisive people who cannot express their legitimate rights; who are disregarded, exploited and victimized; and who harbor resentment rather than seek redress for justified grievances (p. 258).

Ellis (1974) also discusses the results of nonassertive behavior in relation to what he lists as "Irrational Idea No. 10: the idea that maximum human happiness can be achieved by inertia and inaction or by passively and uncommittedly enjoying oneself" (p. 173). He further states:

	NONASSERTIVE BEHAVIOR	ASSERTIVE BEHAVIOR	AGGRESSIVE BEHAVIOR
Characteristics of the behavior:	Emotionally dishonest, indirect, self-denying, inhibited	(Appropriately) emotionally honest, direct, self-enhancing, expressive	(Inappropriately) emotionally honest, direct, self-enhancing at expense of another, expressive
Your feelings when you engage in this behavior:	Hurt, anxious at the time and possibly angry later	Confident, self-respecting at the time and later	Righteous, superior, depreciatory at the time and possibly guilty later
The other person's feelings, about herself when you engage in this behavior:	Guilty or superior	Valued, respected	Hurt, humiliated
The other person's feelings about you when you engage in this behavior:	Irritated, pity	Generally respect	Angry, vengeful

Figure 1. A comparison of nonassertive, assertive, and aggressive behavior (Jakubowski-Spector, 1973, p. 77)

> Being inert, passive, or over-inhibited normally keeps you from being absorbed in ... (loving, creating, and philosophizing) ... and hence from truly living ... (p. 174). And the philosophy of inertia and inaction, especially when it is motivated by fear of failure, blocks the development of self-confidence and self-respect (p. 175).

Early theoretical rationale for assertiveness training was formulated by Andrew Salter and Joseph Wolpe. Salter (1949) perceived the breaking of conditioned inhibitions as the objective of psychotherapy and maintained that in order to increase assertiveness, statements should emphasize "feeling-talk". Wolpe (1958) used assertive responses as one of three classes of responses to reciprocally inhibit anxiety. Recent descriptions of assertiveness training indicate that assertive behavior is being taught, not only as remediation for clinical populations, but as training for a large segment of our population exhibiting either passive or aggressive behavior. The theoretical rationale for assertiveness training has been expanded to include not only a reduction in anxiety as an outcome of assertiveness training, but also increased feelings of potency and self-worth (Alberti & Emmons, 1975; Hardaway and LaPointe, 1974).

The relationship between assertiveness training and positive self-evaluation is described by Bandura (1973):

> With achievement of competencies that bring success, people revise their estimates of themselves in more favorable directions. Participant modeling, though primarily addressed to the acquisition of skills, improves self-evaluations as well (p. 258).

Various studies have assessed changes in self-concept after assertiveness training. Positive self-concept changes were found using the following assessments:

1. Berger Self-Acceptance Scale (Percell, Berwich, & Beigel, 1974),

2. Pierce-Harris Children's Self-Concept Scale (Stevens, 1974), and

3. Tennessee Self-Concept Scale (Boland, 1975; Keating, 1976).

The first study included an adult clinical sample while the remaining three studies included college students.

Support for the outcome of increased feelings of potency as a result of assertiveness training is more difficult to establish; however, very limited empirical support may be found through the following process:

1. establishing internal locus of control expectancy as an indication of an individual's sense of potency,

2. showing a relationship between internal locus of control and assertiveness, and

3. showing empirical support for an expected change toward internal locus of control after assertiveness training.

Maccoby and Jacklin (1974) reviewed several studies which indicated that males tended to develop greater feelings of personal strength and potency than females. Included in this review were studies which showed that college age males tended to have a stronger internal control expectancy than college age women. This review lends support for the use of locus of control measures to assess feelings of potency.

The second step in the process of establishing support for the relationship between assertiveness training and increased feelings of potency was showing a relationship between internal locus of control and assertiveness. This relationship was found in a sample of college students (Appelbaum, Tuma, & Johnson, 1975). Students with an internal locus of control expectancy, as assessed by the I-E Scale, described

themselves as more assertive on the Rathus Assertiveness Scale than students with an external locus of control expectancy.

Changes toward internal locus of control after assertiveness training has received only limited empirical support. Ryan (1976) reported that female college students moved in the direction of internal locus of control expectancy after assertiveness training. However, in another study of a small group of adult clients, no change in locus of control expectancy was found (Rimm, Hill, Brown, & Stuart, 1974). In both of these studies the I-E Scale was used to assess locus of control expectancy.

Very little empirical support has been found for the relationship between assertiveness training and increased feelings of potency. However, various studies have shown a positive change in self-concept after assertiveness training. Thus, assertiveness training can be considered as a means of assisting persons to acquire competencies which will bring success (positive reinforcement), and positively influence self-evaluations.

During the process of learning and practicing assertiveness skills certain problems may occur which will interefere with the expected outcomes of assertiveness training. First, a person fearing failure may adopt the strategy of setting small goals in order to insure success (Beery, 1975; Heckhausen, 1967). A person fearing failure may also anticipate failure and misjudge the outcomes of his behavior (Heckhausen, 1967).

A second problem which may interfere with the development of assertive behavior is the lack of positive reinforcement for assertive

behavior. Females, particularly in our culture, may not encounter positive reinforcement for assertive behavior. Dalsimer (1974) states that fear of success is significantly more prevalent among girls than boys from eighth to twelfth grade. Females are taught during adolescence to hide their intelligence in order to be appealing to boys. Females may achieve affirmation of the self through affiliation, rather than assertiveness (O'Leary, 1974). If the perception of "appropriate" female behavior is contrary to assertive behavior, the learning of assertive skills by females would be impeded.

A third problem which may interfere with the development of assertive behavior occurs when a person perceives reinforcement as not being contingent upon his behavior, i.e., a belief in external control (Bartel, 1969).

In summary, persons learning assertiveness skills are expected to develop increased feelings of potency and self-worth. Certain factors could interfere with the development of these aspects of a positive self-concept. Fear of failure, lack of positive reinforcement for assertive behavior, and a belief in external control were suggested as factors which could interfere with the development of a more positive self-concept following assertiveness training.

Assessments of structured experiential training groups, including assertiveness training groups, have been reported extensively in psychological and educational journals; however, only a few studies have been reported using adolescents in nonclinical settings. Representative studies of structured training groups will be reviewed in the next section. Studies which include adolescents from nonclinical settings will be the focus of this review.

Structured Experiential Training Groups

In recent years the training of groups to facilitate the development of human relations skills has become popular in a variety of settings. Assertiveness skill training, which includes a specific area of human relations skills, will be reviewed first, followed by a review of human relations training groups which are more general in scope.

Training of groups to facilitate assertive behavior has become prevalent in university settings and particularly with female participants (Hall, 1976; Joanning, 1974; Keating, 1976; Rathus, 1972; Ryan, 1976; Winship, 1974; Wysocki, 1976). In addition to college subjects, effective use of assertiveness training has been reported for persons in various age groups including children in kindergarten to fourth grade (Kay & Felker, 1975), junior high school students (Parr, 1974), and adults (Eisler, Miller, Hersen, & Alford, 1974; Percell, 1973).

Desired behavior change has been achieved by providing assertiveness training for persons having a variety of behavior problems including anxiety (Wolpe, 1958), inappropriate anger (Rimm, Hill, Brown, & Stuart, 1974) and excessive passivity (Eisler, Miller, Hersen, & Alford, 1974).

Only three studies of assertiveness training with high school students were found in the literature, and two of these studies included subjects classified as delinquent. Kornfeld (1974) reported a significant change on the physical subscale of the Pierce-Harris Children's Self-Concept Scale after conducting assertiveness training with eight male juvenile delinquents. However, Miller (1974) found no significant changes in self-concept, as assessed by the Tennessee Self-Concept Scale,

after conducting assertiveness training with twelve female juvenile delinquents.

In a study of forty sophomore girls scoring in the nonassertive range of the Rathus Assertiveness Schedule (RAS), Olsen (1976) found a significant increase in assertiveness, as assessed by the RAS, following assertiveness training.

A human relations training program which is broader in scope than the assertiveness training programs, Achievement Motivation Training (Peterson, 1971), resulted in significant changes in locus of control expectancy in two samples of high school students (Smith, 1973; Smith & Troth, 1975). A significant increase in internal locus of control expectancy, as assessed by the I-E Scale, was found in both studies.

Significant changes in self-concept and locus of control expectancy were also reported by Patton (1975) in a study of the effects of a group counseling program with precollege disadvantaged students. The sample included two experimental groups and one control group with sixteen subjects in each group. The experimental groups increased significantly in positive self-concept, as assessed by the Coopersmith Self-Esteem Inventory, but the control group did not change significantly in self-concept. All of the groups increased in internal locus of control expectancy, as assessed by the I-E Scale, and the increase in internal locus of control expectancy reached significance for the female subjects regardless of treatment group.

In summary, the literature regarding self-concept, locus of control, assertiveness, and fear of failure was reviewed. Representative studies

of group procedures similar to the treatments in this study were also reviewed.

Only a few studies of structured experiential training groups with high school age students are reported in the literature. Assertiveness training has received increased attention in the literature, but changes in self-concept and locus of control after assertiveness training have received only partial support.

The two treatments in this study were assertiveness training and human relations training. The intent of this investigation was to compare the effectiveness of the two training groups in changing self-concept, locus of control, and assertiveness. Subjects were also classified according to their performance on an activity designed to assess fear of failure. This classification was used to determine if there were significant differences between the ring toss groups on changes in self-concept, locus of control, and assertiveness.

The methodology used in this study is presented in the next chapter.

METHODOLOGY

The purpose of this study was to assess the effects of two types of psychological education programs on the self-concept, locus of control expectancy, and assertiveness of high school seniors enrolled in the distributive education programs at Ames Senior High School. The effects of the two treatments were examined for each treatment group, for females and males, and for three ring toss groups. Changes in the self-concept, locus of control expectancy, and assertiveness between treatment groups, between females and males, and among ring toss groups were also analyzed.

The procedures used in this study will be described under the following headings: sample selection, instruments used, data collection procedures, treatments, design, and statistical models.

Sample Selection

The subjects in this study were fifty-eight twelfth grade students enrolled in two distributive education classes at Ames Senior High School in Ames, Iowa. The two distributive education classes included thirty-five females and twenty-three males.

The presence of Iowa State University in Ames provided these students with an environment which emphasizes academic preparation. The subjects in this study appeared to be somewhat less academically oriented than the total high school population in terms of grade point average and college plans. However, the percentage of subjects in this study who planned to go on to college is higher than the percentage of all seniors in Iowa who plan to go on to college. The median grade point average

and the percentage of the subjects planning to attend college compared with the total senior class are presented in Table 1.

Table 1. Comparison of grade point average and college plans for subjects in the study and for all twelfth grade students

Population	Median grade point average	College plans
Subjects in study	2.4	65%
All twelfth grade students	2.7	75%

Instruments Used

The treatment effects of interest in this study were self-concept, locus of control, and assertiveness. The instruments used to assess these effects are described below.

Tennessee Self-Concept Scale (TSCS)

The Tennessee Self-Concept Scale (TSCS) was selected to assess the subjects' perception of self. The TSCS contains forty-five positive statements, i.e., "good" things to say about oneself, and forty-five negative statements, i.e., "bad" things to say about oneself. Also included are ten items taken from the L-Scale of the Minnesota Multiphasic Personality Inventory to give a measure of defensiveness. The design of the TSCS is such that the subject chooses one of five possible response categories to indicate the extent to which each statement is true of him or her. The TSCS has been standardized with persons from twelve to sixty-eight years of age, with an educational range from sixth grade to doctor of philosophy (Fitts, 1965).

The test items consist of statements about 1) what the person is (identity), 2) how he feels about the self he perceives (self-satisfaction), and 3) what he does (behavior). These three categories represent an "internal frame of reference" within which the individual self is described.

The test items also represent an "external frame of reference", a dimension which includes the following five categories: 1) physical self, 2) moral-ethical self, 3) personal self, 4) family self, and 5) social self.

The reliability scores for the TSCS were developed from a standardization group of 626 people ranging in age and education as stated previously. The test-retest data over a two-week period using college students resulted in reliability coefficients ranging from .67 to .91 for the various subscales.

Validity data were determined on four bases: 1) content validity, 2) discrimination between groups, 3) correlation with other personality measures, and 4) personality changes under particular conditions. The content validity was developed by including an item only if it was unanimously judged to be a valid measure by a team of seven clinical psychologists (Fitts, 1965). Extensive studies of the other forms of validity are reported by Fitts et al. (1971).

I-E Scale

The instrument chosen to assess locus of control was the I-E Scale. The I-E Scale consists of twenty-nine paired items from which the subject chooses the one which he believes is most true for him. Each pair of

items includes a response indicating a belief in either internal or external control, with the exception of six paired items included as "fillers" to make the content of the other paired items less obvious.

Test-retest reliability, as reported by Rotter (1966), varies from about .50 to .83 for various samples. Biserial item correlations are between .152 and .480. Split-half reliability is reported as .70.

Rotter (1966) reported good discriminant validity on the basis of low relationships between the I-E Scale and variables such as intelligence, social desirability, and political liberalness. More recently, Joe (1971) reported contradictory findings regarding the relationship between the I-E Scale and assessments of social desirability. Construct validity is established by Rotter (1966) on the basis of studies which have predicted differences in behavior for individuals above and below the median of the I-E Scale and from correlations between the I-E Scale and behavioral data.

A factor analysis of the I-E Scale was reported by Mirels (1970), identifying two factors: a belief concerning the respondent's control over his own destiny and a belief concerning the respondent's ability to exert some control over political and world affairs. Previous factor analyses (Rotter, 1966) indicated the presence of a general factor which accounted for most of the variance in item responses.

A study of the I-E Scale's use in three different age groups showed that subjects tended to score more in the direction of internality on the I-E Scale as they increased in age (Staats, 1974).

Additional evidence regarding the construct validity of the I-E Scale

continues to accumulate with its extensive use in recent years (Appelbaum, Tuma, & Johnson, 1975; Joe, 1971; Ryan, 1976).

Rathus Assertiveness Schedule (RAS)

The instrument selected to assess assertiveness was the Rathus Assertiveness Schedule (RAS). The RAS consists of thirty items, some of which were based on questions used to assess patients' pretreatment assertiveness, and some of which were taken from the Guilford and Zimmerman Temperament Survey Scales. Other questions on the RAS were formed from students' diaries of behaviors they would have liked to exhibit, but refrained from exhibiting because of a fear of aversive social consequences (Rathus, 1973).

Test-retest reliability of the RAS is reported by Rathus (1973) as .778 and internal consistency measured by a Pearson Product-Moment correlation coefficient between odd and even item scores yielded an r of .7723.

Rathus established the validity of the RAS by comparing self-reported RAS scores of college students to two external measures of assertiveness. The first comparison of RAS scores was made with student ratings of persons they knew well on seventeen semantic differential scales. RAS scores correlated significantly with the four scales comprising the assertiveness factor of the rating schedule: boldness ($r = .6124$), outspokenness ($r = .3424$), aggressiveness ($r = .5374$), and confidence ($r = .3294$).

The second external measure of assertiveness was a rating of the responses made by forty-seven college students to five situations in

which assertive, outgoing behavior was considered advantageous. A Pearson Product-Moment correlation coefficient between RAS scores and scores from raters of audiotaped responses yielded an r of .7049.

Data Collection Procedures

One of the three-week units of study included in the distributive education program at Ames Senior High School is human relations training. Prior to the beginning of the 1976-1977 school year, the two distributive education teachers decided to provide assertiveness training to one-half of the distributive education students and continue with the traditional human relations training for the remaining one-half of the students. Assessments of the two types of training would then be made to compare the relative effectiveness of the two experiential training programs.

Prior to the beginning of the human relations unit, the two sections of the distributive education class were randomly assigned to one of two groups. Females and males were assigned separately to one of the two groups to insure adequate representation of both sexes. The random assignment was accomplished by numbering, in order, the alphabetized names of females and males in each class section and then alternately assigning the subjects to one group through the use of a random table of numbers. After assignment of subjects into two groups, either the human relations training treatment or the assertiveness training treatment was randomly assigned.

This procedure resulted in the assignment of thirty subjects to the assertiveness training group and twenty-nine subjects to the human

relations training group. Table 2 shows the number of females and males assigned to each treatment group.

Table 2. Number and sex of subjects assigned to the two treatment groups

Sex	Human relations training	Assertiveness training	Totals
Females	18[a]	18	36[a]
Males	11	12	23
Totals	29[a]	30	59[a]

[a]One female in the human relations training group moved from Ames and was dropped from the study.

During the two days prior to the beginning of the experiential training groups, the subjects were administered pretest assessment instruments in the following order: Tennessee Self-Concept Scale, I-E Scale, and the Rathus Assertiveness Schedule. The subjects were informed that they would be randomly assigned to one of two groups for the unit on human relations training, and that the assessment instruments were part of a research study. They also were told that the assessment instruments would be administered again at the conclusion of the human relations unit. The information presented to the students in in Appendix B.

During the first week of the experiential training programs, the subjects individually completed a ring toss activity. This activity followed the format of earlier aspiration level experiments (Gould, 1939; Harsmann, 1933; Sears, 1940). The subjects attempted to ring a post with two sets of twenty tosses. After each set of twenty tosses the subjects estimated the number of ringers they would make on the next

set of twenty tosses. The detailed instructions given to the subjects are presented in Appendix C.

In the aspiration level experiments cited above, differences in goal setting strategies were associated with motives to either approach success or avoid failure. The strategy of setting goals somewhat above the previous performance level was associated with a motive to approach success (hope for success), while the strategy of setting unrealistically high goals or very low goals was associated with a motive to avoid failure (fear of failure).

Upon examination of the subjects' performances on the ring toss activity and the subjects' corresponding estimates of their future performance on the ring toss activity, it was decided that none of the subjects were setting unrealistically high goals. Therefore, a linear relationship was assumed to exist between the strength of the fear of failure disposition, and the discrepancy found between the subjects' performance and estimates of future performance on the ring toss activity.

The number of ringers made by each subject was subtracted from the subject's estimate of the number of ringers he would make. The resulting differences were used to list the subjects in rank order. Nineteen subjects with a comparatively large positive difference (higher estimate than performance) were classified as group one. Twenty subjects with a low positive difference or a negative difference (lower estimate than performance) were classified as group three. The remaining nineteen subjects were classified as group two. Table 3 shows the number of subjects from each of these ring toss groups included in each treatment group. Table 4 shows the classification of ring toss groups by sex.

Table 3. Classification of ring toss groups by treatment

Ring toss groups	Human relations training	Assertiveness training	Totals
Group 1	9	10	19
Group 2	10	9	19
Group 3	9	11	20
Totals	30	28	58

Table 4. Classification of ring toss groups by sex[a]

Sex	Ring toss group 1	Ring toss group 2	Ring toss group 3	Totals
Females	7	14	14	35
Males	12	5	6	23
Totals	19	19	20	58

[a]The predominance of males in ring toss group 1 and females in ring toss groups 2 and 3 may be a result of the ring toss being a sex biased activity.

Subjects in ring toss group one were considered to be exhibiting less fear of failure than subjects in groups two and three. Subjects in group three were considered to have exhibited more fear of failure than subjects in the other two groups. The record of the subjects' performance on the ring toss activity and the classification procedure used to form the three ring toss groups are contained in Appendix D.

During the two days following the treatments the same assessment procedures used in pretesting were used for administration of the posttests.

Treatment of Samples

The two treatments, human relations training and assertiveness training, were conducted during the regularly scheduled distributive education classes between September 29th and October 20th, 1976. Each treatment consisted of fifteen forty-five minute training sessions.

Human relations training

The human relations training included discussions about effective human relations skills, value clarification activities, and goal setting activities. Materials and activities were selected from the following sources: Psychology and Human Relations in Marketing (Hiserodt, 1969), Employee Motivation (DiPlacido et al., 1976), Personal Dynamics in Personality (Everhardt & Leonard, 1976), and Motivation Advance Program (Peterson, 1971).

The human relations training began with a discussion of the meaning of human relations and the importance of good human relations in selling and marketing. Relationships between employer and employee, between fellow employees, and between employees and customers were discussed. After the discussions about human relations skills, the subjects participated in various value clarification activities. The final phase of the training included goal setting activities. A description of this training is contained in Appendix E.

The trainers for the human relations training were the two male distributive education teachers. In previous years these teachers had conducted the human relations training with assistance from the counseling staff at Ames Senior High School.

Assertiveness training

The assertiveness training program was adapted from the training model described by Hardaway and LaPointe (1974). Included in the training program were goal setting activities, assertion exercises, contract review, and behavior rehearsal.

The assertiveness training began with an explanation and discussion of assertive, passive, and aggressive behavior. The subjects were asked to formulate goals for being more assertive and to make plans for achieving these goals. Progress toward achieving these goals was checked in subsequent sessions and problems encountered by the subjects provided a basis for practice and supportive help from the group leaders and others in the training group. Various role playing and assertion exercises were introduced by the trainers during the training period. A description of each treatment session is contained in Appendix F.

The trainers for the assertiveness training group were a male high school counselor (the writer) and a female graduate student enrolled at Iowa State University. The writer had experience in leading assertiveness training as well as other human relations groups. The female graduate student had training in counseling skills.

Design

A pretest, posttest, factorial design was used. Subjects were randomly assigned by sex to two treatment groups. Subjects were also classified according to their performance on a ring toss activity. Thus, the independent variables were treatment, sex, and ring toss groups.

The pretests were administered during the two days immediately preceding the treatments, and the ring toss activity was conducted during the first week of the treatments. Posttests were administered during the two days immediately following the treatments. Changes, as assessed by subtracting the pretest scores from the posttest scores, were analyzed for significance.

Statistical Models

Data were gathered from pretest and posttest administrations of the Tennessee Self-Concept Scale, I-E Scale, and the Rathus Assertiveness Schedule. Subjects were classified according to treatment, sex, and performance on a ring toss activity. Change scores derived by subtracting pretest assessment scores from the posttest scores were analyzed. Pretest and posttest scores within the independent variable groups were tested for significant differences using a t-test for paired samples.

The statistical analysis for testing differences between treatment groups, between females and males, and among ring toss groups on the criterion assessment change scores was analysis of variance with the following model:

$$Y_{ijkl} = A_i + B_j + C_k + AB_{ij} + AC_{ik} + BC_{jk} + ABC_{ijk} + E_{ijkl}$$

Y_1 = Tennessee Self-Concept Scale change scores (the total positive scale change score plus ten subscale change scores were used)

Y_2 = I-E Scale change score

Y_3 = Rathus Assertiveness Schedule change score

A = treatment

i = 1 (human relations training)
= 2 (assertiveness training)

B = sex of subject

j = 1 (female)
2 (male)

C = ring toss group

k = 1 (highest positive discrepancy between aspiration and performance[1])
= 2 (moderate discrepancy between aspiration and performance)
= 3 (low or negative difference between aspiration and performance)

E = error

l = 1, 2, 3, ..., n,ij

n,ij = 3 (human relations training, female, ring toss group 1)
= 8 (human relations training, female, ring toss group 2)
= 6 (human relations training, female, ring toss group 3)
= 6 (human relations training, male, ring toss group 1)
= 2 (human relations training, male, ring toss group 2)
= 3 (human relations training, male, ring toss group 3)
= 4 (assertiveness training, female, ring toss group 1)
= 6 (assertiveness training, female, ring toss group 2)
= 8 (assertiveness training, female, ring toss group 3)
= 6 (assertiveness training, male, ring toss group 1)
= 3 (assertiveness training, male, ring toss group 2)
= 3 (assertiveness training, male, ring toss group 3)

The computer programs used for both the paired t-tests and the analysis of variance tests were selected from the Statistical Package for the Social Sciences (SPSS) system of computer programs (Nie et al., 1975).

The analysis of variance computer program used in this study tested significance by the classic experimental approach. In this approach the main effects are partitioned into separate main effects. Therefore, if the separate main effects are strongly associated, it is possible to have

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[1]The discrepancy between aspiration and performance was defined as the difference when the number of ringers made by the subject was subtracted from the estimate of the number of ringers that would be made on the next set of twenty tosses.

a result in which the additive effect as a whole is significant, while neither of the individual main effects are significant (Nie et al., 1975).

THE FINDINGS

This investigation was designed to examine the effects of two experiential treatments for senior high school distributive education students. Treatments included a human relations program and an assertiveness training program. Subjects were classified by sex and by their performance on a ring toss activity. The subjects' performance on the ring toss activity was used to classify the subjects into three groups. The classification was made on the basis of an assumed linear relationship between a subject's disposition to fear failure and the subject's discrepancy between performance and aspiration as measured by the ring toss activity. According to this classification, subjects in group one exhibited the least fear of failure, subjects in group two exhibited more fear of failure than subjects in group one, and subjects in group three exhibited the highest degree of fear of failure.

The assessment instruments were the Tennessee Self-Concept Scale (TSCS), I-E Scale, and Rathus Assertiveness Schedule (RAS). Paired t-tests were used to determine if the mean posttest scores for the treatment, sex, and ring toss groups were significantly different from the mean pretest scores. A three-way analysis of variance was used to determine if the mean change scores were significantly different between the independent variable groups.

Hypotheses one, two, and three were formulated to test differences between the mean pretest and mean posttest scores on the TSCS, I-E Scale, and RAS, respectively. Hypotheses four, five, and six were formulated to test differences in TSCS, I-E Scale, and RAS mean change scores between

the independent variable groups. Ten subhypotheses were formulated to test data from the TSCS subscales.

To present the findings relevant to each null hypothesis and subhypothesis, the hypothesis will be stated with verbal and tabular presentation of the analysis following the statement. A significance level at or beyond the .05 level was necessary for rejection of a specific null hypothesis.

Ho_1: As assessed by the mean pretest and mean posttest scores on the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. A significant increase in self-concept was found for the females within the assertiveness training group. Results of the analyses are presented in Table 5.

Ho_{1a}: As assessed by the mean pretest and mean posttest scores on the identity subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

Hypothesis 1a was partially rejected. A significant increase in self-identity was found for subjects in the assertiveness training group. Within the assertiveness training group, increases in self-identity for females and for subjects in ring toss group three were significant. Analyses of the data failed to reject the null hypothesis for all other groups. Results of the analyses are presented in Table 6.

Ho_{1b}: As assessed by the mean pretest and mean posttest scores on the self-satisfaction subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

Hypothesis 1b was partially rejected. A significant increase in self-satisfaction was found for females. Females within the human

Table 5. Paired t-test data: TSCS total positive scale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-0.39	17.94	-0.12	0.909
Females	17	0.00	18.23	0.00	1.000
Males	11	-1.00	18.35	-0.18	0.860
Ring toss group 1	9	-1.56	20.65	-0.23	0.827
Ring toss group 2	10	+4.60	14.28	+1.02	0.335
Ring toss group 3	9	-4.78	19.40	-0.74	0.481
Assertiveness treatment	30	+6.33	20.98	+1.65	0.109
Females	18	+12.50	20.57	+2.58*	0.020
Males	12	-2.92	18.74	-0.54	0.600
Ring toss group 1	10	-2.40	15.77	-0.48	0.642
Ring toss group 2	9	+4.67	17.34	+0.81	0.443
Ring toss group 3	11	+15.64	25.26	+2.05	0.067
Females (all)	35	+6.43	20.20	+1.88	0.068
Ring toss group 1	7	-1.57	22.41	-0.19	0.859
Ring toss group 2	14	+7.36	13.82	+1.99	0.068
Ring toss group 3	14	+9.50	24.48	+1.45	0.170
Males (all)	23	-2.00	18.15	-0.53	0.603
Ring toss group 1	12	-2.25	15.58	-0.53	0.603
Ring toss group 2	5	-3.00	18.48	-0.36	0.735
Ring toss group 3	6	-0.67	25.42	-0.06	0.951
Ring toss group 1 (all)	19	-2.00	17.72	-0.49	0.629
Ring toss group 2 (all)	19	+4.63	15.35	+1.32	0.205
Ring toss group 3 (all)	20	+6.45	24.55	+1.17	0.255

*Significant at the .05 level.

Table 6. Paired t-test data: TSCS identity subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-0.07	8.14	-0.05	0.963
Females	17	+0.06	8.75	+0.03	0.978
Males	11	-0.27	7.51	-0.12	0.907
Ring toss group 1	9	-1.89	8.89	-0.64	0.542
Ring toss group 2	10	+2.00	6.99	+0.90	0.389
Ring toss group 3	9	-0.56	8.96	-0.19	0.857
Assertiveness treatment	30	+3.20	8.26	+2.12*	0.043
Females	18	+5.39	7.78	+2.94**	0.009
Males	12	-0.08	8.17	-0.54	0.600
Ring toss group 1	10	-0.30	6.68	-0.14	0.890
Ring toss group 2	9	+3.78	9.16	+1.24	0.251
Ring toss group 3	11	+5.91	8.36	+2.34*	0.041
Females (all)	35	+2.80	8.58	+1.93	0.062
Ring toss group 1	7	-0.43	10.28	-0.11	0.916
Ring toss group 2	14	+3.29	8.77	+1.40	0.185
Ring toss group 3	14	+3.93	7.71	+1.91	0.079
Males (all)	23	-0.17	7.69	-0.11	0.915
Ring toss group 1	12	-1.43	6.10	-0.50	0.624
Ring toss group 2	5	+1.60	5.37	+0.67	0.541
Ring toss group 3	6	+0.83	12.12	+0.17	0.873
Ring toss group 1 (all)	19	-1.05	7.63	-0.60	0.555
Ring toss group 2 (all)	19	+2.84	7.91	+1.57	0.135
Ring toss group 3 (all)	20	+3.00	9.03	+1.49	0.154

*Significant at the .05 level.

**Significant at the .01 level.

relations training group and females within ring toss group three increased significantly in self-satisfaction. No significant changes in self-satisfaction were found for the remaining groups. Results of the analyses are presented in Table 7.

Ho_{1c}: As assessed by the mean pretest and mean posttest scores on the behavior subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. Results of the analyses are presented in Table 8.

Ho_{1d}: As assessed by the mean pretest and mean posttest scores on the physical subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. However, females in ring toss group three did make a significant positive change in physical self-concept. The results of the analyses are presented in Table 9.

Ho_{1e}: As assessed by the mean pretest and mean posttest scores on the moral-ethical subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. Females in the assertiveness training group and females in ring toss group three did show significant positive changes in moral-ethical self-concept. The analyses relative to the null hypothesis are presented in Table 10.

Ho_{1f}: As assessed by the mean pretest and mean posttest scores on the personal subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

Table 7. Paired t-test data: TSCS self-satisfaction subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	+0.96	6.90	+0.74	0.466
Females	17	+3.41	6.03	+2.33*	0.033
Males	11	-2.82	6.68	-1.40	0.192
Ring toss group 1	9	+1.33	7.19	+0.56	0.593
Ring toss group 2	10	+1.20	6.65	+0.57	0.582
Ring toss group 3	9	+0.33	7.67	+0.13	0.899
Assertiveness treatment	30	+2.90	9.10	+1.75	0.091
Females	18	+4.17	9.21	+1.92	0.072
Males	12	+1.00	8.99	+0.39	0.707
Ring toss group 1	10	+1.00	6.93	+0.46	0.659
Ring toss group 2	9	+0.33	9.17	+0.11	0.916
Ring toss group 3	11	+6.73	10.20	+2.19	0.054
Females (all)	35	+3.80	7.72	+2.91**	0.006
Ring toss group 1	7	+3.29	6.73	+1.29	0.244
Ring toss group 2	14	+2.07	5.47	+1.42	0.180
Ring toss group 3	14	+5.79	9.88	+2.19*	0.047
Males (all)	23	-0.83	8.03	-0.49	0.626
Ring toss group 1	12	-0.08	6.91	-0.04	0.967
Ring toss group 2	5	-2.80	12.22	-0.51	0.635
Ring toss group 3	6	-0.67	7.34	-0.22	0.833
Ring toss group 1 (all)	19	+1.16	6.86	+0.74	0.471
Ring toss group 2 (all)	19	+0.79	7.72	+0.45	0.661
Ring toss group 3 (all)	20	+3.85	9.49	+1.81	0.086

*Significant at the .05 level.

**Significant at the .01 level.

Table 8. Paired t-test data: TSCS behavior subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-1.25	10.00	-0.66	0.514
Females	17	-3.41	11.02	-1.28	0.220
Males	11	+2.09	7.42	+0.93	0.372
Ring toss group 1	9	-1.00	9.31	-0.32	0.756
Ring toss group 2	10	+1.40	5.40	+0.82	0.433
Ring toss group 3	9	-4.44	14.05	-0.95	0.370
Assertiveness treatment	30	+0.23	8.61	+0.15	0.883
Females	18	+2.94	8.50	+1.47	0.160
Males	12	-3.83	7.32	-1.81	0.097
Ring toss group 1	10	-3.10	8.69	-1.13	0.288
Ring toss group 2	9	+0.56	6.31	+0.26	0.798
Ring toss group 3	11	+3.00	9.78	+1.01	0.333
Females (all)	35	-0.14	10.18	-0.08	0.934
Ring toss group 1	7	-4.43	9.29	-1.26	0.254
Ring toss group 2	14	+2.00	5.71	+1.31	0.213
Ring toss group 3	14	-0.14	13.56	-0.04	9.969
Males (all)	23	-1.00	7.81	-0.61	0.545
Ring toss group 1	12	-0.75	8.61	-0.30	0.769
Ring toss group 2	5	-1.80	5.17	-0.78	0.480
Ring toss group 3	6	-0.83	9.11	-0.22	0.832
Ring toss group 1 (all)	19	-2.11	8.80	-1.04	0.311
Ring toss group 2 (all)	19	+1.00	5.70	+0.77	0.454
Ring toss group 3 (all)	20	-0.35	12.16	-0.13	0.899

Table 9. Paired t-test data: TSCS physical subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	+1.00	5.13	+1.03	0.311
Females	17	+1.00	4.87	+0.85	0.410
Males	11	+1.00	5.75	+0.58	0.576
Ring toss group 1	9	-0.34	7.28	-0.14	0.894
Ring toss group 2	10	+2.30	3.59	+2.03	0.074
Ring toss group 3	9	+0.89	4.14	+0.64	0.537
Assertiveness treatment	30	+1.43	5.86	+1.34	0.191
Females	18	+2.44	5.91	+1.75	0.097
Males	12	-0.08	5.70	-0.05	0.960
Ring toss group 1	10	-0.40	6.28	-0.20	0.845
Ring toss group 2	9	+1.33	6.08	+0.66	0.529
Ring toss group 3	11	+3.18	5.29	+2.00	0.074
Females (all)	35	+1.74	5.40	+1.91	0.065
Ring toss group 1	7	-2.57	6.08	-1.12	0.306
Ring toss group 2	14	+2.71	4.89	+2.08	0.058
Ring toss group 3	14	+2.93	4.78	+2.29*	0.039
Males (all)	23	+0.44	5.62	+0.37	0.714
Ring toss group 1	12	+0.92	6.76	+0.47	0.648
Ring toss group 2	5	-0.60	4.04	-0.33	0.756
Ring toss group 3	6	+0.33	4.84	+0.17	0.873
Ring toss group 1 (all)	19	-0.37	6.58	-0.24	0.810
Ring toss group 2 (all)	19	+1.84	4.81	+1.67	0.112
Ring toss group 3 (all)	20	+2.15	4.83	+1.99	0.061

*Significant at the .05 level.

Table 10. Paired t-test data: TSCS moral-ethical subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-0.54	4.76	-0.60	0.556
Females	17	+0.06	4.78	+0.05	0.960
Males	11	-1.46	4.80	-1.00	0.339
Ring toss group 1	9	-2.56	5.18	-1.48	0.177
Ring toss group 2	10	+0.60	4.53	+0.42	0.685
Ring toss group 3	9	+0.22	4.44	+0.15	0.884
Assertiveness treatment	30	+2.10	6.10	+1.89	0.069
Females	18	+3.83	6.97	+2.33*	0.032
Males	12	-0.50	3.26	-0.53	0.606
Ring toss group 1	10	0.00	4.69	0.00	1.000
Ring toss group 2	9	+1.22	3.35	+1.10	0.305
Ring toss group 3	11	+4.73	8.15	+1.92	0.083
Females (all)	35	+2.00	6.22	+1.90	0.066
Ring toss group 1	7	-2.00	5.66	-0.94	0.386
Ring toss group 2	14	+1.43	4.40	+1.22	0.246
Ring toss group 3	14	+4.57	7.14	+2.39*	0.032
Males (all)	23	-0.96	4.01	-1.15	0.264
Ring toss group 1	12	-0.75	4.71	-0.55	0.592
Ring toss group 2	5	-0.60	1.52	-0.88	0.426
Ring toss group 3	6	-1.67	4.37	-0.93	0.393
Ring toss group 1 (all)	19	-1.21	4.96	-1.06	0.302
Ring toss group 2 (all)	19	+0.90	3.91	+1.00	0.332
Ring toss group 3 (all)	20	+2.70	6.97	+1.73	0.099

*Significant at the .05 level.

Hypothesis 1f is partially rejected. Subjects in the human relations group made a significant positive change in personal self-concept. Changes for all other groups were not significant. Results of the analyses are shown in Table 11.

Ho_{1g}: As assessed by the mean pretest and mean posttest scores on the family subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. Females in the assertiveness training group made a significant positive change in family self-concept, as did the subjects in ring toss group two within the assertiveness training group. The results of the analyses are presented in Table 12.

Ho_{1h}: As assessed by the mean pretest and mean posttest scores on the social subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. The analyses are presented in Table 13.

Ho_{1i}: As assessed by the mean pretest and mean posttest scores on the self-criticism subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. The results of the analyses are presented in Table 14.

Ho_{1j}: As assessed by the mean pretest and mean posttest scores on the total self-conflict subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. The results of the analyses are presented in Table 15.

Table 11. Paired t-test data: TSCS personal subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	+1.71	3.86	+2.35*	0.026
Females	17	+1.94	4.25	+1.88	0.078
Males	11	+1.36	3.33	+1.36	0.204
Ring toss group 1	9	+1.78	4.24	+1.26	0.244
Ring toss group 2	10	+1.80	3.52	+1.62	0.140
Ring toss group 3	9	+1.56	4.28	+1.09	0.307
Assertiveness treatment	30	+0.23	6.11	+0.21	0.836
Females	18	+1.39	6.05	+0.97	0.344
Males	12	-1.50	6.02	-0.86	0.407
Ring toss group 1	10	-1.10	4.73	-0.74	0.480
Ring toss group 2	9	-0.89	7.64	-0.35	0.736
Ring toss group 3	11	+2.36	5.78	+1.36	0.205
Females (all)	35	+1.66	5.18	+1.89	0.067
Ring toss group 1	7	+0.86	5.70	+0.40	0.704
Ring toss group 2	14	+1.07	4.95	+0.81	0.433
Ring toss group 3	14	+2.64	5.39	+1.84	0.089
Males (all)	23	-0.13	5.03	-0.12	0.902
Ring toss group 1	12	-0.08	4.10	-0.07	0.945
Ring toss group 2	5	-1.00	8.34	-0.27	0.802
Ring toss group 3	6	+0.50	4.18	+0.29	0.781
Ring toss group 1 (all)	19	+0.26	4.62	+0.25	0.807
Ring toss group 2 (all)	19	+0.53	5.83	+0.39	0.699
Ring toss group 3 (all)	20	+2.00	5.05	+1.77	0.092

*Significant at the .05 level.

Table 12. Paired t-test data: TSCS family subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-0.43	5.05	-0.45	0.657
Females	17	-0.06	5.33	-0.05	0.964
Males	11	-1.00	4.78	-0.69	0.503
Ring toss group 1	9	-1.44	5.22	-0.83	0.431
Ring toss group 2	10	+1.20	6.03	+0.63	0.545
Ring toss group 3	9	-1.22	3.56	-1.03	0.334
Assertiveness treatment	30	+1.50	5.86	+1.40	0.171
Females	18	+2.28	4.46	+2.17*	0.045
Males	12	+0.33	7.57	+0.15	0.882
Ring toss group 1	10	-1.30	5.58	-0.75	0.472
Ring toss group 2	9	+3.22	2.99	+3.23*	0.012
Ring toss group 3	11	+2.64	7.31	+1.20	0.259
Females (all)	35	+1.14	4.97	+1.36	0.183
Ring toss group 1	7	-0.43	6.16	-0.18	0.860
Ring toss group 2	14	+2.29	4.71	+1.83	0.093
Ring toss group 3	14	+0.79	4.69	+0.63	0.542
Males (all)	23	-0.30	6.28	-0.23	0.818
Ring toss group 1	12	-1.92	4.78	-1.39	0.192
Ring toss group 2	5	-1.80	5.68	-0.71	0.517
Ring toss group 3	6	-1.17	9.20	-0.31	0.769
Ring toss group 1 (all)	19	-1.37	5.21	-1.15	0.267
Ring toss group 2 (all)	19	+2.16	4.82	+1.95	0.067
Ring toss group 3 (all)	20	+0.90	6.11	+0.66	0.518

*Significant at the .05 level.

Table 13. Paired t-test data: TSCS social subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-0.68	6.00	-0.45	0.555
Females	17	-0.53	3.97	-0.55	0.590
Males	11	-0.91	8.48	-0.36	0.730
Ring toss group 1	9	+1.00	7.18	+0.42	0.687
Ring toss group 2	10	-1.30	4.24	-0.97	0.358
Ring toss group 3	9	-1.67	6.71	-0.75	0.477
Assertiveness treatment	30	+0.87	5.83	+0.81	0.422
Females	18	+2.22	5.00	+1.89	0.077
Males	12	-1.17	6.59	-0.61	0.552
Ring toss group 1	10	+0.40	5.30	+0.24	0.817
Ring toss group 2	9	-0.89	4.08	-0.65	0.531
Ring toss group 3	11	+2.73	7.30	+1.24	0.243
Females (all)	35	+0.89	4.97	+1.36	0.183
Ring toss group 1	7	+2.57	4.83	+1.41	0.208
Ring toss group 2	14	-0.57	3.56	-0.58	0.570
Ring toss group 3	14	+1.50	5.36	+1.05	0.314
Males (all)	23	-1.04	7.38	-0.23	0.818
Ring toss group 1	12	-0.42	6.65	-0.22	0.832
Ring toss group 2	5	-2.60	5.68	-1.13	0.320
Ring toss group 3	6	-1.00	10.84	-0.23	0.830
Ring toss group 1 (all)	19	+0.68	5.21	+0.49	0.630
Ring toss group 2 (all)	19	-1.11	4.05	-1.19	0.250
Ring toss group 3 (all)	20	+0.75	6.11	+0.66	0.518

Table 14. Paired t-test data: TSCS self-criticism subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	+0.50	4.03	+0.66	0.517
Females	17	+0.12	4.73	+0.10	0.920
Males	11	+1.09	2.74	+1.32	0.216
Ring toss group 1	9	+0.33	3.04	+0.33	0.751
Ring toss group 2	10	+0.50	5.28	+0.30	0.771
Ring toss group 3	9	+0.67	3.78	+0.53	0.611
Assertiveness treatment	30	+1.33	4.89	+1.49	0.146
Females	18	+1.17	5.40	+0.92	0.373
Males	12	+1.58	4.23	+1.30	0.221
Ring toss group 1	10	+0.50	3.44	+0.46	0.657
Ring toss group 2	9	+1.56	6.58	+0.71	0.498
Ring toss group 3	11	+1.91	4.81	+1.32	0.217
Females (all)	35	+0.66	5.04	+0.77	0.446
Ring toss group 1	7	+0.43	3.05	+0.37	0.723
Ring toss group 2	14	+0.72	6.57	+0.41	0.691
Ring toss group 3	14	+0.72	4.36	+0.61	0.550
Males (all)	23	+1.35	3.52	+1.83	0.080
Ring toss group 1	12	+0.42	3.37	+0.43	0.677
Ring toss group 2	5	+1.80	3.03	+1.33	0.255
Ring toss group 3	6	+2.83	4.17	+1.67	0.157
Ring toss group 1 (all)	19	+0.42	3.17	+0.58	0.570
Ring toss group 2 (all)	19	+1.00	5.78	+0.75	0.461
Ring toss group 3 (all)	20	+1.35	4.31	+1.40	0.177

Table 15. Paired t-test data: TSCS total self-conflict subscale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-2.18	9.41	-1.22	0.231
Females	17	-1.58	8.37	-0.78	0.445
Males	11	-3.09	11.21	-0.91	0.382
Ring toss group 1	9	-4.67	11.93	-1.17	0.274
Ring toss group 2	10	+3.20	8.44	-1.20	0.261
Ring toss group 3	9	+1.44	7.32	+0.59	0.570
Assertiveness treatment	30	+0.10	8.88	+0.06	0.951
Females	18	-0.11	10.04	-0.05	0.963
Males	12	+0.42	7.19	+0.20	0.845
Ring toss group 1	10	-0.20	9.62	-0.72	0.488
Ring toss group 2	9	+3.78	5.26	+2.15	0.063
Ring toss group 3	11	-0.82	10.23	-0.27	0.796
Females (all)	35	-0.83	9.16	-0.54	0.596
Ring toss group 1	7	-2.71	10.36	-0.69	0.514
Ring toss group 2	14	-0.43	8.95	-0.18	0.861
Ring toss group 3	14	-0.29	9.35	-0.11	0.911
Males (all)	23	-1.26	9.28	-0.65	0.522
Ring toss group 1	12	-3.75	11.09	-1.17	0.266
Ring toss group 2	5	+1.60	3.05	+1.17	0.306
Ring toss group 3	6	+1.33	8.38	+0.39	0.713
Ring toss group 1 (all)	19	-3.37	10.54	-1.39	0.181
Ring toss group 2 (all)	19	+0.11	7.80	+0.06	0.954
Ring toss group 3 (all)	20	+0.20	8.88	+0.10	0.921

Ho_2: As assessed by the mean pretest and mean posttest scores on the I-E Scale, there are no significant changes in locus of control expectancy within the treatment, sex, and ring toss groups.

Hypothesis 2 was partially rejected. A significant negative change was found for subjects in ring toss group two. A negative change represents a change in the direction of internal locus of control. No significant changes were found for any of the other groups. Results of the analyses are presented in Table 16.

Ho_3: As assessed by the mean pretest and mean posttest scores on the RAS, there are no significant changes in assertiveness within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject null hypothesis 3. Results of the analyses are presented in Table 17.

Ho_4: As assessed by the mean change scores on the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Analysis of the data resulted in insufficient evidence to reject null hypothesis 4. Results of this analysis are presented in Table 18.

Ho_{4a}: As assessed by the mean change scores on the identity subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

There was insufficient evidence to reject the null hypothesis. The analysis relative to this hypothesis is presented in Table 19.

Ho_{4b}: As assessed by the mean change scores on the self-satisfaction subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Table 16. Paired t-test data: I-E Scale

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-0.75	2.74	-1.45	0.160
Females	17	-0.59	2.83	-0.86	0.404
Males	11	-1.00	2.72	-1.22	0.251
Ring toss group 1	9	-0.67	2.45	-0.82	0.438
Ring toss group 2	10	-0.90	2.23	-1.27	0.235
Ring toss group 3	9	-0.67	3.71	-0.54	0.604
Assertiveness treatment	30	-0.53	2.60	-1.13	0.270
Females	18	-0.67	2.59	-1.09	0.290
Males	12	-0.33	2.71	-0.43	0.678
Ring toss group 1	10	+0.20	1.99	+0.32	0.758
Ring toss group 2	9	-1.78	2.91	-1.84	0.104
Ring toss group 3	11	-0.18	2.68	-0.23	0.826
Females (all)	35	-0.63	2.67	-1.39	0.173
Ring toss group 1	7	+0.43	2.57	+0.44	0.675
Ring toss group 2	14	-1.00	2.45	-1.53	0.151
Ring toss group 3	14	-0.79	2.97	-0.99	0.340
Males (all)	23	-0.65	2.67	-1.17	0.255
Ring toss group 1	12	-0.58	1.98	-1.02	0.328
Ring toss group 2	5	-2.20	2.86	-1.72	0.161
Ring toss group 3	6	+0.50	3.51	+0.35	0.741
Ring toss group 1 (all)	19	-0.21	2.20	-0.43	0.682
Ring toss group 2 (all)	19	-1.32	2.54	-2.26*	0.037
Ring toss group 3 (all)	20	-0.40	3.10	-0.58	0.571

*Significant at the .05 level.

Table 17. Paired t-test data: RAS

Group	N	Mean change	Standard deviation	t value	2-tail probability
Human relations treatment	28	-2.96	10.13	-1.55	0.133
Females	17	-2.82	9.79	-1.19	0.252
Males	11	-3.18	11.13	-0.95	0.365
Ring toss group 1	9	-0.22	9.85	-0.07	0.948
Ring toss group 2	10	-6.30	10.76	-1.85	0.097
Ring toss group 3	9	-2.00	9.79	-0.61	0.557
Assertiveness treatment	30	+2.07	15.93	+0.71	0.483
Females	18	+6.22	14.36	+1.84	0.084
Males	12	-4.17	16.72	-0.86	0.406
Ring toss group 1	10	-5.40	19.79	-0.86	0.411
Ring toss group 2	9	+4.89	12.79	+1.38	0.205
Ring toss group 3	11	+5.73	12.99	+1.46	0.174
Females (all)	35	+1.83	13.01	+0.83	0.411
Ring toss group 1	7	+5.14	15.81	+0.86	0.422
Ring toss group 2	14	-1.14	11.18	-0.38	0.708
Ring toss group 3	14	+3.14	13.61	+0.86	0.403
Males (all)	23	-3.70	14.01	-1.27	0.219
Ring toss group 1	12	-7.67	14.01	-1.88	0.087
Ring toss group 2	5	+1.20	18.78	+0.14	0.893
Ring toss group 3	6	+0.17	7.78	+0.05	0.960
Ring toss group 1 (all)	19	-2.95	15.69	-0.82	0.423
Ring toss group 2 (all)	19	-0.53	13.03	-0.18	0.862
Ring toss group 3 (all)	20	+2.25	12.03	+0.84	0.413

Table 18. Analysis of variance: TSCS total positive scale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	1993.39	498.35	1.30	0.285
Treatment	1	658.71	658.71	1.71	0.194
Sex	1	572.93	572.93	1.49	0.226
Ring toss	2	340.35	170.17	0.44	0.999
Treatment x sex	1	514.04	514.04	1.34	0.252
Treatment x ring toss	2	1016.11	508.06	1.32	0.276
Sex x ring toss	2	230.17	115.08	0.30	0.999
Treatment x sex x ring toss	2	351.61	175.81	0.46	0.999
Error	46	17689.72	384.56		

Table 19. Analysis of variance: TSCS identity subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	406.95	101.74	1.42	0.241
Treatment	1	159.59	159.59	2.23	0.139
Sex	1	45.38	45.38	0.63	0.999
Ring toss	2	127.18	63.59	0.89	0.999
Treatment x sex	1	87.95	87.95	1.23	0.273
Treatment x ring toss	2	50.29	25.15	0.35	0.999
Sex x ring toss	2	7.77	3.89	0.05	0.999
Treatment x sex x ring toss	2	59.42	29.71	0.42	0.999
Error	46	3292.70	68.84		

Hypothesis 4b was partially rejected. A significant difference in change scores on the self-satisfaction subscale was found between females and males. Females had a positive mean change score of 3.80, while males had a negative mean change score of 0.83. Results of the analysis are presented in Table 20.

Ho_{4c}: As assessed by the mean change scores on the behavior subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Analysis of data gathered to test hypothesis 4c resulted in rejection of the null hypothesis. A significant interaction between treatment and sex was found. Results of the analysis are presented in Table 21.

The interaction effects for treatment and sex are illustrated in Figure 2. Positive change scores on the behavior subscale were made by males in the human relations training group and by females in the assertiveness training group. Changes in the negative direction were found for females in the human relations group and for males in the assertiveness training group.

Ho_{4d}: As assessed by the mean change scores of the physical subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

There was insufficient evidence to reject the null hypothesis. Table 22 presents the results of the analysis.

Ho_{4e}: As assessed by the mean change scores on the moral subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Table 20. Analysis of variance: TSCS self-satisfaction subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	448.71	112.18	1.72	0.160
Treatment	1	47.02	47.02	0.72	0.999
Sex	1	292.27	292.27	4.49*	0.037
Ring toss	2	95.55	47.77	0.73	0.999
Treatment x sex	1	82.63	82.63	1.27	0.265
Treatment x ring toss	2	170.33	85.16	1.31	0.279
Sex x ring toss	2	13.45	6.73	0.10	0.999
Treatment x sex x ring toss	2	62.28	31.14	0.48	0.999
Error	46	2993.99	65.09		

*Significant at the .05 level.

Table 21. Analysis of variance: TSCS behavior subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	128.55	32.14	0.38	0.999
Treatment	1	36.37	36.37	0.43	0.999
Sex	1	0.04	0.04	0.00	0.999
Ring toss	2	86.22	43.11	0.51	0.999
Treatment x sex	1	496.58	496.58	5.90*	0.018
Treatment x ring toss	2	169.87	84.93	1.01	0.374
Sex x ring toss	2	103.12	51.56	0.61	0.999
Treatment x sex x ring toss	2	16.54	8.27	0.10	0.999
Error	46	3868.80	84.10		

*Significant at the .05 level.

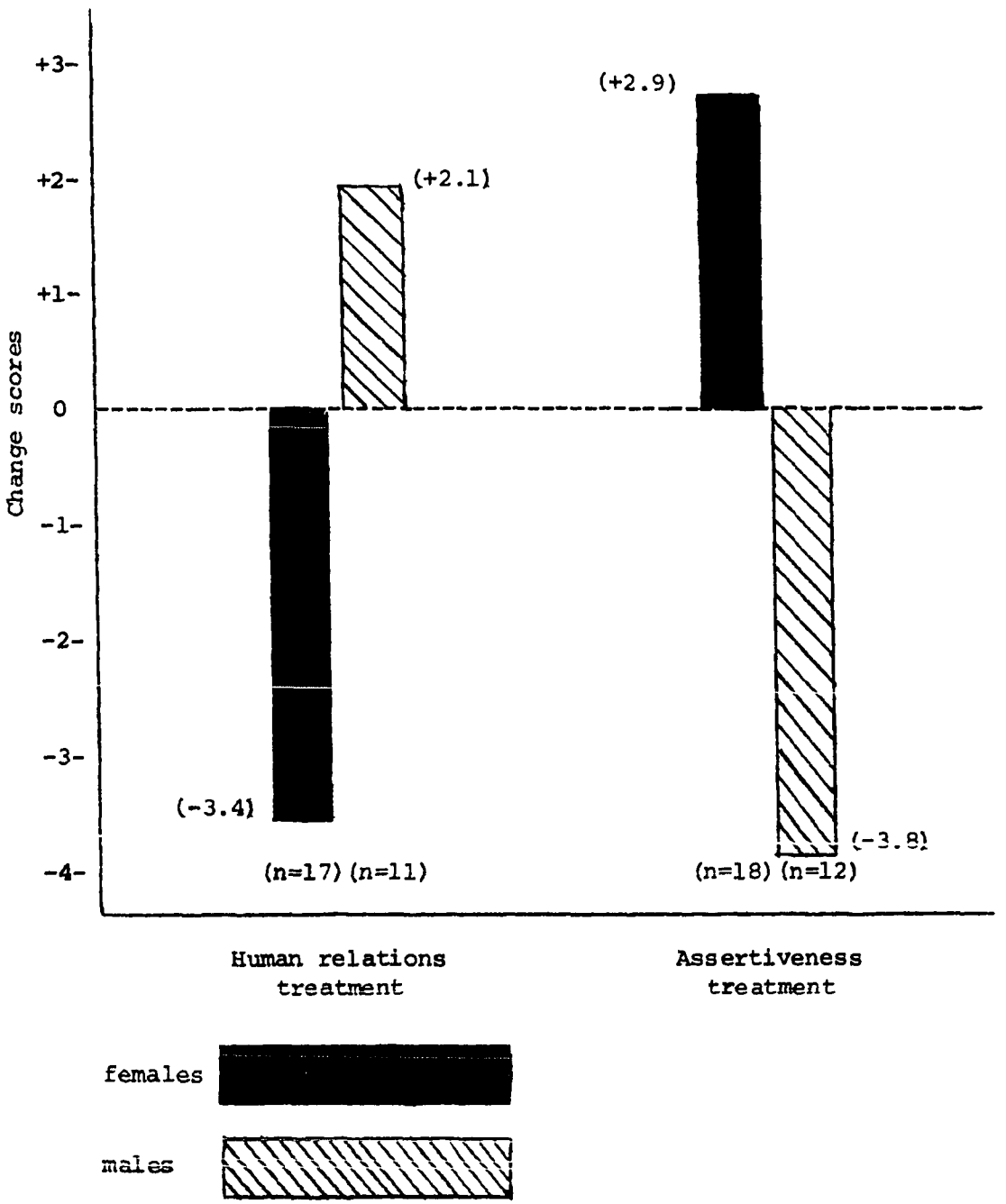

Figure 2. Treatment x sex interaction: change scores on the TSCS behavior subscale

Table 22. Analysis of variance: TSCS physical subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	80.29	20.07	0.68	0.999
Treatment	1	2.90	2.90	0.10	0.999
Sex	1	4.81	4.81	0.16	0.999
Ring toss	2	53.71	26.85	0.91	0.999
Treatment x sex	1	25.46	25.46	0.87	0.999
Treatment x ring toss	2	19.13	9.56	0.33	0.999
Sex x ring toss	2	113.39	56.70	1.93	0.155
Treatment x sex x ring toss	2	112.52	56.26	1.91	0.157
Error	46	1352.83	29.41		

There was insufficient evidence to reject the null hypothesis 4e. The combined main effects were significant. The difference between treatment groups on the moral-ethical change scores approached significance at the .064 level. The assertiveness training group had a positive change score on this subscale, and the human relations group had a small negative change score. Females had larger positive change scores than males, regardless of treatment group, and participants in ring toss groups two and three had larger positive change scores than participants in ring toss group one regardless of treatment group. Since each of the main effects is credited with only the incremental sum of squares that adds to the effects of the other, none of the main effects were significant. However, the additive effect as a whole was significant. The analysis is shown in Table 23.

Ho_{4f}: As assessed by the mean change scores on the personal subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

There was insufficient evidence to reject the null hypothesis. The results of the analysis are presented in Table 24.

Ho_{4g}: As assessed by the mean change scores on the family subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

There was insufficient evidence to reject the null hypothesis. Results of the analysis are shown in Table 25.

Ho_{4h}: As assessed by the mean change scores on the social self subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Table 23. Analysis of variance: TSCS moral-ethical subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	310.43	77.61	2.81*	0.036
Treatment	1	96.92	96.92	3.51	0.064
Sex	1	64.57	64.57	2.34	0.129
Ring toss	2	86.88	43.44	1.57	0.217
Treatment x sex	1	32.87	32.87	1.19	0.281
Treatment x ring toss	2	31.22	15.61	0.57	0.999
Sex x ring toss	2	119.27	59.63	2.16	0.125
Treatment x sex x ring toss	2	30.88	15.44	0.56	0.999
Error	46	1270.20	27.61		

*Significant at the .05 level.

Table 24. Analysis of variance: TSCS personal subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	104.15	26.04	0.89	0.999
Treatment	1	34.61	34.61	1.18	0.283
Sex	1	35.04	35.04	1.19	0.280
Ring toss	2	28.68	14.29	0.49	0.999
Treatment x sex	1	8.93	8.93	0.30	0.999
Treatment x ring toss	2	31.47	15.74	0.54	0.999
Sex x ring toss	2	2.07	1.04	0.04	0.999
Treatment x sex x ring toss	2	10.33	5.17	0.18	0.999
Error	46	1350.49	29.36		

Table 25. Analysis of variance: TSCS family subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	185.01	46.25	1.59	0.191
Treatment	1	59.81	59.81	2.06	0.155
Sex	1	3.76	3.76	0.13	0.999
Ring toss	2	101.49	50.75	1.75	0.184
Treatment x sex	1	1.25	1.25	0.04	0.999
Treatment x ring toss	2	29.45	14.73	0.51	0.999
Sex x ring toss	2	10.11	5.06	0.17	0.999
Treatment x sex x ring toss	2	172.15	86.08	2.96	0.060
Error	46	1336.04	29.04		

There was insufficient evidence to reject null hypothesis 4h. The results of the analysis are presented in Table 26.

Ho_{4i}: As assessed by the mean change scores on the self-criticism subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

There was insufficient evidence to reject the null hypothesis. Results of the analysis are presented in Table 27.

Ho_{4j}: As assessed by the mean change scores on the total self-conflict subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Hypothesis 4j was rejected. Three-way interaction effects were found between treatment, sex, and ring toss groups. Table 28 presents the results of the analysis. The interaction effects are shown in Figures 3 and 4.

A negative change score on the total self-conflict subscale is desired. Figures 3 and 4 show that in ring toss group one, males experiencing the human relations training and females experiencing the assertiveness training made the largest negative change in total self-conflict. In ring toss group two, females experiencing human relations training decreased in total self-conflict while females experiencing assertiveness training increased in total self-conflict. The reverse was true for males in ring toss group 3; males experiencing human relations training increased in total self-conflict while males experiencing assertiveness training decreased in total self-conflict.

Table 26. Analysis of variance: TSCS social subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	151.81	37.95	0.41	0.999
Treatment	1	30.27	30.27	0.81	0.150
Sex	1	79.14	79.14	2.10	0.999
Ring toss	2	64.95	32.48	0.86	0.999
Treatment x sex	1	10.08	10.08	0.27	0.999
Treatment x ring toss	2	52.61	26.30	0.70	0.999
Sex x ring toss	2	2.09	1.04	0.03	0.999
Treatment x sex x ring toss	2	33.62	16.81	0.45	0.999
Error	46	1730.29	37.62		

Table 27. Analysis of variance: TSCS self-criticism subscale

Sources of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	31.81	7.95	0.34	0.999
Treatment	1	9.86	9.86	0.42	0.999
Sex	1	13.39	13.39	0.57	0.999
Ring toss	2	15.25	7.63	0.33	0.999
Treatment x sex	1	0.39	0.39	0.02	0.999
Treatment x ring toss	2	2.64	1.32	0.06	0.999
Sex x ring toss	2	10.72	5.26	0.23	0.999
Treatment x sex x ring toss	2	21.72	10.86	0.46	0.999
Error	46	1076.37	23.40		

Table 28. Analysis of variance: TSCS total self-conflict subscale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	244.15	61.04	0.80	0.999
Treatment	1	77.92	77.92	1.02	0.319
Sex	1	7.58	7.58	0.10	0.999
Ring toss	2	166.15	83.08	1.09	0.346
Treatment x sex	1	13.96	13.96	0.18	0.999
Treatment x ring toss	2	199.41	99.70	1.31	0.280
Sex x ring toss	2	12.85	6.43	0.08	0.999
Treatment x sex x ring toss	2	768.04	384.02	5.03*	0.011
Error	46	3511.74	76.34		

*Significant at the .05 level.

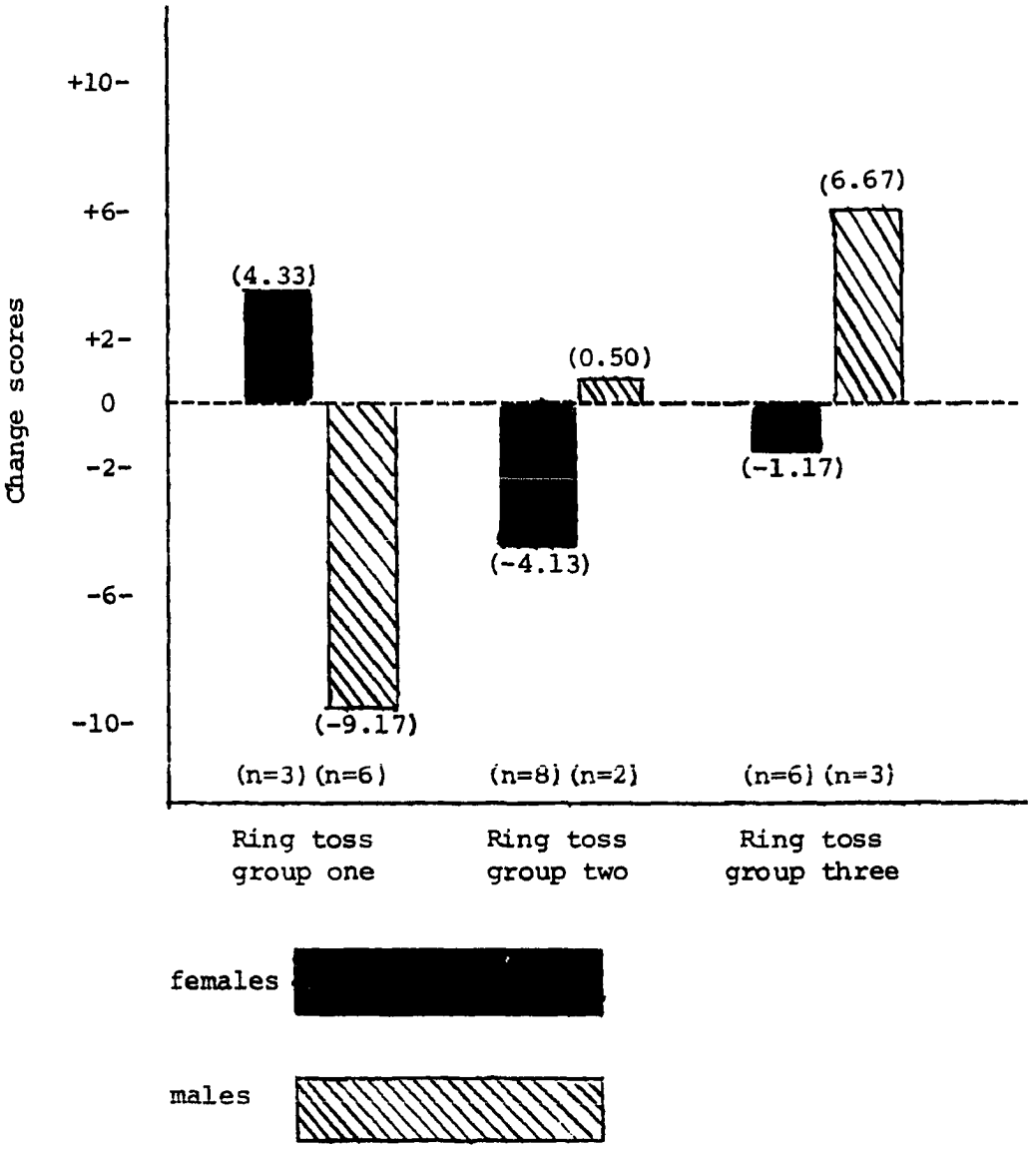

Figure 3. Sex x ring toss interaction with human relations group: change scores on the TSCS total self-conflict subscale

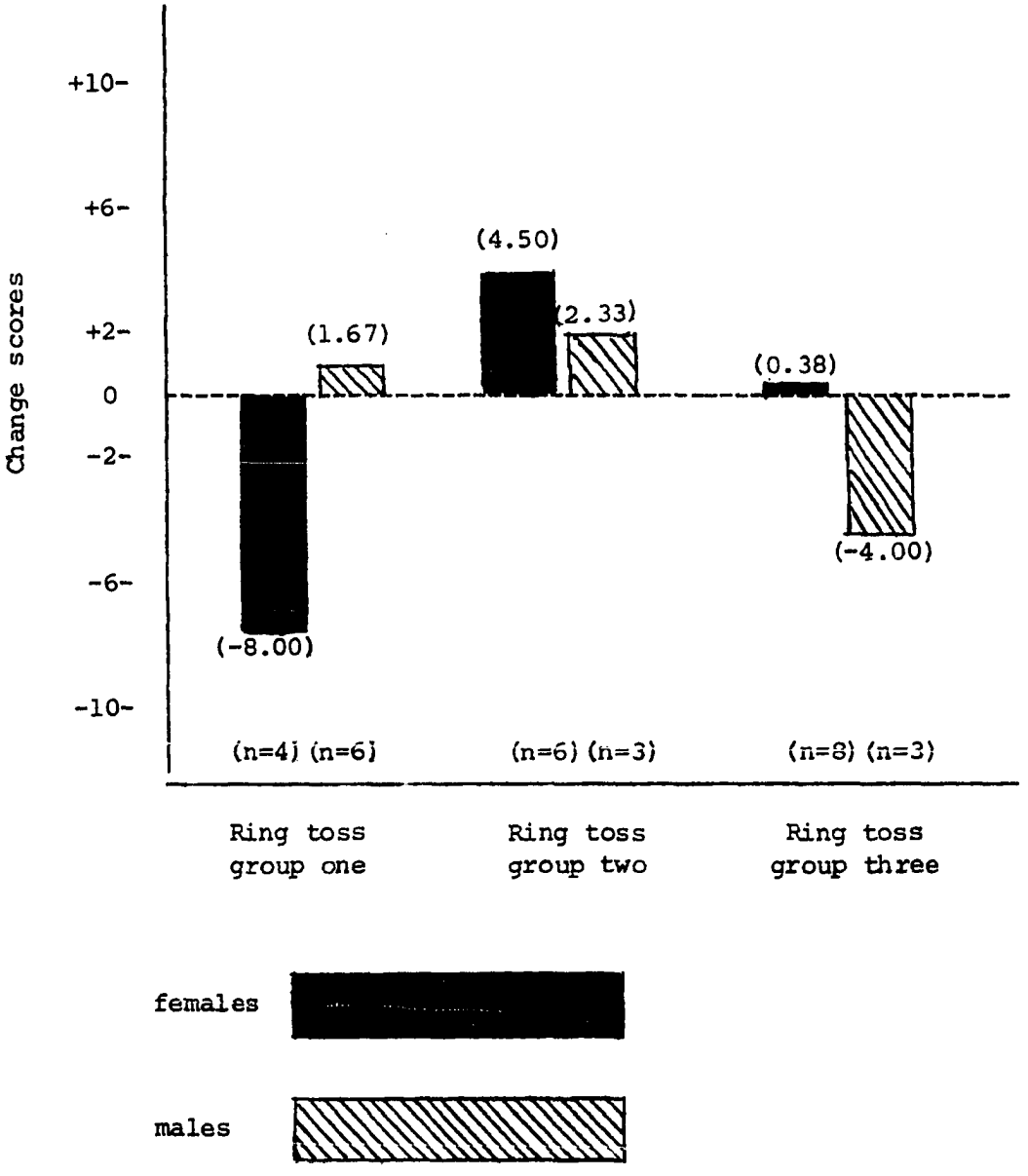

Figure 4. Sex x ring toss interaction with assertiveness group: change scores on the TSCS total self-conflict subscale

Ho_5: As assessed by the mean change scores on the I-E Scale, there are no significant differences in locus of control change between the two treatment groups, between females and males, and among ring toss groups.

There was insufficient evidence to reject the null hypothesis. The analysis of the results are presented in Table 29.

Ho_6: As assessed by the mean change scores on the RAS, there are no significant differences in assertiveness change between the two treatment groups, between females and males, and among the ring toss groups.

There was insufficient evidence to reject the null hypothesis. The results of the analysis are shown in Table 30.

A summary of the differences between pretest and posttest assessments for treatment, sex, and ring toss groups is presented in Tables 31 and 32. Differences approaching significance were made by females and by subjects in ring toss groups two and three. Table 31 presents these differences for the treatment group; Table 32 presents these differences for the subgroups within the treatment, sex, and ring toss groups.

Table 29. Analysis of variance: I-E Scale

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	14.71	3.68	0.49	0.999
Treatment	1	0.38	0.38	0.05	0.999
Sex	1	0.99	0.99	0.13	0.999
Ring toss	2	14.02	7.01	0.94	0.999
Treatment x sex	1	1.64	1.64	0.22	0.999
Treatment x ring toss	2	4.80	2.40	0.32	0.999
Sex x ring toss	2	14.25	7.63	1.02	0.370
Treatment x sex x ring toss	2	16.87	8.44	1.13	0.333
Error	46	343.66	7.47		

Table 30. Analysis of variance: RAS

Source of variation	d.f.	Sum of squares	Mean square	F-ratio	P
Main effects	4	916.23	229.06	1.42	0.241
Treatment	1	354.81	354.81	2.20	0.141
Sex	1	298.22	298.22	1.85	0.177
Ring toss	2	120.32	60.16	0.37	0.999
Treatment x sex	1	83.34	83.34	0.52	0.999
Treatment x ring toss	2	587.76	293.88	1.82	0.171
Sex x ring toss	2	421.48	210.74	1.31	0.280
Treatment x sex x ring toss	2	810.21	405.10	2.51	0.090
Error	46	7414.88	161.19		

Table 31. Summary of changes within treatment groups on the mean TSCS, I-E Scale, and RAS scores. Levels of significance are shown for all changes significant at the .10 level or beyond

Subgroups	Tennessee Self-Concept Scale											I-E Scale	RAS
	Total positive	Identity	Self-satisfaction	Behavior	Physical	Moral-ethical	Personal	Family	Social	Self-criticism	Total self-conflict		
Human relations training group							.026						
Assertiveness training group		.043	.091										

Table 32. Summary of changes within treatment, sex, and ring toss subgroups on the mean TSCS, I-E Scale, and RAS scores. Levels of significance are shown for all changes significant at the .10 level or beyond; *significant at the .05 level; **significant at the .01 level

	Tennessee Self-Concept Scale												
Subgroups	Total positive	Identity	Self-satisfaction	Behavior	Physical	Moral-ethical	Personal	Family	Social	Self-criticism	Total self-conflict	I-E Scale	RAS
Human relations training													
Females			.033*				.078						
Males													
Ring toss group 1													
Ring toss group 2					.074								.097
Ring toss group 3													
Assertiveness training													
Females	.020*	.009**	.072		.097	.032*		.045*	.077				.084
Males				.097									
Ring toss group 1													
Ring toss group 2								.012*			.063		
Ring toss group 3	.067	.041*	.054		.074	.083							
Female subgroups													
Ring toss group 1													
Ring toss group 2	.068				.058			.093					
Ring toss group 3		.079	.047*		.039*	.032*	.089						
Male subgroups													
Ring toss group 1													.087
Ring toss group 2													
Ring toss group 3													

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Two structured training programs were examined to assess participant changes in self-concept, locus of control expectancy, and assertiveness. The two programs were human relations training and assertiveness training. Subjects were classified by gender and by their performance on a ring toss activity. The ring toss activity was used to assess the subjects' fear of failure.

Six general null hypotheses with twenty subhypotheses were tested. Hypotheses one, two, and three were designed to test differences between mean pretest scores and mean posttest scores on the criterion variables. Paired t-tests were used to analyze data relative to these hypotheses. Hypotheses four, five, and six were designed to test differences in mean change scores between treatment groups, between females and males, and among ring toss groups on the criterion variables. Three-way analysis of variance was used to analyze data for hypotheses four, five, and six.

In the first section of this chapter the findings for each of the general hypotheses will be summarized. Following this section will be the conclusions made from the study and the recommendations for future studies.

> Ho_1: As assessed by the mean pretest and mean posttest scores on the TSCS, there are no significant differences in self-concept within the treatment, sex, and ring toss groups.

The null hypothesis was partially rejected. Significant change in the positive direction (higher posttest mean score than pretest mean score) was made by the human relations training group on the personal self subscale of the TSCS and by the assertiveness training group on the

identity subscale of the TSCS. There was insufficient evidence to reject the null hypothesis for either of the training groups on the other subscales of the TSCS. However, positive changes by the assertiveness training group approached significance on the self-satisfaction and moral-ethical subscales of the TSCS.

Females made a significant positive change on the self-satisfaction subscale of the TSCS. Positive changes by females approached significance on the total positive scale and on the identity, physical, moral, and personal subscales. None of the mean change scores made by males approached significance.

Analyses of the mean pretest and mean posttest scores on the TSCS for females and males within the treatment groups showed that females contributed the most to the positive mean changes in the treatment groups. Females in the assertiveness training group made a significant positive change on the total positive scale and on the identity, moral, and family subscales of the TSCS.

None of the differences between mean pretest and mean posttest scores made by males in either of the two training groups were significant.

None of the differences between mean pretest and mean posttest scores on the TSCS made by the ring toss groups were significant. However, significant positive changes were made by assertiveness training participants and by females within ring toss groups two and three. Assertiveness training participants in ring toss group two made a significant positive change on the family subscale.

Assertiveness training participants in ring toss group three made a significant positive change on the identity subscale and females in ring

toss group three made significant positive changes on the self-satisfaction, physical, and moral subscales of the TSCS.

Ho_2: As assessed by the mean pretest and mean posttest scores on the I-E Scale, there are no significant changes in locus of control expectancy within the treatment, sex, and ring toss groups.

Hypothesis two was partially rejected. A significant change in the direction of internal control expectancy was made by subjects in ring toss group two. No significant changes were made by the treatment groups or by females and males across treatment groups; however, mean scores for all groups changed in the direction of internal control expectancy.

Ho_3: As assessed by the mean pretest and mean posttest scores on the RAS, there are no significant changes in assertiveness within the treatment, sex, and ring toss groups.

There was insufficient evidence to reject the null hypothesis. A positive change in mean score from pretest to posttest approaching significance was made by females within the assertiveness group.

Ho_4: As assessed by the mean change scores on the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Hypothesis four was partially rejected. Significant differences in change scores were found between females and males on the self-satisfaction subscale of the TSCS. Females had a positive change score and males had a small negative change score on this subscale. The difference between treatment groups on mean change scores for the moral-ethical subscale approached significance. The assertiveness training group had a positive mean change score and the human relations group had a negative mean change score on this subscale.

On the behavior subscale of the TSCS a significant interaction was found between treatment and sex. Positive change scores were made by males in the human relations training group and by females in the assertiveness training group. Negative change scores were made by females in the human relations training group and by males in the assertiveness training group.

A significant three-way interaction between treatment, sex, and ring toss groups was found on the total self-conflict subscale of the TSCS.

Ho_5: As assessed by the mean change scores on the I-E Scale, there are no significant differences in locus of control expectancy between the two treatment groups, between females and males, and among ring toss groups.

There was insufficient evidence to reject the null hypothesis.

Ho_6: As assessed by the mean change scores on the RAS, there are no significant differences in assertiveness between the two treatment groups, between females and males, and among the ring toss groups.

There was insufficient evidence to reject the null hypothesis.

Conclusions

The desired outcomes of both training programs were a more positive self-concept, a stronger internal locus of control expectancy, and increased assertiveness by the training participants. The conclusions made from this study will be discussed in relation to these training outcomes.

More positive self-concept

Females in both training programs made changes toward a more positive self-concept. This was particularly evident for females in the

assertiveness training group. There was a lack of significant change in self-concept by males in either of the training groups. This difference cannot be easily explained. A similar finding was reported by Stevens (1974) in a study of group therapy with potential college dropouts. Females increased significantly in self-esteem as assessed by the Pierce-Harris Children's Self-Concept Scale but males did not. Stevens attributed this finding to females being more willing to express thoughts and feelings, more receptive to new data, more tolerant of criticism, and more willing to defer to the opinions of others than males. This observation by Stevens was similar to the observation by group leaders in this study. Group leaders in both training groups observed that females seemed more interested and involved in the training activities than did males.

A greater involvement by females than males in the training groups is consistent with Maccoby and Jacklin's (1974) review of sex differences. Females generally perceive themselves as more socially competent than males and have more ego involvement in social areas than males. Since the activities in the two training programs were interpersonal in nature, females may have made a greater investment in the training than males.

The greater interest and involvement by females may also have been because females perceived the training as having more value than did males. In both of the training programs the establishment and maintenance of satisfactory interpersonal relations were emphasized. The literature suggests that females place a relatively higher value on affiliation than do males (Maccoby & Jacklin, 1974; O'Leary, 1974; Oliver, 1975). The positive change in self-concept by females, particularly by females in the assertiveness training group, would seem to be at least partially

explained by a greater interest and involvement in the training and subsequent positive reinforcement by peers and group leaders.

Although both training programs emphasized the establishment and maintenance of satisfactory human relationships, the training programs differed considerably in content and orientation. This difference is consistent with the differences in subscale changes on the TSCS made by females in the two training groups. The only significant difference between pretest and posttest mean scores on the TSCS for females in the human relations training group was on the self-satisfaction subscale. A positive change indicates a stronger degree of acceptance or satisfaction with self (Fitts, 1965). The human relations training included many value clarification activities which would allow for exploration of values and beliefs within an accepting environment. This setting would seem to especially promote a feeling of self-satisfaction.

The females in the assertiveness training group had significantly higher mean posttest scores than mean pretest scores on the identity, moral, and family subscales, as well as on the total positive scale of the TSCS. The identity subscale contains items describing how an individual perceives himself. The moral and family subscales contain items describing the self in terms of moral worth and feelings of adequacy, worth, and value as a family member, respectively (Fitts, 1965). The assertiveness training included behavior rehearsal for specific situations. Included were moral-ethical and family situations which may have affected the self-descriptions on the moral-ethical and family subscales of the TSCS. The more positive description of self by females in the assertiveness training group on the identity subscale indicates

that change toward a more positive self-concept after training was mostly due to more positive descriptions of self from a moral-ethical and a family member frame of reference.

The significant interaction effects on the behavior subscale of the TSCS may also be the result of differences between the training groups in both the orientation and content of the training. The behavior subscale assesses the individual's perception of the way he functions (Fitts, 1965). Females in the assertiveness training group made a positive change on the behavior subscale, while females in the human relations group made a negative mean change on this subscale. In the assertiveness training program the assertion of control over one's time, possessions, and body, and the right to intervene when treated unfairly provided the orientation for behavior rehearsal in various interpersonal situations. This orientation was not emphasized in the human relations training. The positive reinforcement for the assertion of rights in the assertiveness training group may have caused the females in this group to describe their behavior in more positive terms than females in the human relations training group where the assertion of rights was not necessarily reinforced.

Differences between males in the two treatment groups on the behavior subscale of the TSCS may also be due to the orientation and content of the training. Males in the assertiveness training group changed toward a more negative self-description on the behavior subscale. Some of the behavior rehearsal situations in the assertiveness training placed females in a more assertive role with males than is typically encountered, e.g., assertive refusal by a female when asked for a date and the assertive request for a date by a female. The active participation by females in

assertive behavior rehearsal may have caused males to evaluate their behavior in more negative terms.

Although no assessment of aggressiveness was made in this study, males generally are more aggressive than females during adolescence (Maccoby & Jacklin, 1974). Assertiveness, rather than aggression, was encouraged and supported in the assertiveness training group. Males in the assertiveness group may have become more aware of the aggressive aspects of their behavior and evaluated these aspects negatively.

Differences in mean change scores on the TSCS between the two training groups could also have been affected by differences in group leadership. Group leadership was not controlled in this study. In the human relations training group both of the leaders were male, while in the assertiveness training group one of the leaders was female and one was male. However, empirical support showing that the sex of the leader affects training outcomes for female or male subjects is lacking. In a study specifically designed to analyze the effects of the sex of the leader in assertiveness training with women, Hall (1976) concluded that assertiveness training outcomes were not significantly affected by the sex of the leader.

A final factor which could explain some of the change in self-concept by females in the assertiveness training is regression toward the mean. Females in the assertiveness training group had a lower pretest mean score on the TSCS positive scale than females in the human relations training group or males in either of the two treatment groups. However, females in the assertiveness group had a higher mean posttest score on the TSCS total positive scale than either females in the human relations group or

males in either of the two treatment groups. Although some regression toward the mean could be expected, the complete reversal in relative position on the mean score from pretest to posttest could not be explained by regression.

Thus, the two factors which seemed to be the most important contributors to the positive change in self-concept by females were a stronger interest and involvement in training by females and a training program in which the orientation and content were more relevant to females than to males. The greater interest and involvement by females could be because a higher value was placed on affiliation by the females than by the males.

The analyses of changes in self-concept by subjects within the ring toss groups showed that no significant changes in self-concept were made by subjects in ring toss group one. This finding was unexpected. According to the classification made on the basis of differences between performance and aspiration on a ring toss task, subjects in ring toss group one would have been more motivated by the motive to achieve and less by fear of failure than subjects in the other two ring toss groups. Previous studies have supported a relationship between a strong motive to achieve and high academic achievement (Atkinson & Litwin, 1960; Spielberger, 1962). A similar relationship between high motive to achieve and successful learning of the skills included in the two training programs was expected in this study. Resulting success experiences were expected to have a positive influence on the subject's self-concept.

An examination of the number of females and males in the ring toss groups (Table 4) shows that a large majority of the subjects in ring toss

groups two and three were females. Thus the finding of significant changes by assertiveness training participants and females in ring toss groups two and three appear to be a repetition of the findings discussed for females. However, the fact that the classification of subjects resulted in significant differences in the proportion of females within the ring toss groups, higher than would be expected,[1] merits closer attention to the changes in self-concept made by subjects within the ring toss groups. Previously it was suggested that the orientation and content of the training programs may have been more relevant for females than for males. Subjects were not screened prior to the training programs and therefore were not selected on the basis of an expressed need for the training. Nonassertive subjects could be expected to benefit more from the assertiveness training than subjects who perceived themselves as being highly assertive. Although females had lower scores (less assertive) on the RAS pretest than males, the difference was not significant. A signigicant difference between mean pretest RAS scores did occur among the ring toss groups. The mean RAS pretest scores for ring toss groups one, two, and three were 18.63, 10.26, and 1.40, respectively. The difference in mean RAS pretest scores between ring toss group one and ring toss group three was significant beyond the .01 level. Thus, subjects in ring toss group three described themselves as less assertive than subjects in ring toss group one prior to training and, therefore, could be expected to benefit more from assertiveness training.

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[1]The raw chi square test yielded significant differences in the proportion of female subjects included in the three ring toss groups at the .04 level.

A significant three-way interaction between treatment, sex, and ring toss groups was found on the total self-conflict subscale of the TSCS. This interaction is illustrated in Figures 3 and 4 on pages 97 and 98. A negative mean change score indicates less confusion, contradiction, and conflict in self-perception at the end of the treatment. Differences in the mean self-conflict scores between ring toss groups were greater for males than females in the human relations training. Males in ring toss group one who participated in human relations training had negative change scores indicating less self-conflict, while males in ring toss group three had positive change scores indicating more self-conflict at the end of the training. In the assertiveness training program females in ring toss group one showed the most change. Change scores by females in ring toss group one indicated that they experienced less self-conflict at the end of the training. This interaction effect means that females and males within the ring toss groups were affected differently by the two training programs on the total self-conflict subscale. However, the small number of subjects within each subgroup and the lack of significant changes in self-conflict by any of the subgroups involved in the interaction prevent further conclusions from being made.

Stronger internal locus of control expectancy

An internal locus of control expectancy is the perception that one's behavior is the major determinant of the reinforcements received in any situation. Subjects in both training groups, females and males, and subjects in each of the ring toss groups had mean change scores on the I-E Scale in the direction of internal locus of control expectancy.

However, only the changes by subjects in ring toss group two were significant. The trend by all groups towards an internal locus of control expectancy suggests that a longer training period may have resulted in significant changes by the treatment groups. Smith (1973), in a study of an achievement motivation program conducted over a five month period, reported that adolescent female and male participants made significant changes toward an internal control expectancy. However, the longer treatment period increases the probability that changes in locus of control expectancy may be due to maturation. Subjects may be expected to change in the direction of internal locus of control as they increase in age (Staats, 1974). In a study of group counseling with precollege students, Patton (1975) reported that female subjects in both experimental and control groups became more internal; the change was unrelated to the treatment.

Increased assertiveness

Although significant differences in mean change scores between treatment groups did not occur, the mean change score for the assertiveness training group was in the direction of increased assertiveness. The direction of change for the human relations training group was toward nonassertiveness. Within the assertiveness training group females made a positive change (more assertive) while males made a change in the negative direction. The difference between females in the assertiveness group and females in the human relations group on the mean RAS change score was significant beyond the .05 level.

The change in the direction of nonassertiveness by the males in the

assertiveness training group may be attributed to their relatively high degree of assertiveness at the beginning of the training period. Males in the assertiveness training group had a mean RAS of 19.5 on the pretest which compares with means of 0.29 and 1.62 reported by Rathus (1972) in a sample of college undergraduate students. The standard deviations for the two administrations were 29.12 and 27.63, respectively. A regression towards the mean could be expected by subjects scoring as high above the mean as the males in this study did on the pretest administration.

The subjects were not screened prior to the beginning of the training groups, and many of the subjects probably did not feel a need for either of the training programs. Many of the subjects included in the assertiveness training program may not have had a need to become more assertive.

Conclusions relative to effects of the two training programs on self-concept, locus of control expectancy, and assertiveness are listed below.

1. Females changed toward a more positive self-concept. This was true in both treatment groups.
2. Females in the human relations training program expressed more satisfaction with self after the treatment than before.
3. Females in the assertiveness training program described themselves in more positive terms after the treatment than before. This change was particularly significant when they described themselves from a moral frame of reference and as a family member.
4. The differences in content and orientation of the two training programs contributed to the interaction effect between treatment and sex on the behavior subscale of the TSCS. The more accepting atmosphere in the human relations training group may

have reinforced current ways of behaving, while the assertiveness training reinforced the practice of new behaviors. Male attributes such as strength, power, and dominance are generally valued higher by both males and females than female attributes such as cooperation, sympathy, and social skills (Maccoby & Jacklin, 1974; O'Leary, 1974). The encouragement and support for practicing more assertive behavior in the assertiveness training group may have helped females to perceive themselves as stronger, more powerful, and more dominant. Possession of these valued attributes would then influence their self-descriptions positively.

5. The ring toss classification of subjects according to their fear of failure was not a successful predictor of skill achievement in the two training programs. However, the classification was related to the subjects' self-descriptions of assertiveness. Subjects with the highest estimates of future performance compared to actual performance (ring toss group one) described themselves as more assertive than subjects with the lowest estimates of future performance compared to actual performance (ring toss group three).

6. Self-conflict changes for females and males within the ring toss groups were different for human relations training participants than for assertiveness training participants. In the human relations group a change toward less self-conflict was made by males in ring toss group one and by females in ring toss group two. A change toward more self-conflict was made by females in

ring toss group one and by males in ring toss group three. In the assertiveness group a change toward less self-conflict was made by females in ring toss group one and by males in ring toss group three. A change toward more self-conflict was made by both females and males in ring toss group two.

7. Subjects did not change significantly in locus of control expectancy, regardless of the experiential training program.
8. Subjects did not change significantly in assertiveness, regardless of the experiential training program.
9. The change toward more assertiveness by females in the assertiveness training group was significantly greater than the assertiveness change by females in the human relations group.

Recommendations

Further evaluation of structured training groups in psychological education is needed to ascertain their effectiveness with different populations and to identify the variables which influence the outcomes of such programs. The specific recommendations for future studies made in this section concern selection of subjects, design, and instrumentation.

The appropriateness of the training for some of the subjects was questioned in this study. Subjects who were passive or aggressive prior to assertiveness training probably benefited more from the training than subjects who were relatively assertive. No assessment of aggression was made in this study. Theoretically, both passive and aggressive subjects will improve their concept of self through the learning of assertiveness skills. It is recommended that future studies provide for an assessment

of the relative passivity and aggression of the subjects prior to training. Classifications made on the basis of these assessments could then be used as independent variables and the effectiveness of the training for subjects within each classification could be studied.

Two changes in the design of this study are recommended for future studies. First, an effort should be made to minimize the portion of variance due to differences in group leadership. This might be done by having the same leaders for two or more different kinds of training, or by replicating the treatments and systematically accounting for the group leadership variable.

Another improvement in design would be the addition of a control group. Factors such as history and maturation, which might interact with the treatment, could be controlled. The addition of more groups so the effects of pretesting could be controlled would also be desirable.

A third recommendation is the use of behavioral measures in addition to self-report assessments. The validity of self-report data is questionable (Wylie, 1961). Therefore, alternative measures should be employed as dependent variables.

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ACKNOWLEDGMENTS

I wish to thank the members of my graduate committee, and especially Dr. Gordon Hopper, for guidance and assistance during the research and throughout my graduate program. I would also like to express my appreciation to Dr. Dominick Pellegreno for his assistance during my graduate program and to Dr. Anton Netusil for his assistance with the research design and statistical analysis used in this study.

I am also very appreciative of the support and patience given me by my family and for their special contributions which helped me complete my study.

APPENDIX A: COMPLETE LIST OF NULL HYPOTHESES

Ho_1: As assessed by the mean pretest and mean posttest scores on the Tennessee Self-Concept Scale (TSCS), there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

a. As assessed by the mean pretest and mean posttest scores on the identity subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

b. As assessed by the mean pretest and mean posttest scores on the self-satisfaction subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

c. As assessed by the mean pretest and mean posttest scores on the behavior subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

d. As assessed by the mean pretest and mean posttest scores on the physical subscale of the TSCS there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

e. As assessed by the mean pretest and mean posttest scores on the moral-ethical subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

f. As assessed by the mean pretest and mean posttest scores on the personal subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

g. As assessed by the mean pretest and mean posttest scores on the family subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

h. As assessed by the mean pretest and mean posttest scores on the social subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

i. As assessed by the mean pretest and mean posttest scores on the self-criticism subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

j. As assessed by the mean pretest and mean posttest scores on the total self-conflict subscale of the TSCS, there are no significant changes in self-concept within the treatment, sex, and ring toss groups.

Ho_2: As assessed by the mean pretest and mean posttest scores on the I-E Scale, there are no significant changes in locus of control within the treatment, sex, and ring toss groups.

Ho_3: As assessed by the mean pretest and mean posttest scores on the Rathus Assertiveness Schedule (RAS), there are no significant changes in assertiveness within the treatment, sex, and ring toss groups.

Ho_4: As assessed by the mean change scores on the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

a. As assessed by the mean change scores on the identity subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

b. As assessed by the mean change scores on the self-satisfaction subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

c. As assessed by the mean change scores on the behavior subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

d. As assessed by the mean change scores on the physical subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

e. As assessed by the mean change scores on the moral-ethical subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

f. As assessed by the mean change scores on the personal subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

g. As assessed by the mean change scores on the family subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

h. As assessed by the mean change scores on the social subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

i. As assessed by the mean change scores on the self-criticism subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

j. As assessed by the mean change scores on the total self-conflict subscale of the TSCS, there are no significant differences in self-concept change between the two treatment groups, between females and males, and among the ring toss groups.

Ho_5: As assessed by the mean change scores on the I-E Scale, there are no significant differences in locus of control change between the two treatment groups, between females and males, and among the ring toss groups.

Ho_6: As assessed by the mean change scores on the RAS, there are no significant differences in assertiveness change between the two treatment groups, between females and males, and among the ring toss groups.

APPENDIX B: INFORMATION GIVEN TO SUBJECTS

During the next three weeks you are scheduled to receive instruction in human relations skills. This year you will be randomly assigned to one of two groups for this training. The groups will differ in the kind of human relations instruction received.

You will be asked to complete inventories before the groups begin and after completion of the human relations training. The first of these inventories is the Tennessee Self-Concept Scale containing statements to help you describe yourself as you see yourself. The second inventory is the I-E Scale designed to find out how you perceive important events in our society. The final inventory also contains a series of statements for you to respond to in terms of how descriptive these statements are of you.

These inventories are a part of a research study which I am doing. They will be used to help assess the human relations instruction. The inventories will not be used to evaluate your individual participation and in no way will affect your grade. Your individual inventory results will not be shared with anyone else, not even your teachers. After scoring the inventories (upon completion of the human relations instruction) you will have an opportunity to discuss your individual results with me. I will then record the scores without identifying the names of individuals.

You will also be asked to participate in a ring toss activity. In this activity, you will toss rings to see how many ringers you can make, and also guess the number of ringers you will make on subsequent tries.

After all of you have completed this activity, I will explain more about it.

If any of you have questions about this study, please see me. If any of you would rather not take the inventories, you will not be required to do so.

APPENDIX C: INSTRUCTIONS GIVEN FOR RING TOSS ACTIVITY

1. Here are five rings. Stand behind this line and try to ring the stake setting on this table as many times as you can in twenty attempts. I will retrieve the rings for you and keep a count of the number of ringers you make. (The distance from the line to the stake was six feet.)
2. Now, estimate how many ringers you would make in another twenty attempts.
3. Go ahead and see how many ringers you can make this time. You will have twenty attempts this time also.
4. Now, estimate how many ringers you would make in a third attempt of twenty tosses.

APPENDIX D: CLASSIFICATION PROCEDURE USED TO FORM THE RING TOSS GROUPS

In Figure 5 below, the performance of subjects within each ring toss group is shown. Four scores are shown for each subject. The first and third scores shown are the number of ringers made in the first and second set of twenty tosses, respectively. The second and fourth scores given are the estimates of the number of ringers which would be made on the second and third set of twenty tosses. However, the subjects did not go ahead with a third set of twenty tosses.

Group 1				Group 2				Group 3			
T_1	E_1	T_2	E_2	T_1	E_1	T_2	E_2	T_1	E_1	T_2	E_2
1	5	1	3	3	3	0	2	1	2	5	4
3	5	8	12	3	5	5	6	3	4	3	3
4	6	7	9	3	5	5	6	7	7	6	6
12	15	11	12	6	7	3	5	8	8	5	6
9	11	11	13	7	6	2	6	3	4	4	4
5	7	6	8	9	10	8	9	4	4	5	5
6	8	7	10	7	9	4	4	7	5	1	1
2	5	4	6	1	3	3	4	4	5	1	1
2	7	3	5	4	5	2	5	2	2	12	10
9	14	10	10	3	5	4	4	0	1	2	2
5	8	6	7	2	4	4	3	1	1	2	2
0	4	0	3	1	2	5	7	7	8	10	10
3	5	6	8	2	4	11	8	2	2	7	6
4	10	10	13	2	5	9	9	1	2	5	3
4	6	3	5	3	4	5	7	3	3	3	3
5	7	4	6	8	9	7	10	9	10	11	11
8	10	6	9	7	10	10	8	4	4	4	4
7	9	6	9	7	10	7	7	3	3	4	5
6	9	9	10	7	9	13	14	12	12	12	12
								9	10	11	11

T_1 = Number of ringers in first set of twenty tosses.
E_1 = Number of ringers estimated for second set of twenty tosses.
T_2 = Number of ringers in second set of twenty tosses.
E_2 = Number of ringers estimated for third set of twenty tosses.

Figure 5. Performance and estimates by subjects in the three ring toss groups

The classification procedure was based on the formula $(E_1 + E_2) - (T_1 + T_2)$. For example, the subject making one ringer on each set of twenty tosses and estimating five and three ringers, respectively, for the second and third set of twenty tosses would receive a composite score of 6 [(5 + 3) - (1 + 1) = 6]. In addition, the first estimate was given added importance in ring toss group one by including only subjects with an initial estimate of two or more ringers above the number of ringers made in the initial trial ($E_1 - T_1 \geq 2$). In ring toss group three, only subjects with an initial estimate less than two ringers above the number of ringers made in the first trial were included. Thus, the scores for subjects in each of the three ring toss groups satisfied the following conditions:

Ring toss group 1: $(E_1 + E_2) - (T_1 + T_2) \geq 4$ and $E_1 - T_1 \geq 2$.

Ring toss group 2: all subjects not included in ring toss groups one and two.

Ring toss group 3: $(E_1 + E_2) - (T_1 + T_2) \leq 1$ and $E_1 - T_1 \leq 2$.

APPENDIX E: SUMMARY DESCRIPTION OF HUMAN RELATIONS TREATMENT

1st day:

1. Name game -- a name of some famous person was taped on the back of each group member. Each member circulated among the group, and asked questions of other members in an attempt to identify the name taped on his/her back.

2. Discussion about human relations -- leaders led a group discussion about the meaning and importance of practicing effective human relation skills on the job. Group members shared examples of attitudes and behaviors illustrating "good" and "bad" human relations in a work setting.

2nd day:

1. Broken squares activity -- leaders organized small groups of five members with one or two observers for each group. Each group member was given several cardboard pieces. The small groups were instructed to form five squares of equal size with the pieces. Members were not allowed to speak or give signals to other members. After the groups completed the task, the members discussed how they felt during the activity. Observations were solicited from the observers.

2. Lecture/discussion -- leaders presented a lecture about the employers' concern for good human relations among workers. After the lecture, the leaders initiated group discussion by asking the group members the following two questions:

   a. What are some reasons why a worker may not produce to the best of his or her abilities?

b. In what ways can an employer encourage high production among employees?

3rd day:

Discussion of employer-employee relations -- the following questions were used as a basis for group discussion:

a. How can a prospective employee's qualities be identified before the person is hired so that costly mistakes for both employer and employee can be avoided?

b. How should an employer deal with an employee who is often late to work?

c. What effect does the hiring of women and minority groups have on a business?

d. What fringe benefits should be provided by employers?

e. What problems develop for both employer and employee if an employee does not give his or her best effort?

4th day:

Introduction to value clarification activities -- leaders presented lecturette defining values and describing the function of values. Group members were then asked to complete on paper the following incomplete sentences:

a. I'm for _____.

b. I'm against _____.

c. I enjoy reading about _____.

d. On Friday night I usually _____.

e. On my day off I like to _____.

Leaders then asked the members to consider the completed sentences in terms of how well the sentences described the things they believed were or were not worthwhile. Members shared reactions to the activity with others in the group.

5th day:

Value activity, "What Do I Value in Life?" -- students ranked work values according to personal importance. Students then shared the top five and bottom five values with an explanation about why the values were important or not important to them.

6th day:

Values activity, "Values Auction" -- group members were given a sheet with twenty-six items representing different values. Members were asked to prepare a budget dividing two thousand dollars among the items. The leaders then auctioned off each item. After the auction, the members ranked the items according to the amount budgeted and the amount bid. Members were asked to think about the value the item represented, and to compare the ranking with the ranking of values done the previous day.

7th day:

Values activity -- leaders asked questions which required members to make a value judgment. Members voted for one of three possible responses to each question by raising his or her hand, and the leader asked various members to explain the reason for his or her choice. The following question and three possible responses are representative of the questions asked:

1. Which would you most like to improve:
    a. your looks,
    b. the way you use your time, or
    c. your social life?

8th day:

Values activity -- members were required to form an opinion on a particular controversial issue and defend his or her own opinion. Leaders selected the controversial issues and the members wrote a slogan about the issue. The students were then assigned to small groups of four to discuss their slogans. A representative issue was: "Should an employee report a close friend who is shoplifting?".

9th day:

Values activity -- each group member made a list of five personal values and five material items which he or she felt necessary for job success. A composite list of these values and items was made and put on the blackboard by the leaders. Groups of four members each were formed and a composite ranking of the values and items were made by each small group. A spokesperson for each group shared the rankings with the entire group and explained the rationale for the ranking.

10th day:

Values activity -- group members wrote answers to each of the following questions:

a. Whom do you respect and admire the most?

b. Why do you admire this person?

c. What value does this person hold that you admire most?

d. What example can you cite which illustrates this value in practice?

e. How highly do you regard this value?

f. What personal behaviors can you cite which illustrate the importance of this value in your life?

After the members completed their written answers, they shared their responses to the first and second questions with others in the group.

11th day:

Value and decision making activity -- leaders organized members into small groups of four members each and named a chairperson for each group. A direction sheet, with a description of a person applying for a job in a department store, was given to each member. The group then made a decision on which applicant to hire and a spokesperson for each group explained to the total group how the group members arrived at the decision.

12th day:

Lecture-discussion on improving one's personality -- leaders presented a lecture about the physical, emotional, and mental components of personality, emphasizing the ability of individuals to shape their own personality. After the lecture, the leaders used the following questions to stimulate discussion.

a. What are some ways that you can improve your personality in order to be successful in business?

b. How do emotions such as depression, joy, and self-confidence affect one's behavior?

The leaders reinforced statements by group members which indicated the value of positive thinking.

13th day:

Strength sharing activity -- leaders gave a brief introduction to the activity by citing observations and examples of negativism in our society, followed by examples of positive traits possessed by individuals. Members then formed small groups of four, and shared something good that happened

to them in elementary school and in junior or senior high school. Members also described a possession that they valued. Members were then given a 4 x 6 card on which they wrote a phrase describing what they liked about the person that they had written on the card. The cards were then passed to the next person and the process was repeated until each member had written and verbalized something he or she liked about each of the other members of the group. After the small groups had completed the activity, the leaders asked the members to share their reactions to the activity with the total group.

14th day:

Goal setting activity -- leaders discussed the importance of goal setting, the rules for goal setting, and reasons why some people do not set goals. Members were then asked to consider improvements which they might make in the areas of social relations, education, health, family relations, and vocations. Members wrote a description of an improvement they might make in each of these areas and then ranked these improvements according to their importance.

15th day:

Goal setting activity -- leaders asked the members to write both short-term and long-term goals in each of the life areas. Leaders helped members, as needed, to clarify goals and plan strategies for meeting these goals. After the members had completed writing their goals, they formed groups of four members each and shared one of their goals with the others in their group. Members suggested strategies which would be helpful to other members in meeting their goals.

APPENDIX F: SUMMARY DESCRIPTION OF ASSERTIVENESS TRAINING PROGRAM

1st day:

1. Introductions -- each member verbalized two personal attributes or assets. After receiving reinforcement from the leaders, the members, in turn, verbalized an exaggeration of one of the assets or attributes stated earlier. The leaders encouraged the members to state the exaggerations assertively.

2. Discussion of assertion, passivity, and aggression -- written definitions of assertion, passivity, and aggression were given to the members. These definitions were discussed and examples of assertion, passivity, and aggression were given by the leaders and by the members.

3. Explanation of personal rights -- the basic rights of control over one's time, possessions, and body, and the right to intervene when treated unfairly were discussed.

4. Goal setting -- members were asked to consider personal goals which would enable them to be more assertive.

2nd day:

1. Assertion exercise -- a leader initiated a conversation with the person next to him. Members then, in turn, changed the topic of conversation. The activity continued until all members had participated in changing the topic of conversation.

2. Goal setting -- the leaders verbally presented examples of goals which members might wish to make. Members were then asked to write personal goals to help them to be more assertive. After writing these goals, the members shared the goals with the total group. The leaders

then helped the members to formulate a written contract for the coming week which would help them to accomplish an assertion goal.

3rd day:

1. Assertion exercise -- one of the leaders described a situation where a person was stopped by a friend on the way to a class. The friend wanted to talk, but the person did not have time. Each member was asked to formulate a response to the friend. The leaders provided feedback reinforcing positive elements of the responses and encouraging improvements in responses when needed.

2. Contract review and practice -- leaders provided assistance by role playing situations where members had encountered difficulty. During the contract review and practice, role plays were used to model desired behavior and to provide behavior rehearsal for the members. Various combinations of leaders and members participated in the role plays and role reversal was used often during the first two sessions of contract review.

4th day:

1. Assertion exercise -- volunteers participated in a role play in which one of them asks the other for a date. The second person does not want to go on the date and attempts to refuse the date assertively. After the role play, the participants and the other members discussed the feelings and rights of persons in similar situations, and the ways in which a date might be refused.

2. Contract review and practice -- the process described for the previous day was followed each day until the end of the training, as time permitted.

5th day:

1. Assertion exercise -- members practiced speaking words as loudly as possible. The leaders modeled the behavior first and then provided encouragement to the members during the activity.

2. Contract review and practice.

6th day:

1. Videotape role play -- the leaders presented a videotape role play of a situation in which a person is asked by a friend to cheat on a test. Prior to showing the assertive response on the videotape, the members were asked to give their responses. The feelings of the members, especially their fears of making assertive refusals, were discussed.

2. Contract review and practice.

3. Home work assignment -- members were asked to select a trivial topic and be prepared to deliver a one minute monologue the next day.

7th day:

1. Assertion exercise -- each member delivered a one minute monologue on a trivial topic. The leaders then selected topics and assigned them to the members. The members delivered an impromptu one minute talk about their assigned topic. The leaders provided encouragement and reinforcement as needed.

2. Contract review and practice.

8th day:

1. Role play -- leaders role played a situation where a parent asks a daughter to stop seeing a friend. Members were asked to formulate desired responses before the daughter's response was given in the role play. The role play included continued escalation of angry responses.

The leaders attended to the feelings of members after the escalated responses in the role play.

2. Contract review and practice.

9th day:

1. Role play -- volunteer members role played a situation in which an employer interviews an applicant and attempts to persuade the applicant to work more hours than the applicant desires. The same format was followed as in previous role play situations.

2. Contract review and practice.

10th day:

1. Assertion exercise -- members paired up and consecutively engaged in arguments. The members selected their own topics for the arguments. After the arguments the leaders and members gave examples of statements and responses which contributed to the escalation of the arguments. After critiquing the argument, the same individuals were asked to engage in assertive disagreement about the same topic. The leaders role played arguments and assertive disagreements prior to the exercises.

2. Contract review and discussion.

11th day:

1. Assertion exercise -- each member gave and received a personal compliment assertively. Members remained in the total group setting and compliments were given, in turn, until all had experienced giving and receiving a compliment. Leaders were alert for responses which negated the compliment; the leaders processed the feelings and communications of the members following the exercise.

2. Contract review and practice.

12th day:

Behavior rehearsal -- volunteers role played situations suggested by group members. After the role play, members and leaders joined in making suggestions for alternative responses.

13th day:

1. Role play -- leaders role played a situation in which an employer justly criticized an employee for poor work. The assertiveness behaviors of both employer and employee were discussed by the group.

2. Contract review and practice.

14th day:

Behavior rehearsal -- same process as followed on the 12th day.

15th day:

1. Self-evaluation -- each member verbally evaluated his or her progress and received evaluative feedback from other group members and leaders.

2. Planning -- members discussed future goals for becoming more assertive.

APPENDIX G: TENNESSEE SELF-CONCEPT SCALE

INSTRUCTIONS:

On the top line of the separate answer sheet, fill in your name and the other information except for the time information in the last three boxes. You will fill these boxes in later. Write only on the answer sheet. Do not put any marks in this booklet.

The statements in this booklet are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully, then select one of the five responses listed below. On your answer sheet, put a circle around the response you chose. If you want to change an answer after you have circled it, do not erase it but put an X mark through the response and then circle the response you want.

When you are ready to start, find the box on your answer sheet marked time started and record the time. When you are finished, record the time finished in the box on your answer sheet marked time finished.

As you start, be sure that your answer sheet and this booklet are lined up evenly so that the item numbers match each other.

Remember, put a circle around the response number you have chosen for each statement.

Responses:	Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
	1	2	3	4	5

You will find these response numbers repeated at the bottom of each page to help you remember them.

STATEMENTS:

1. I have a healthy body.
2. I like to look nice and neat all the time.
3. I am an attractive person.
4. I am full of aches and pains.
5. I consider myself a sloppy person.
6. I am a sick person.

7. I am neither too fat nor too thin.

8. I am neither too tall nor too short.

9. I like my looks just the way they are.

10. I don't feel as well as I should.

11. I would like to change some parts of my body.

12. I should have more sex appeal.

13. I take good care of myself physically.

14. I feel good most of the time.

15. I try to be careful about my appearance.

16. I do poorly in sports and games.

17. I often act like I am "all thumbs".

18. I am a poor sleeper.

19. I am a decent sort of person.

20. I am a religious person.

21. I am an honest person.

22. I am a moral failure.

23. I am a bad person.

24. I am a morally weak person.

25. I am satisfied with my moral behavior.

26. I am as religious as I want to be.

27. I am satisfied with my relationship to God.

28. I wish I could be more trustworthy.

29. I ought to go to church more.

30. I shouldn't tell so many lies.

31. I am true to my religion in my everyday life.

32. I do what is right most of the time.

33. I try to change when I know I'm doing things that are wrong.

34. I sometimes use unfair means to get ahead.

35. I sometimes do very bad things.

36. I have trouble doing the things that are right.

37. I am a cheerful person.

38. I have a lot of self-control.

39. I am a calm and easy going person.

40. I am a hateful person.

41. I am a nobody.

42. I am losing my mind.

43. I am satisfied to be just what I am.

44. I am as smart as I want to be.

45. I am just as nice as I should be.

46. I am not the person I would like to be.

47. I despise myself.

48. I wish I didn't give up as easily as I do.

49. I can always take care of myself in any situation.

50. I solve my problems quite easily.

51. I take the blame for things without getting mad.

52. I change my mind a lot.

53. I do things without thinking about them first.

54. I run away from my problems.

55. I have a family that would always help me in any kind of trouble.

56. I am an important person to my friends and family.

57. I am a member of a happy family.

58. I am not loved by my family.

59. My friends have no confidence in me.

60. I feel that my family doesn't trust me.

61. I am satisfied with my family relationships.

62. I treat my parents as well as I should. (Use past tense if parents are not living)

63. I understand my family as well as I should.

64. I am too sensitive to things my family say.

65. I should trust my family more.

66. I should love my family more.

67. I try to play fair with my friends and family.

68. I do my share of work at home.

69. I take a real interest in my family.

70. I quarrel with my family.

71. I give in to my parents. (Use past tense if parents are not living)

72. I do not act like my family thinks I should.

73. I am a friendly person.

74. I am popular with women.

75. I am popular with men.

76. I am mad at the whole world.

77. I am not interested in what other people do.

78. I am hard to be friendly with.

79. I am as sociable as I want to be.

80. I am satisfied with the way I treat other people.

81. I try to please others, but I don't overdo it.

82. I should be more polite to others.

83. I am no good at all from a social standpoint.

84. I ought to get along better with other people.

85. I try to understand the other fellow's point of view.

86. I see good points in all the people I meet.

87. I get along well with other people.

88. I do not feel at ease with other people.

89. I do not forgive others easily.

90. I find it hard to talk with strangers.

91. I do not always tell the truth.

92. Once in a while I think of things too bad to talk about.

93. I get angry sometimes.

94. Sometimes, when I am not feeling well, I am cross.

95. I do not like everyone I know.

96. I gossip a little at times.

97. Once in a while, I laugh at a dirty jcke.

98. It times I feel like swearing.

99. I would rather win than lose in a game.

100. Once in a while I put off until tomorrow what I ought to do today.

PLEASE NOTE:

Pages 161-165, "I-E Scale" and
"Rathus Assertiveness Schedule"
not microfilmed at request of author.
Available for consultation at Iowa
State University Library.

UNIVERSITY MICROFILMS.