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HUNSBERGER, ELIZABETH H. The Study of the Self Concept of Church College and State University Athletes and Non-Athletes. (1971)
Directed by: Dr. Celeste Ulrich. Pp. 83

The purpose of this study was to investigate the possible effect of intercollegiate basketball participation on the real-ideal self-concept congruency of Mennonite and non-Mennonite women athletes. Subjects in this study were freshmen and sophomores from two Mennonite colleges, a state university and a state college.

The Q-sort technique was selected to measure the real-ideal self-concept congruency. Doudlah's sorting statements were used. The experimenter administered the Q-sort to each subject prior to and after a regularly scheduled basketball season. Correlation coefficients between the real-sort and ideal-sort were computed for each subject after the administration of the Q-sorts.

A three-way analysis of variance was used to determine if there was a difference in self-concepts before and after the basketball season between athletes and non-athletes and Mennonites and non-Mennonites.

The following results were obtained:

1. There was a significant difference between the pre and post real-ideal correlations for the total group.
2. There was no difference between athletes and non-athletes before or after the basketball season.
3. There was no difference between Mennonites and non-Mennonites before or after the basketball season.

The following conclusions were made:

1. Several combined factors may have influenced the increased real-ideal congruency: maturation, general college living, broadening view of life, and participation on the basketball team.

2. The spiritual and cultural dimensions of the Mennonite way of life apparently did not effect a difference in the way a Mennonite and a non-Mennonite perceive the real-self in relation to the ideal-self.
3. Although participation on the basketball team may have been a factor influencing real-ideal congruency in this study, it cannot be isolated from the influences of maturation and general college living.

THE STUDY OF THE SELF-CONCEPT OF CHURCH
COLLEGE AND STATE UNIVERSITY
ATHLETES AND NON-ATHLETES

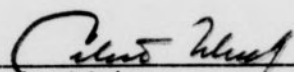
by

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A Thesis Submitted to
the Faculty of the Graduate School at
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Master of Science in Physical Education

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Approved by



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CHAPTER I

INTRODUCTION

People change in many ways as they grow up. Less apparent changes, but nevertheless real and crucial to learning and development, are changes in the way people see and feel about themselves.

Before discussing these changes, it is necessary to define certain terms. For purposes of clarity, the following terms will be used according to the stated definition.

1. Real-self - refers to the subject's view of his actual or real self; his concept of himself as he actually is at that moment in life. (real-self concept)
2. Ideal-self - refers to the subject's view of his ideal self; his concept of the kind of person he would ideally like to be. (ideal-self concept)
3. Real-ideal congruency - refers to the correlation between real-sorts and ideal-sorts. This may also be termed a real-ideal correlation.
4. Self-concept - refers to the organized way in which a person views all the perceptions of self that are in his awareness. Change in the self-concept is measured by a change in the real-ideal congruency.

The individual's self-concept is not limited to a single perception of self. The self-concept consists of all the ways a person perceives himself in every different situation he experiences. An individual's perception of himself in various situations; together with the objects, people, culture, ideas and values which he perceives as part of himself constitutes his self-concept.

The self-concept is a product of personal interaction with others in both its origin and expression. The self-concept emerges as one interacts with others, perceives their attitudes toward him, and incorporates these into perceptions of himself.

The cultural matrix into which one is born is an important factor in the development of the self-concept. "The phenomenal self is a direct outgrowth of the cultural matrix of our parents and early guardians." (15:82) The phenomenal self is partly determined by one's religious and activity affiliations. The individual's self-concept usually reflects the values, beliefs, interests and ambitions of his social environment.

Those individuals who are followers of the Anabaptist persuasion referred to by the term "Mennonite" are influenced more by the controls of the home and church than by any other group with which they interact. (65:1)

In analyzing the beliefs and values held by the Mennonites which influence the self-concept of those individuals who interact in this subculture, Klassen (37) cautioned against constructing an exclusive Mennonite syndrome.

Therefore, when we try to analyze the Mennonite syndrome it is best to assume that we are doing this in an inclusive sense and not in an exclusive sense. That is, we are trying to ascertain what we share with the rest of the human race, not what we have all by ourselves. (37:140)

A member of the Mennonite community is confronted with the firm belief that "all of life must be placed into a religious dimension." (37:140) Whereas, for some groups the choice of buying insurance is an economic matter, it becomes a matter of religion

for some Mennonites. This commitment to a religious dimension has led more Mennonites to perceive themselves as obsessed with guilt than as ones who have no capacity to feel guilt. (37:140)

The dedication to hard work is another factor in the Mennonite way of life. The concept of work is held with a very narrow view. Any vocation in the fine arts can hardly be thought of as work. (37:139)

There is a certain repression of life begun in early child rearing which pervades the educational process up until the time the children leave home. The smallness of one's view of life penetrates the developing self-concept. (36:140)

Klassen (36) spoke of the Mennonites' attitude toward themselves as not one of humility, but a kind of debasement which immobilizes. A person who has been deeply influenced by an early childhood which stresses the debasement of self may experience the need to evaluate the self. However, to permit this to happen might contradict the initial self-concept. These persons have difficulty in altering their self-concept toward an expanding and socially accepted direction as well as accepting a more constricting and socially unaccepted perception. (11:503)

Another cultural dimension of the Mennonite identity is the sense of peoplehood. This sense of belonging together is more than a religious experience. It is the product ". . . of the shared experience of a distinct people, indentifiable without reference to 'spiritual' properties." (56:242) This identification has encouraged persons to perceive themselves in much the same way as others within

the community. Showalter (56) emphasized the need to encourage the "development of personal ego identity" rather than to encourage the present pattern of fitting each individual into a corporate mold.

Through the process of socialization within these spiritual and cultural dimensions of the Mennonite way of life, each individual develops a concept of himself as he actually is and a concept of the kind of person he would like to be. Whether or not this way of life has effected a difference in the way a Mennonite and a non-Mennonite perceive themselves has been part of the focus of this study.

The self-concept is also a direct outgrowth of the activity group in which one participates. In activity, the individual experiences success and failure, good times and hard times. The participation in sports is a continuing process of assimilation and integration of new experiences and discoveries concerning one's resources and limitations. There is a dynamic impact between the self and this continuum of experiences.

Changes in the self-concept occur only as the result of experiences. As roles are assigned and defined, the individual's integration of his real-self with how others see him changes with regard to real-ideal congruency.

This is usually a gradual change which comes by maturity. As individuals broaden their interest and activity experiences, their self-concepts become more complex. There is the need to synthesize the varied concepts of self in these different roles.

The synthesis and consistency of one's self-concept enables one to adapt to new situations and roles. As age and social interaction increase, the self-concept changes in the direction which is consistent with the individual's perception of himself.

Occasionally, there may be a sudden change in the self-concept because of some traumatic experience which forces an individual to face the fact that he is out of step with his group. This can occur when an individual enters a group that demands different behavior from the cultural matrix of his parents and early guardians.

There are educational values in knowing and understanding the dynamics of real-ideal congruency changes because such a relationship may be an indication of development, learning and change within each individual. It is important to know what may influence the real-ideal congruency. It is also important for the physical educator and coach to be cognizant of the effect that these changes may have on the overt behavior of their students.

Physical education offers intercollegiate sports opportunities for those individuals who derive the actualization, maintenance and enhancement of their self-concept through this experience. Participation on a team binds people together with common goals and purposes. The quantity and quality of friendships developed on these teams are perceivable influences which could affect a change in real-ideal congruency. (27:298)

This study investigated whether statistical evidence would indicate a significant difference between Mennonite and

non-Mennonite athletes and non-athletes before and after a basketball season regarding the real-ideal congruency. Several terms need to be defined before stating the hypotheses.

1. Mennonite - refers to those subjects who were affiliated with the religious denomination called "Mennonite." These subjects were enrolled in Mennonite colleges.
2. University - refers to all other subjects. These subjects were enrolled in either a state university or state college.
3. Athletes - refers to those subjects who were members of the varsity, junior varsity or freshman basketball team. These subjects were freshmen and sophomores.
4. Non-athletes - refers to those subjects who were not on any intercollegiate team and who never had been on such a team. These subjects were also freshmen and sophomores.

Three main null hypotheses were formulated to investigate the possible effect of a basketball season, the subjects' athletic status and the school attended on the real-ideal congruency of each subject.

1. There is no difference between pre-season and post-season real-ideal correlations for the total group.
2. There is no difference between athletes and non-athletes regarding real-ideal correlations.
3. There is no difference between Mennonite subjects and university subjects regarding real-ideal correlations.

Four other hypotheses were formulated to investigate the interaction between these groups of subjects.

4. There is no difference between pre and post congruency scores of the athletes and non-athletes.
5. There is no difference between pre and post congruency scores of Mennonite and university subjects.
6. There is no difference between the congruency scores of Mennonite and university athletes and non-athletes.
7. There is no difference between Mennonite and university athletes and non-athletes on the pre and post congruency scores.

CHAPTER II

STATEMENT OF PURPOSE

The purpose of this study was to investigate the possible effect that participation on an intercollegiate basketball team might have on the real-ideal congruency change of female subjects from Mennonite colleges and state institutions of higher learning.

The Doudlah revision of Butler and Haigh's Q-sort set was administered to freshmen and sophomore basketball players before and after the regularly scheduled basketball season. A group of non-athletes was also tested as a control group.

The subjects were chosen from two colleges affiliated with the Mennonite Church: Goshen College in Indiana and Eastern Mennonite College in Virginia. The two state institutions for higher education were chosen because of their close proximity to the Mennonite colleges. Purdue University in Indiana and Madison College in Virginia cooperated in this study.

CHAPTER III

REVIEW OF LITERATURE

Theories of Self-Concept

The subject matter of psychology is focused on the concept of self. The self-concept theory of studying human personality and behavior is given significant importance in the theoretical framework of most psychologists. Research on the self-concept suffers from those problems related to the usual research procedures. One of those is the definition of the subject and related concepts. Most definitions are broad and theoretical. Hall and Lindzey have pointed out that:

The self is not a metaphysical or religious concept; it is a concept that falls within the domain of a scientific psychology. Self-theory represents a serious attempt to account for a certain phenomena and to conceptualize one's observations of certain aspects of behavior. (3:468)

Self theorists and researchers often have different meanings for the term "self." There are two definitions directly opposed to each other. Some theorists define self as a composite of thoughts and feelings which constitute a person's awareness of his individual existence, his conception of who and what he is. (6:9) This is a "self-as-object" definition. It is suggested, in a sense, a person is what he thinks of himself. (3:468) The self is "the individual as known to the individual." (11:503)

Other theories define self as "a group of psychological processes which govern behavior and adjustment." (3:468) In this sense, the self consists of an active group of processes such as thinking, remembering, and perceiving.

In the healthy course of the development of the self, one is involved in a continuing process of assimilation and integration of new experiences; new discoveries concerning one's resources, one's limitations and one's relationship with oneself and with others. (6:114)

William James (4) wrote profoundly in developing his concept of self. James' theory of self was based upon social interaction. In his definition of self, James stated:

In its widest possible sense, a man's Self is the sum total of all that he can call his, not only his body and his psychic powers, but his clothes and his house; his wife and his children; his ancestors and friends; his reputation and his works; his lands and horses; and yacht and bank account. (5:291)

Cooley (1) originated the idea of the "looking glass self." His concept was clearly "other-directed" for he believed the self was reflected through others.

George Mead (10) also emphasized the social origin of the self. Mead supported his theoretical concept that self was a social product with empirical data gained by observing humans at various growth levels. As he investigated children beginning their social life Mead developed the "I" and "me" concepts of self. The "I" part was that which was largely genetic in origin and which was consistently present in every special situation. The "me" was termed the "social self" and was a reflection of society's demands. A child began his social life by responding to imitation (the "me"), using his natural capacities such as smiling (the "I").

Each individual had as many "me's" as social roles. The "me" that was realized depended on the group toward which the individual's behavior was directed.

Sullivan (16) saw the origin of the self from a social context. "It was seen that a personality can never be isolated from the complex of interpersonal relations in which the person lives and has his being." (16:10) The earliest experiences which influence the development of self were the experiences with other people. Sullivan pinpointed the social context as "significant others" such as parents, siblings, and teachers.

Hilgard (35) claimed that socialization influenced both the origin and expression of the self-concept. He believed that since the self-concept is transmitted by parents and others who are part of the culture, uniformities within socialization set forth the ideal of a modal personality. The socialization process also sets up certain defined roles which each individual conforms to some degree of success or failure. According to Hilgard, this general course of socialization influenced the way a person viewed his real-self and ideal-self.

Symonds (17) added one's own perception of self to Colley's "looking glass self." Symonds listed four aspects of the self. (58:s-111)

1. How a person perceives himself.
2. What he thinks of himself.
3. How he values himself.
4. How he attempts through various actions to enhance or defend himself.

Symonds believed that the best way of arriving at these aspects of self was not through self-report, but by projective techniques, clinical interviews and external observations. Symonds was skeptical about self-descriptions because one's conscious picture of himself can be distorted by the unconscious.

Snygg and Combs (15) took an entirely different point of view and based their concept of the self on the phenomenal field of the behaving organism. The phenomenal field is the subject's total perceptions which are at that moment in awareness. These awarenesses range from less to more conscious, but never are they unconscious. "The phenomenal self includes all those parts of the phenomenal field which the individual experiences as part or characteristic of himself." (15:58)

According to Snygg and Combs the culture into which one is born is more important in the development of the phenomenal self than the child's reactions to his physical environment. "The phenomenal self is a direct outgrowth of the cultural matrix of our parents and early guardians." (15:82)

The phenomenological self-theory, as adopted by Rogers (12), has been "the most developed and elaborated and has provided the largest body of research." (58:s-114) Rogers' theory of the development of the self-concept is based on the proposition that "every individual exists in a continually changing world of experiences of which he is the center." (12:483) Only a small part of this phenomenal field is consciously experienced, but whenever the need

arises any experience can become available to the consciousness.

The self gradually emerges from the total perceptual field.

The self-concept is an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perceptions of ones' characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and the goals and ideals which are perceived as having positive or negative valence. (12:501)

McQuitty (44) attempted to base a theory of self-concept upon a definition of personality integration. Comparing responses of mental hospital patients to responses of community persons, using a factorial structure measurement, McQuitty found the correlated coefficients of the patients to be lower than community persons.

Combining the contributions of Rogers, Snygg and Combs, together with the results of our research, we suggest that the adequate person is one in whom the self is well integrated, in the sense that his successive subjective descriptions of self are characteristic of similar categories of people, and as a result of this he can readily accept into his organized conscious concept of self all his interpretations of reality, including, of course, perceptions of himself. (44:472)

Although theories of the self differ and the definitions are broad, most theorists agreed that the self is acquired.

Rogers suggested:

As a result of interaction with the environment and particularly as a result of evaluational interaction with others, the structure of self is formed -- an organizing fluid, but a consistent conceptual pattern of perceptions of characteristics and relationships of the 'I' or the 'me'; together with values attached to these concepts. (12:498)

Development of the Self-Concept

Development of self involves a process of differentiation. The developing self recognizes personal properties and resources. Parts of the body are the first properties of which an infant begins to be aware. Through nursery school observations, Murphy (11) theorized that in the development of self there is an "anchorage of the picture of the self upon some part of the body, some attribute, or some point of special affinity between child and parent." (11:503)

From body awareness, the development of self moves toward synthesizing social roles. Experiments with three- and four-year-olds have indicated there is much more prestige derived from one who can dominate the play than from one who is the best-looking at this age. (11:505)

As a child begins to comprehend language, he begins to form ideas of himself which correspond with labels and epithets which others classify him under - good, naughty, strong, silly. At the same time, the child is also confronted with a set of ideals and good qualities of national heroes or religious leaders. There begins an awareness of what one is to be, yet the fact remains that one is never quite like that model.

At the onset of puberty, the dominance pattern must be completely recast. What a person looks like becomes paramount in how one feels about himself and others. For many girls the tension is acute.

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At the onset of puberty, the dominance pattern must be completely recast. What a person looks like becomes paramount in how one feels about himself and others. For many girls the tension is acute.

She does not have to excel in basketball, but she needs a picture of herself which will somehow integrate all she has learned about being feminine with all that the boys expect of her in terms of enthusiasm for their own consuming interests in the more savage and predatory world of sports and of jobs. (11:853)

Because of its fluidity, researchers find studying the phenomenal self difficult. It is in constant change. A person reacts as an "organized whole to his continually changing world and any alteration of any part of the whole organized system may produce changes in any other part. (12:486)

Not only does the self enhance itself through change, it also maintains itself through consistency. An experience inconsistent with the self-concept can either be viewed as a threat or can be perceived, examined, and assimilated into the self-structure with a slight revision. (12:517)

Lecky's (9) basic premise regarding self-concept was that all the individual's values are organized into a single system, the nucleus of which is his valuation of self. The one basic human need is to maintain a gestaltic mental organization. When new experiences arise, one accepts those stimuli that are perceived as being consistent with the present organization and rejects those which are incompatible with the present value system. The adolescent, thus, has a concept of himself which is instrumental in governing his behavior.

Studies of ages and changes in the self-concept will give some clues to the developmental sequence in the formation of the real-self, ideal-self, and real-ideal congruency.

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Studies of ages and changes in the self-concept will give some clues to the developmental sequence in the formation of the real-self, ideal-self, and real-ideal congruency.

Ames (19) investigated the changes which took place in verbalization as she believed such change reflected changes taking place in children's developing sense of self in relation to others. She observed children in a nursery school over a period of two years and recorded verbalizations of the subjects as they played alone, with the teacher, or with others. She found that verbalizations were first directed to self and to the teacher. As the child grew older and had interacted longer with others, these verbalizations were directed mostly to contemporaries. (19:231) This change in verbalization patterns supports the theory that the sense of self is, to a large extent, developed as a child perceives himself and his role in relation to others.

Perkins (48) investigated the effects of four selective factors on the development of the self-concept. This development was in the form of changes in the children's self-concepts. The four selective factors were:

1. Social-emotional climate; group-centered vs. teacher-centered. (measured by Withall's Climate Index)
2. Teacher participation in an in-service child study program.
3. Teacher acceptance of self and others. (measured by Reed's Sentence Completion Test)
4. Grade level; fourth vs. six graders. (48:221)

Perkins hypothesized that children in group-centered climates, whose teachers had participated in child study programs, whose teachers showed greater acceptance of self and others and who were in sixth grade would have greater real-ideal congruency

than children in teacher-centered climates, whose teachers had never participated in child study programs, whose teachers had less acceptance of self and others, and who were in fourth grade. (48:221)

The subjects in Perkins' study were a representative sample consisting of four fourth grade and four sixth grade classrooms in a suburban county school system. The subjects were selected so that the extremes of the four variables were represented. Each subject was given the Q-sort three times during a six-month period to measure both the real-self and ideal-self. The real-sort was correlated with the ideal-sort to measure real-ideal congruency. A change in real-ideal congruency indicated a change in the self-concept. Evidences of this change in the self-concept was found by computing the difference between a child's z score of congruency in December and his z score of congruency in May.

To determine whether the differences of real-ideal congruency were significant for each four independent variables, sex groups and time, the analysis of variance was used. The following results were obtained from the statistical treatment:

1. The real-self concepts and ideal-self concepts of children became increasingly and significantly congruent through time. (.05)
2. The real-ideal congruencies of girls generally were significantly greater than those of boys. (.01)
3. Sixth grade children and children whose teachers had completed child study courses showed significantly greater real-ideal congruency than did children in the fourth grade and whose teachers had never participated in child study programs. (.01)

4. There was little or no relationship between changes in children's real-ideal congruency and (a) changes in their school achievement, and (b) changes in their acceptance of peers. (48:230)

According to these findings, it can be noted that children do achieve closer real-ideal congruency during a period of time they are attending school. The general pattern of growth and maturation influences some of this change, but also influencing the real-ideal congruency may be specific factors in the school environment.

Havighurst, Robinson and Dorr (33) described the development of the ideal-self concept. Empirical data were collected by asking boys and girls to write a brief essay on the subject, "The Person I Would Like to Be." Havighurst and his colleagues were the first to study the development changes of the ideal-self concept.

Subjects for this study ranged in ages from eight to eighteen and came from various economic, social, and geographical backgrounds. The written compositions were placed in one of four categories according to the type of person the subject described: (1) parents or family member, (2) glamorous persons, (3) attractive visible adults, and (4) imaginary persons. (33:241)

Although the researchers did not control the age factor, they did offer a tentative description of an age sequence. The ideal-self concept in childhood was an identification with a parental figure and moved through a stage of romanticism and glamour during middle childhood and early adolescence. In late adolescence the ideal-self concept was identified as a composite

of desirable characteristics symbolized either in an attractive visible young adult or in an imaginary figure. Although not every individual followed this sequence; it seemed to be the standard development found in most young people. (33:241)

Changes in the ideal-self concept were affected also by the environments and teaching influences. Those school environments, where the ideals were inculcated through teaching about the lives of great people, influenced the child's report concerning his ideal-self. This was particularly evident in parochial school children's report. (33:257) Havighurst's study reflects the theory that the ideal-self is developed and changed by association with people who are older, more powerful, and better able to get the desirable things of life than the child or adolescent who observes them.

To investigate the theory that internal organization and crystallization of the self-concept is achieved early in the development, Engle (30) hypothesized that the self-concept would remain stable over a two-year period. She constructed her own Q-sort items relevant to adolescent concerns as defined by Jersild. Fifty positive and fifty negative statements were selected by judges. Engel tested the reliability of the Q-sort by a ten-day test-retest method and found the reliability to be .68. (30:211) The paper-pencil method of taking the Q-sort was utilized.

One hundred and seventy-two subjects were used in Engel's study. One group was tested in the eighth and tenth grades while a second group was tested in the tenth and twelfth grades. The

results indicated that there was no significant change between Q-sorts obtained in 1954 and in 1956.

Based on the psychoanalytic theory of identification, Jorgensen and Howell (38) predicted that from ages five through the termination of the latency period (about age 12 or 13), the real-ideal congruency would increase. Secondly, they hypothesized that through ages 13-18 the correlations between real-self and ideal-self would become stabilized because the identification process becomes more or less complete. The researchers used a twenty-item semantic differential scale to measure the real-ideal congruency. Results showed that from ages eight through twelve, there was an increase in real-ideal congruency significant at the .001 level of confidence. On further analyzes, this hypothesis was found tenable only for males. It was suggested that the less complicated identification process for males accounted for these results. (38:67)

The second hypothesis concerning the stabilizing of real-ideal congruency was verified. This resulted for males, females, and the combined sexes. Overall it was found that the younger age group males were significantly more congruent than the females at the .001 level of confidence. There was no significant differences between male and female in the older age group. (38:67) Thus, as experiences broaden and each individual is given the freedom to discover who he is at each moment, the concept of real-self emerges and becomes congruent with the individual's ideal-self.

Variables Influencing the Self-Concept

Studies of variables which seem to influence the self-concept are based upon the aspects of body image and attitudes toward the body, and social roles and attempts to synthesize such roles. The parent-child interaction is one variable accorded great importance. The self-concept is a learned constellation of perceptions, cognitions, and values. An important part of this learning comes from observing the reactions one gets from other persons. The parents are the persons who are present earliest and most consistently. Wylie (18) mentioned five aspects in which the parents can influence the development of the self-concept.

1. The generalized level of self-regard.
2. The subjective standards of conduct which are associated with his role and individual status.
3. The realism of his views of his abilities and limitations and the acceptance of them.
4. The degree of acceptance in the phenomenal self-concept of inevitable characteristics, i.e., hostility, jealousy, sex.
5. The adequacy of his means of appraising accurately his effects on others. (18:121)

The parent-child relation has been studied very often as a variable to self-development. Manis (42) predicted that maladjusted individuals see themselves as being less like their parents than do adjusted persons. The subjects described their real-self and ideal-self on a series of twenty-four bipolar rating scales. They also rated each of their parents on these two concepts. Then they described themselves as they thought each of their parents

viewed them. The hypothesis was found to be significant. The maladjusted individual had a great disparity between how he thought each parent viewed him. Although the subject felt both parents viewed him with low-esteem, he felt they did so for different reasons. (42:484)

Jourard and Remy (39) studied the attitudes of a person toward his body and self as they compared to the subject's concept of how his parents evaluated these two factors. Self-rated cathexes of the self and body significantly correlated with perceived parental cathexes.

Helper (34) had eighth and ninth graders evaluate themselves as they ordinarily thought of themselves and as they would most like to be. An adjective rating scale was used. The parents also evaluated their child as they ordinary thought of the child and as they would like the child to be. Correlations between parental evaluation and children's self-evaluation tended to be small but consistently positive. These results contrast to the correlations reported by Jourard and Remy.

Studies by Peck (47) and Sears (55) found that adolescent's real-ideal congruency and other personality factors are related to parental warmth, acceptance and disciplinary patterns. It made little or no difference for either the boy or girl whether these qualities are exhibited by the mother, father, or both.

Although there seems to be an overall indication that parents are important to children in the formation of the real-self

and ideal-self concepts, research has not made the evidence clear as to why and how, other than as theoretical implications.

Another variable which may influence the self-concept is based on the theory that one's self-concept is shaped through interaction with others. Most studies relating self-concept and social interactions involve associations between self-concept measures and role status variables. (18:136)

Peer groups and friendships seem to influence real-self and ideal-self concepts. Thompson and Nishimura (66:313) found the average intercorrelation between one's own ideal-self and the description of a friend to be higher than one's own real-ideal correlation. McKenna (43:271) found that real-ideal correlations were equal to friend-ideal correlations. Although it does seem that one's perceptions of real-self and of ideal-self are related to peers, the order of sequence is not clear. A single cause-effect relation cannot be assumed in human interaction studies.

An individual lives not only in a single culture, but also in various subcultures. The phenomenal self is partly determined by his specific clique of associates such as religious or activities group.

Individuals' self-concept usually reflects his subculture's prejudices, ambitions, interests and habits of speech and gesture. Interaction with the community helps a person to revise or verify home concepts concerning personal worth. (4:173)

Since the characteristics of subcultures differ, the way persons from various subcultures perceive themselves may also differ. Thissen (62) did a study in which she hypothesized that

a specific reaction pattern might be identified by psychological tests when Mennonites are compared with non-Mennonites.

A group of five psychological tests were administered to 204 Mennonite subjects (urban and rural students and rural non-students) and a control group of 199 non-Mennonite urban students. The five tests were the Otis Self-Administering Test of Mental Ability, Higher Examination, Form A; the Edwards Personal Preference Schedule; the Incomplete Sentences Test; the George Washington University Series Social Intelligence Test; and the Thematic Appreciation Test. (62:49)

Of particular significance to the present study were the results of the Edwards Personal Preference Schedule for the females. Thirteen percent of the Mennonite females scored below the mean of the control group on the "deference scale" compared to 48 percent of the control group. This was a significant difference at the .05 level of confidence. On the "dominance" variable the Mennonite females showed a significant difference from the control group at the .02 level of confidence. The Mennonite females were significantly different from the control group in both abasement and heterosexuality variables at the .001 level of confidence. (62:55)

The high scores in deference and abasement gave evidence to Klassen's (37) theory that Mennonites have very little pride in themselves. This lack of pride is not humbleness in the theological sense, but a self-attitude which is a "type of debasement which immobilizes." (37:141)

Nichols' (46) study on the effect of religious affiliation of the developing personality pointed out the fact that this area has received much attention by students writing theses and dissertations but little attention from mature investigators. Wylie (18) suggested that religious categories and psychologically relevant variables cannot be distinctly formulated. Therefore, findings concerning the possible influence of religious affiliation on the self-concept cannot be clearly interpreted psychologically.

Studies on the influence of activity participation are based on the theory that the self-concept is developed through interaction with other people and that change in the real-ideal congruency is affected as an individual perceives the reactions of others to him.

Adolescents attempt to find a group to identify with for forming clubs, cliques or small groups. Those who do not know how to get into such a group or form one themselves begin to develop negative feelings toward themselves and others. (7:19)

As a member of a group, the person learns what it means to give and receive emotional support and understanding in a new and more mature fashion. The self is redefined in a context. . . of the self in relation to others. This is perhaps the most compelling quality of the group experience. (12:191)

Phillips (50) suggested that participation in student activity programs is independent of self-concept scores. He administered the Osgood Semantic Differential to the seniors in a suburban Detroit high school which had an 80 percent Negro student population. The subjects filled in a questionnaire check list stating how many and what type of activities they had participated in during the years they were attending that school.

The chi-square statistic was employed on the frequency of participation in relation to sex and high or low self-concept scores. The .05 level of confidence was considered acceptable to denote significance. The following significant relationships were found:

1. Participation in the activity program is significantly related to the self-concept scores for boys; but not for the girls nor for the total group.
2. A significant relationship was found between participation in athletics and self-concept scores for the first string male athletes, but not for second string athletes.
3. No evidence from the data supported the conjecture that non-participants would have low self-concept scores. (50:36)

Although other variables besides student participation in activities may affect the self-concept, Phillips suggested that student activity programs can become the vehicle whereby an individual can put into practice behavior which designates his positive acceptance of self. (50:33)

Donovan and Olsen (29) tested the hypothesis that there would be no significant difference in personality characteristics between freshman women who apply for appointive positions in student activities and those who do not apply. The subjects in the activities group were paired with the control group by grade-point average and academic field of interest. The California Psychological Inventory was administered. Results suggested that the activities group was more self-accepting and poised (.01 level), self-confident and sociable (.02 level), and dominant (.05 level) than those in the control group. (29:239)

Read (51) investigated the influence of competitive and non-competitive programs of physical education on the body-image and self-concept. The body-image was measured by a Body-Cathexis Test and the Tennessee Self-Concept Scales was administered to evaluate the self-concept. The subjects were divided into a competitive and non-competitive group. The competitive group was further divided into constant winners, constant losers and a control group. The experimenter operationally controlled these conditions.

An analysis of covariance was used to determine the statistical differences. No significant difference was found between the body-image and self-concept of subjects in the competitive and non-competitive programs of physical education. Those subjects who were constant winners had significantly higher body-image and self-concept scores than the constant losers. Those subjects who neither lost nor won all the time had no significant differences in their concepts of self. (50:4312) The results suggested that competitive activities can be an influence on the self-concept. The critical point seems to be where losing or winning affects a change in the real-ideal congruency.

Dowell, Badgett and Landiss (8) examined the relationship between the self-concept and selected physical attributes. The results concerning extracurricular activities achievement and self-concept dimensions showed a significant negative relationship between athletic achievement and the intellectual self-concept at the .05 level of confidence. At the .001 level of confidence there

was a significant positive relationship between athletic achievement and the physical self-concept. A negative relationship existed between the non-athletic achievement and physical self-concept, significant at the .01 level of confidence. There was also a significant relationship between the athletic achievement and the motivational self-concept (.05 level).

Nelson (67) studied the relationship between the motor ability, real-self concept and ideal-self concept of eighth grade girls. She administered the Scott Motor Ability Test to classify the girls into low, average, and high motor ability groups. She measured the girls real-ideal congruency with a seventy-five statement Q-sort devised by Doudlah. (66) Nelson reworded the statements for the reading level of eighth graders. These two tests were given before and after a seven-week basketball unit. Major findings suggested that:

1. Motor ability scores for the group as a whole did improve significantly; within the total group the only significant improvement was the average motor ability group.
2. Girls in the average and high motor ability groups had a change in the real-ideal congruency following the basketball unit.
3. Each motor ability group changed in their concept of real-self.
4. In the initial measure of self-concept there was no difference between motor ability groups and self-concept.
5. The statistical evidence did not support the assumption that following a unit in basketball there would be differences between motor ability groups in the self-concept. Statistically, the

subjects in the high and average motor ability groups tended to increase in awareness of self-concept following the basketball unit. (67:56-57)

Samuelson (68) investigated the effects of a specially structured seven-week physical education class upon the self-concepts of low self-esteem tenth grade girls. The Self-Esteem Inventory and Behavior Rating Form were used to measure self-esteem and to rate subjects behavior by teachers. The Self-Esteem Inventory was administered before and after the seven-week period to an experimental and control group. Teachers rated the subject's behavior one week before the class began and one month after the class ended. Results at the .05 level of confidence showed that the experimental group scored significantly higher on the Self-Esteem Inventory post-test than did the control group.

Although the above studies used different instruments to measure the change in individual's self-concept, they seem to agree that types of activities within the physical education program may influence this change.

Most evidence from past research on the effect of athletic competition has been on personality changes rather than on self-concept changes. Studies by Biddulph (21), Booth (22), Lakie (40), Malumphy (41), Seymour (56) and many others indicated there were differences in personality traits between athletes and non-athletes and between various types of athletes. But whether these personality traits develop from participation in athletics or whether the individual with certain personality traits chooses athletics

still remains unanswered. (54:311) Conflicting evidence was found by Werner (64) after studying personality structure of college athletes over a four-year period. He found no evidence to support the hypothesis that college athletics significantly influenced personality structure.

Variables other than parent-child interaction, religious affiliation and activity participation may influence self-concept changes. Many studies have investigated the relationship between self-concept change and role changes, counseling and psychotherapy.

As roles are being assigned and defined, the individual's integration of perceived self with how others see him bring about changes in the self-concept. Schmidt (53) studied the influence of role change on the self-concept. His subjects were forty-eight girls who were in the process of becoming Catholic nuns. As the new role became internalized and the old role became less salient, there was a significant change in the phenomenal self-concept. The problem of defining terms and choosing appropriate measuring instruments suggests that more research must be done in this area.

Nahinsky (45) used the Q-sort technique developed by Stephenson to determine if the real-ideal discrepancy manifested itself in acceptance or rejection of certain roles in the external world. Two groups of Navy officers were used as subjects. One group was composed of officers choosing a Navy career and the other group was composed of officers deciding against a Navy career. The one hundred statements were sorted three times by each officer: one sorting to describe themselves, another to describe a typical

Navy officer and another to describe an ideal career Navy officer.

The following conclusions were drawn from the data collected: (45:364)

1. Officers leaving the Navy picture themselves as being less like the typical career Navy officer (.05) and the ideal career officer (.01) than officers staying in the Navy picture themselves.
2. These lower inter-concept relationships for the non-career group are not related to any differences between the two groups in the way individuals picture themselves, the typical or ideal career officer.
3. The differences between the way the two groups pictured themselves, the typical and ideal officer were all significant at the .01 level of confidence.
4. The Q-technique proved useful in discriminating between two groups at different levels of adjustment to a particular role.

The influence of counseling and therapy on the self-concept seems to be one of producing a change in the perception of the self so that the client can have a more adequate self-concept. (27:33)

The self-concept is itself a perception which stands between stimulus and response. Since perceptions can change, the self-concept can change; the stimulus can be perceived in a new way and responded to differently. This makes psychotherapy and education possible. (58:s-115)

According to Rogers (12), the result of therapy is primarily a change in the real-self concept rather than the ideal-self concept, although there are some slight changes evident in the ideal-self. In therapy the client begins to perceive objects in his phenomenal field differently. At first the person perceives largely the values introduced and introjected from others and from his personal cultural environment. During therapy one begins to allow one's own experiences to be the object of awareness. This change

in perception of values could change the congruency between the real-self and ideal-self. (12:141)

Studies by Rogers and Dymond (14) and Butler and Haigh (13) supported these theoretical implications. Among other hypotheses, Butler and Haigh hypothesized that "client-centered therapy results in a decrease in the discrepancy between the perceived self (real-self) and the valued self (ideal-self)." (13:257)

The Q-sort for the real-self and the ideal-self was given to twenty-five clients in a pre-therapy and post-therapy test and again six to twelve months following the conclusion of therapy. A control group of non-therapy persons were tested and matched with the clients for age, sex, and socio-economic status. No change was found in the control group from initial to follow-up tests. The mean real-ideal correlations of the client group before therapy was negative .01. The post-therapy mean was positive .34 and the follow-up mean was positive .31. There was an "own-control" group within the client group who were tested when they asked for therapy. The researchers waited sixty days before beginning therapy. At the end of that sixty-day wait, the subjects were tested again. The real-ideal correlation remained the same. These results support Butler and Haigh's hypothesis. (13:257)

Baily (20) randomly divided twenty-eight women inmates into an audiotape playback group, a regular therapy group, and a non-therapy control group. To test the hypothesis that the audiotape playback group would be more effective in bringing about personality change, the Q-sort test and a behavioral rating scale

were administered before and after a six-week therapy session. The three groups did not differ significantly. These results may be due to the short therapy period and the type and number of subjects in the study. (20:840)

Cole, Oetting and Miskimins (26) investigated the results of a restricted type of group treatment program aimed specifically at producing self-concept changes in female adolescents with a record of behavior problems. Twenty-three subjects were put into three groups: (1) a group therapy experience run by professional mental health workers, (2) a group of similar intent and design run by a volunteer service organization for women, and (3) a group of "normal" girls selected from the public schools. (26:642)

The subjects were given a semantic differential self-concept test before and after a ten-week program designed to produce positive self-image changes. A positive self-image change was defined by the researchers as a decrease in the real-ideal discrepancy score. The results showed no significant difference between the real-ideal discrepancy means for each group before the ten-week program. The variances of each of the therapy groups were found to be significantly greater than the variance of the normal group on the pretest. This difference was significant for the professional group at the .05 level of confidence and at the .01 level for the volunteer group. In the post-test neither the means nor the variances showed significant differences, as there were less extreme scores in the treatment groups. Ninety-three percent of the subjects in the treatment groups had less extreme

scores. This movement was found to be in the real-self concept rather than in the ideal-self concept. (26:643)

Taylor (61) was interested in seeing whether changes in the self-concept reported in successful psychotherapy occurred when noncounseled subjects repeated Q-sort descriptions of the real-self and ideal-self. An intensive real-self concept group made ten real-sorts in five days. Another group made repeated real-sorts interpolated with ideal-sorts. A third group took repeated real-sorts over an extended period of time. In all cases there was a general trend for the real-self to become more consistent and its relationship to the ideal-self became more congruent. This intense self-description seemed to influence a change in the self-concept much like the changes viewed in psychotherapy.

Ginn (31) did a study to determine whether or not the self-concept of the counselor-in-preparation was changed by participation in a counseling practicum. The subjects were divided into three groups with a counselor-educator supervising each group. A Q-sort test, constructed from self-referent statements taken from the literature, was administered on a pre-practicum and post-practicum basis. Each counselor evaluated each subject before and after the practicum. The results indicated that counselors-in-preparation held a congruent self-ideal correlation before and after the practicum. There was no significant change in the real-ideal correlation. It was concluded that participation in the counseling practicum did not influence a significant change in self-concept.

Behavior and the Self-Concept

From the review of literature tentative conclusion might be drawn that certain variables may influence the development and change of self-concept. Empirical evidence does not allow conclusive statements suggesting cause and effect. Studies do suggest, however, that behavior is related to how one perceives the self. Rogers stated that "most ways of behaving are adopted by the organism which are consistent with the concept of self." (12:507) Studies have been made correlating the self-concept with adjustment, acceptance of others and levels of aspiration.

Based on the theory that the real-ideal correlations from Butler and Haigh's items should correlate with adjustment, Hanlon, Hofstaetter and O'Conner (32) hypothesized that successful psychotherapy promotes a positive and significantly high correlation between measure of adjustment and real-ideal congruency.

Using the Q-sort and the California Test of Personality, Hanlon and his associates tested this hypothesis on seventy-eight male juniors in a Catholic high school. The correlations between real-ideal congruency and adjustment score were found to be significant at the .05 level of confidence except in the area involving "social standards." (32:216)

Horowitz (36) investigated the relationships of anxiety, self-concept and sociometric status of upper elementary children. Results, consistent with findings by others, indicated that high anxiety was related to low self-concept and low sociometric status.

Chodorkoff (24) hypothesized that the greater the real-ideal congruency the more adequate the individual's personal adjustment. Each subject was given a Biographical Inventory and the Rorshach and Thematic Apperception Test. Adequacy of personal adjustment was obtained by a rating based on the clinical evaluation of the biographical and projective material. One week later each subject was given a Q-sort of 125 self-descriptive statements and instructed to sort these so that they described the real-self. A day later the subjects sorted the items describing the ideal-self. A correlation was calculated between the adjustment rating and real-ideal congruency score. Results showed a significant curvilinear relationship. The most adequately adjusted subjects showed the highest congruency, but the least adequately adjusted subjects did not show the least congruency. (24:266)

Studies suggesting that real-ideal congruency reflects adequate adjustment must be cautiously interpreted because an adjusted individual may present a discrepancy in the real-ideal correlation because he is motivated to change in a direction which will be more satisfying to him.

Stock (59) and Phillips (49) have correlated attitudes toward oneself and feelings toward others. Stock found definite relationships between how a person views himself and how he feels toward others during non-directive therapy. (59:180) Phillips found the relationship between self-other attitudes of high school and college students to be far above that expected by chance. Neither of these studies was able to give a sequence of causality.

Chodorkoff and Lepine (25) undertook a study to investigate relationships between goal setting, real-ideal congruency and the feeling of adequacy. No significant relationship was found except between real-ideal congruency and expressed adequacy.

It would seem, then, that an individual experiences psychological adjustment when all the ways in which a person perceives himself are accepted into an organized conscious concept of self. The individual perceives his qualities, abilities, limitations, attitudes and impulses which are uniquely in his phenomenal field. He also perceives the attitudes of others toward him and his feelings toward them. Through maturation and interaction, each individual usually acquired a congruent real-ideal concept of himself. (6, 12, 15, 17, 27)

Measurement of the Self-Concept

Not only is the researcher of self-concept limited by the broad definitions confronting him, but he has also been limited by the numerous instruments developed to measure the self-concept.

One of the first attempts of measuring the self-concept outside clinical observations was constructed by Phillips. (49:81) He converted Sheerer's descriptions of self-other attitudes into simple statements on a questionnaire form. The twenty-five self-referral statements and the twenty-five other-referral statements were answered by the respondent on a five-point scale. Each response was arbitrarily assigned a weighting. An individual's total score for each of the two sets of statements was computed

separately. This quantitative method of measuring the self-concept opened up the field in developing instruments which could be used in testing reliable changes between pre- and post-therapy sessions.

Bugental (23) interviewed varied types of clients using different sets of questions in an attempt to find a way to explore the perception of self. The "W-A-Y" or "Who Are You?" question seemed to allow the client to express his most meaningful and current needs.

There have been many studies in which the phenomenal self-concept has been measured by rating scales, questionnaires and adjective check lists. Most of these indices have been used only once or twice and there is insufficient information in regard to their reliability or their construct validity for inferring phenomenal self-concept. (18:98)

The two personality measurement techniques which show the most promise are the Q-sort and the Semantic Differential. According to Storey (60:449), the Q-sort is more flexible and comprehensive and demands less projection on the part of the subject. Even though the Q-sort technique is used often, there is question about its reliability and construct validity because there have been so many different sets of Q-sort items used which

range from single adjectives, to brief phrases or sentences to sentences with several parts and even to paragraphs. . . . If one's purpose is to develop a projective technique, ambiguity and multiplicity of points within each item might be useful. However, if one is aiming to give the subject a chance to express his phenomenal field clearly, item simplicity and clarity would seem to be very important in Q-sort sets. (18:59)

Butler and Haigh's set of one hundred self-referent Q-sort statements are used the most often by them and Rogers and Dymond in the research on non-directive psychotherapy. (18:43) The items used in this instrument are reworded remarks made spontaneously in non-directive therapy. Whether or not these statements represent a total imaginary universe of self-concept characteristics is not known. Since they have come from clients spontaneously, these statements presumably refer to attributes of some importance to the self-concept. (18:44)

In a study of the relationship between self-concept, body-image and movement-concept at the University of North Carolina at Greensboro, Doudlah (66) used seventy-five of Butler and Haigh's one hundred self-referent statements. Since it is important to have some cohesiveness between individual researches within a particular area such as self-concept, Doudlah's revision was used as the Q-sort set in this study.

Conclusion and Summary

The review of literature concerning the theories and research on the phenomenal self-concept has raised important questions concerning human behavior. The empirical and statistical evidence which was investigated as supporting the theories seemed to be limited. There are several reasons for this limitation.

1. The difficulty in formulating definitions which are agreed upon by both theorists and researchers.
2. The difficulty in formulating well-controlled research.

3. Individual researches are not part of a planned research program, therefore, cannot be easily synthesized.
4. Difficulty in choosing or constructing an instrument which actually measures the phenomenal self.

These problems may be minimized and even obliterated as research continues in this field, but man himself will remain a constant problem to the researcher. Klassen (37) pointed to definite problems in the study of human personality factors.

When do we research in this field we must recognize that the human being is most difficult to study because he is the only object in any experiment who will either attempt to help you find what he thinks you are looking for, or deliberately frustrate your efforts. Furthermore, we must attempt to draw all of the evidence into our field of inquiry. Without that we are very poor researchers and poor scientists. . . . I am also convinced that the best sociologist and psychologist is one who looks at his own work with a twinkle. (37:142-143)

Although researchers have been limited by these problems, they have continued to investigate the development of the self-concept, the variables which influence self-concept changes and the effect of self-concept change on behavior.

CHAPTER IV

PROCEDURES

Selecting the Test

The Q-sort technique was selected to measure the individual's self-concept in this study. The sorting statements were devised by Doudlah. (66) From the review of literature the following factors influenced the choice of this measuring instrument: (12, 18, 60, 66)

1. Every subject must use the same simple, easily understood language utilized by the test; but interpretation of the test items is left to the subject.
2. In each sorting every subject must arrange the items in the same distribution based on the Gestalt theory of a patterned self-concept; thus the results can be correlated.
3. The correlation between the real-sort and ideal-sort allows an intensive study of perception changes.
4. The yield is quantifiable, therefore, subjected to statistical description and analysis.
5. The Q-sort is easy to administer, score and correlate.

The Q-sort methodology forces each subject to arrange a set of descriptive statements into a predetermined number of columns which range on a continuum according to how well the statement describes the subject's concept of self. Each column consists of a predetermined number of statements. When the statements are sorted, they are in a normal distribution curve.

Doudlah's set of seventy-five statements was sorted on a nine-point continuum. The left-hand side of the scale was designated for those statements which were "least like" the subject. The right-hand side was designated as "most like." In sorting the statements, each subject placed the two statements which least described a particular view of herself in Column One and the two which were most like her in Column Nine. The next five statements least and most like a particular view of the subject were put in Columns Two and Eight, respectively. This was done until all the statements had been sorted in the columns. The normal distribution curve was as follows:

1	2	3	4	5	6	7	8	9
2	.	.	.	.	.	.	.	2
	5	.	.	.	.	.	5	
LEAST LIKE							MOST LIKE	
		9	.	.	.	9		
			13	.	13			
				17				

This study was concerned with how the subjects perceived their real-self and ideal-self and the correlation between the two. Each subject sorted the seventy-five statements twice. The subject was first instructed to sort the statements according to how she perceived herself at that moment in life. A second sort was then administered instructing the subject to sort the statements as she ideally would like to be.

Construction of Instrument

A sturdy portable board was designed and constructed for the sorting of the statements. Four 10 inch by 36 inch quarter-inch peg boards were fastened together by hinges so that they could be folded up into a compact package for convenient transporting. A model of this instrument can be found in the Appendix.

Two such instruments were constructed. Each side of the instrument was painted a different color. One board was blue and yellow, the other was red and green. Black numbers etched in gold metal plates were applied to the boards to designate the value for each column. The words "MOST LIKE" were applied to the left-hand side. These words were made from gold metal plates which had letters etched in black.

Quarter-inch dowel rods were painted white. These were cut into seventy-five two-inch pegs. Each peg was sharpened at both ends. At the time of testing, these pegs were inserted into every other hole under each column number. The number of pegs was determined by the normal distribution. In Column Five the 36 inch length of the board was not long enough. Extra holes were drilled between the existing holes so that all seventeen pegs could be spaced far enough apart to allow for the statement cards.

The seventy-five statements were typed on dittos. Four sets of cards were mimeographed on four different colors of construction paper: blue, yellow, red and green. Each statement was pasted on a three-inch by one and a half inch cardboard backing.

A hole was punched at the top of each card. Each statement was numbered.

During the testing period, the blue set of cards was hung on the yellow board; the yellow set of cards on the blue board; the green cards on the red board; and the red cards on the green board. The contrasting background made it easier for the subject to read the statements once they were arranged on the pegs and also easier for the experimenter to score.

Selection of Subjects

This study was concerned with self-concept differences between Mennonite and state university-college athletes and non-athletes before and after a regular scheduled basketball season. Students from Eastern Mennonite and Goshen colleges were selected to represent the Mennonite population. Madison College and Purdue University were selected to represent the university population because of their close proximity to the Mennonite colleges.

A letter was sent to the women's basketball coach at each of these schools asking if she would participate in this study. All four schools responded in the affirmative. A copy of the letter may be found in the Appendix.

The athlete subjects from each school were limited to freshmen and sophomore basketball players. The non-athletes were volunteers from service courses who did not participate on any varsity level team. Several non-Mennonites from the Mennonite institution sample had to be dropped from the study.

Each subject was scheduled to take the Q-sort test before the basketball season by the coaches at the four schools. The experimenter obtained the assistance of one athlete subject on each campus to schedule the subjects for the second administration of the test after the basketball season. The assistants were instructed to contact each subject and schedule an hour block of time when the subject was free to take the test. The scheduled hour was checked on individual schedule cards and on a master schedule. The master schedule was returned to the experimenter. One week prior to the experimenter's visit to each campus, the assistant mailed each subject her schedule card as a reminder to appear at the designated room to take the post-season Q-sort.

The original sample consisted of seventy-two subjects. Six of these subjects were dropped from the study after the second administration of the test. Two university athletes failed to come to the post-season test and two Mennonite athletes had been cut from the basketball team since the administration of the pre-season test. One university non-athlete was dropped from the study because of illness and another had discontinued school.

When the sixty-six subjects were separated according to the type of school attended and athletic role, the subjects made up groups of the following numbers: Mennonite athletes - 12; Mennonite non-athletes - 15; university athletes - 20; and university non-athletes - 19.

Administration of the Test

The experimenter administered the test to each subject. At each school a room was provided for the testing area. Each of the Q-sort boards was set up on a table or large desk. These were arranged so that both sides of the boards could be used at the same time.

Usually there were two subjects scheduled to take the test during the same hour. Each subject was given the same instructions. The subjects were instructed to sort the first set of statements according to how she perceived herself at that moment in life. A copy of the instructions and a list of the Q-sort statements can be found in the Appendix.

After sorting the seventy-five statements in the real-sort and hanging them on the pegs, the subject went to the other side of the board and did a second sort. This time she was instructed to sort the statements according to the type of person she would ideally like to be.

The experimenter transmitted the real-sort and ideal-sort from the board to a log book by recording the numbers of the statements sorted in each column. There were times when it was necessary to test three or four subjects at once. An adjustment in the recording procedures was made. After completing the real-sort, the subject waited while the experimenter recorded the statements and removed them from the pegs. The subject did the ideal-sort on the same side.

Scoring

The Q-sorts were scored by recording the rating, one through nine, given each statement by the subject on the real-sorts and ideal-sorts. The real-sort was scored with a blue "S" and ideal-sort was scored with a red "I." A score sheet was used for both the first and second test. A copy of the score sheet appears in the Appendix.

To assure that all statements had been recorded correctly, all the "S's" and "I's" were totaled in each column. The column totals corresponded with the normal distribution curve when recording of the statements was done correctly.

To find the real-ideal congruency score, the difference between ratings of the real and ideal sorts was found and recorded in column "D." This discrepancy score was squared and recorded in column " D^2 ." These scores were summed to yield the " D^2 " total.

A nomograph was used to find real-ideal correlation coefficients for each subject on the pre- and post-season tests. A copy of the nomograph constructed by Doudlah (66:62) was obtained from Dr. Rosemary McGee. This nomograph was revised by the experimenter so that correlation coefficients could be computed to hundredths. Graph paper that was twenty squares to the inch was used to construct the nomograph for this study. A reproduction of the nomograph is included in the Appendix.

To find the correlations for all " D^2 " totals up to 511, the nomograph was entered from the left at the " D^2 " total, crossed over to the diagonal and proceeded down to the appropriate r scales.

For all " D^2 " totals above 511, correlations were found by entering the nomograph from the right at the " D^2 " total, crossed to the diagonal and proceeded up to the appropriate r scales.

CHAPTER V

ANALYSIS AND INTERPRETATION OF DATA

The purpose of this study was to investigate the possible effect of intercollegiate basketball participation on the real-ideal congruency of Mennonite and non-Mennonite women athletes.

The subjects in this study attended Goshen College, Eastern Mennonite College, Purdue University, and Madison College. Freshman and sophomore women participating on the varsity, junior varsity or freshman basketball teams were selected as the group of athletes. Freshman and sophomore women who were not participants in any intercollegiate sport activity were selected to be a control group of non-athletes. Non-Mennonite athletes and non-athletes were screened from the Mennonite sampling.

Analysis of Data

The sixty-six subjects completed Q-sorts for the real-self and ideal-self before and after a regular scheduled basketball season. Real-ideal correlations were computed for each subject by the utilization of a Q-sorting technique. These correlations have been referred to as congruency scores throughout the analysis and interpretation of data.

The pre and post congruency scores were organized into four groups representing the Mennonite athlete, Mennonite non-athlete, university athlete, and university non-athlete. A

presentation of the congruency scores for each subject is on Tables IV, V, VI, and VII in the Appendix.

Null hypotheses were stated concerning the result of three factors and their associated interactions on the real-ideal congruency. The three factors were the time interval of a basketball season, the subject's athletic status and the type of school attended. An analysis of variance of this three-way factorial design was used to test for differences. The .05 level of confidence was used to find the null hypotheses untenable. Table I presents the findings of the three-way analysis of variance.

The first null hypothesis concerned the main effect of the basketball season upon a change in self-concept.

1. There is no difference between pre-season and post-season real-ideal correlations for the total group.

The F ratio was found to be significant at the .05 level of confidence. This hypothesis was found untenable. An analysis of group means in Table II, page 52, indicates that the real-ideal correlations became more congruent after the basketball season.

The second and third hypotheses were concerned with the effect of two other main factors on the self-concept: athletic status and school attended.

2. There is no difference between athletes and non-athletes regarding real-ideal correlations.
3. There is no difference between Mennonite subjects and university subjects regarding real-ideal correlations.

TABLE I
THREE-WAY ANALYSIS OF VARIANCE OF THREE FACTORS
AND THEIR ASSOCIATED INTERACTIONS
INFLUENCING REAL-IDEAL CONGRUENCY

Source of Variation	df	SS	MS	F
Between Pre and Post	1	.2609	.2609	4.57 ^a
Between athletes and non-athletes	1	.0034	.0034	.06
Between Mennonite and university	1	.0451	.0251	.79
Athletes/non-athletes pre/post	1	.0314	.0314	.55
Athletes/non-athletes Mennonite/university	1	.0348	.0348	.61
Pre/post - Mennonite/university	1	.0665	.0665	1.16
Athletes/non-athletes - pre/post Mennonite/university	1	.0625	.0625	1.09
Within	124	7.0646	.0570	

^aF significant at the .05 level.

TABLE II
MEANS AND STANDARD DEVIATIONS OF
THE THREE FACTORS INFLUENCING
REAL-IDEAL CONGRUENCY

Factor	Number	M	SD
Pre-season	66	.5579	.2666
Post-season	66	.6367	.2026
Athletes	64	.6008	.2712
Non-athletes	68	.5940	.2065
Mennonite	54	.5737	.2401
University	78	.6136	.2387

These hypotheses were found tenable since neither of the F ratios were significant. Congruency scores did not significantly differ between the athletes and non-athletes nor between the Mennonite and university subjects.

To determine whether differences among means may have owed their divergencies to the joint effect of two factors acting together or of the combined effect of all three factors, the remaining hypotheses were suggested.

4. There is no difference between pre and post congruency scores of the athletes and non-athletes.
5. There is no difference between pre and post congruency scores of Mennonite and university subjects.
6. There is no difference between the congruency scores of Mennonite and university athletes and non-athletes.
7. There is no difference between Mennonite and university athletes and non-athletes on the pre and post congruency scores.

The lack of a significant F for the interaction ratios suggested that all of the above hypotheses were tenable.

Interpretation of Data

According to the findings of this study, freshman and sophomore women in college did increase the congruency between the real-self and ideal-self during a three-month time interval. These findings support the empirical evidence that general patterns of growth and development are influential in the maintenance and enhancement of the self-concept. It may also be postulated that

general college living may have influenced the real-ideal congruency since the one factor all the subjects had in common was being a college student.

The statistical evidence indicated no difference between the real-ideal correlations of athletes and non-athletes on the initial Q-sort. There was no difference between these two groups after the basketball season, although there was an increase in the real-ideal congruency for the total group. This can be interpreted to mean that participation on the basketball team was not the only factor possibly influencing change in the real-ideal congruency during this three-month interval. It can be assumed that the athlete may have experienced a similar change in her congruency score had she not been a team member. However, this does not deny the importance of participation on the basketball team as a specific factor within the total life experience of the athlete which may have affected a change in self-concept. It was particularly interesting to note that the Mennonite athlete group mean was the lowest before the basketball season and the highest after the season. (See Table III) From the statistical evidence it can be assumed this change was a combination of factors including basketball participation.

The absence of a significant difference between Mennonite and university subjects regarding self-concept raised interesting implications in support of and in disagreement with Klassen's (37) view of the Mennonite syndrome. The Mennonite subjects in

TABLE III
 MEANS AND STANDARD DEVIATIONS OF THE
 INTERACTIONS BETWEEN FACTORS

Group	Number	Pre		Post	
		M	SD	M	SD
Mennonite athlete	12	.4917	.3289	.7042	.1646
Mennonite non-athlete	15	.5240	.2462	.5847	.1681
University athlete	20	.5865	.2874	.6185	.2611
University non-athlete	19	.5963	.2233	.6542	.1781

this study apparently were not immobilized by an attitude of self-abasement since they were able to change their initial self-concept in the same direction and to the same degree as the university subjects. Both groups indicated more congruency between the real-self and ideal-self on the second Q-sort.

The change in the self-concept of Mennonite subjects may have specifically been influenced by a broadening view of life which had been repressed until they left home. Whereas the home life of these Mennonite subjects may have emphasized a sense of peoplehood and a corporate concept of self, college life encourages the development of personal identity. Indeed, the fact that the Mennonite subjects were in college might be an important aspect of their "escape" from the Mennonite syndrome.

Since there was no significant difference between Mennonite and university subjects after this three-month interval, it is possible that some of these same factors could have influenced the congruency scores of the university subjects also. As Klassen (37) pointed out, it is important to find traits which are common with others and not exclusively "Mennonite" when analyzing the Mennonite syndrome.

The fact that only the time interval was a significant factor influencing the real-ideal congruency of all the subjects supported Rogers' (12) theory that as a person matures he internalizes his own valuing system and the self becomes enhanced, stabilized and consistent. A measurement internalization may be

the amount of congruency between the real-self and ideal-self. Caution must be taken, though, in generalizing that increased congruency between scores was indicative of maturity in all the subjects. There is no evidence, only empirical conjectures, to support such an idea.

CHAPTER VI

SUMMARY AND CONCLUSION

The purpose of this study was to investigate the effect of intercollegiate basketball participation on the real-ideal congruency of Mennonite and non-Mennonite women athletes. Sixty-six freshman and sophomore women from four institutions of higher learning participated in this study. The subjects were grouped according to the type of school attended (Mennonite and university) and athletic status (athlete and non-athlete). The number of subjects in each group was: Mennonite athletes - 12; Mennonite non-athletes - 15; university athletes - 20; and university non-athletes - 19.

The Q-sort technique was selected to measure the real-ideal congruency in this study. Doudlah's (66) sorting statements were used. The Q-sort was administered by the experimenter at each of the institutions of higher learning before and after a regular scheduled basketball season.

Real-ideal correlations were computed for each subject after the administration of the Q-sorts. A three-way analysis of variance was used to test for differences. The .05 level of confidence was used to reject the null hypotheses.

The following are the statistical findings:

1. There was a significant difference between the pre and post real-ideal correlations for the total group. The subjects perceived more congruency between the

real-self and ideal-self after a three-month interval. Several combined factors may be postulated as influential in this change: maturation, general college living, broadening view of life, and participation on the basketball team.

2. There was a lack of statistical difference between athletes and non-athletes regarding self-concept.
3. There was no significant difference between Mennonite and university subjects regarding self-concept. The spiritual and cultural dimensions of the Mennonite way of life apparently did not effect a difference in the way a Mennonite and a non-Mennonite perceive the real-self in relation to the ideal-self.
4. The statistical evidence did not support the assumption that there would be differences between athletic status groups following a regular scheduled basketball season. Statistically, both the athletes and non-athletes increased the congruency between the real-self and ideal-self. It may be assumed that participation on the basketball team was no more influential in increasing congruency than maturation or general college living.
5. There was no significant differences between Mennonite and university subjects before or after the basketball season. Both groups were able to increase the real-ideal congruency. The immobilization of self-abasement among Mennonites was not evident in this study.
6. There was no significant interaction variance in the combined effect between the school attended and athletic status regarding self-concept.
7. The triple interaction effect of time interval, athletic status and the school attended was not significant in attributing to any differences between groups regarding the self-concept.

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APPENDIXES

APPENDIX A

Model of Q-Sort Board

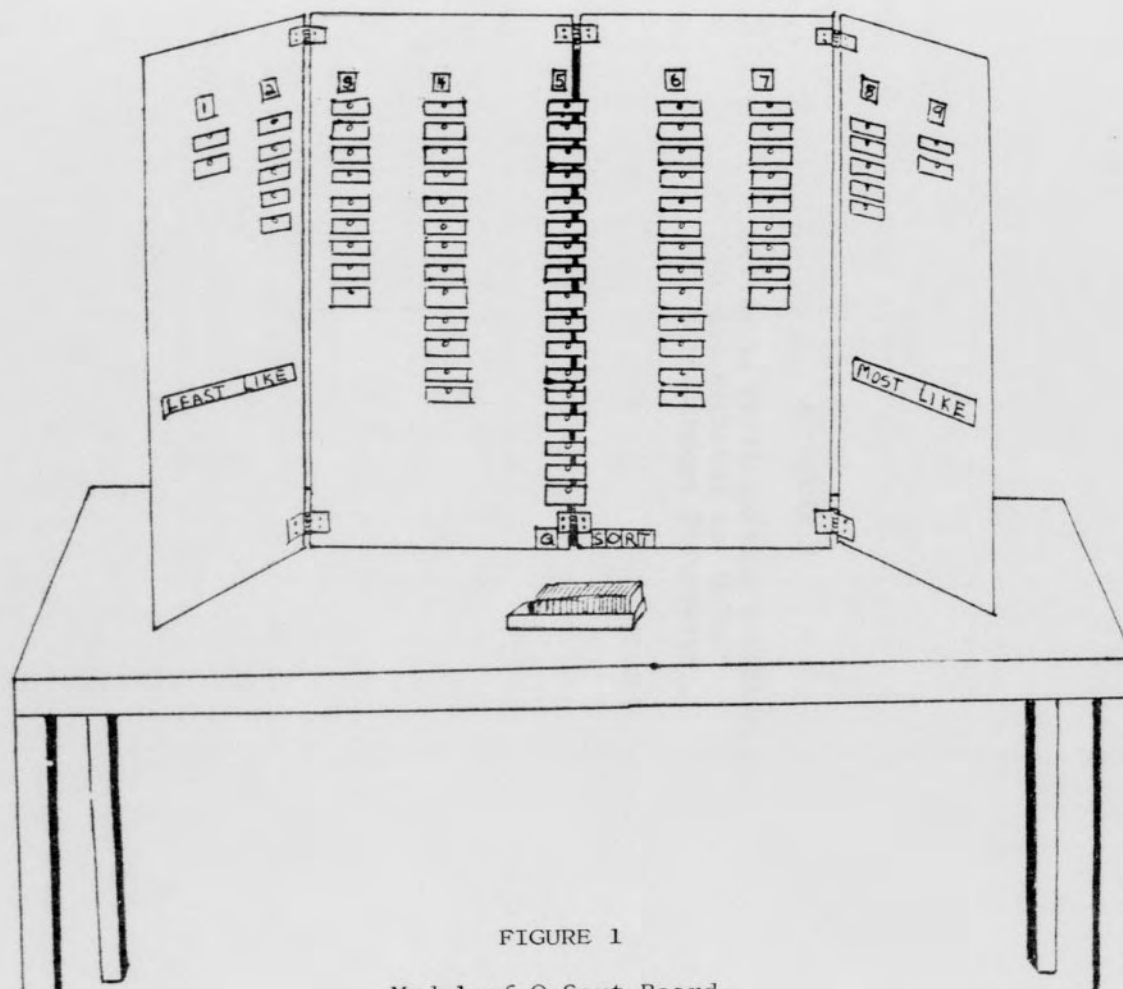


FIGURE 1
Model of Q-Sort Board

APPENDIX B

Letter to Participating Institutions
Instructions for Q-Sort
Self-Concept Statements

LETTER TO PARTICIPATING INSTITUTIONS

Miss Ruth Gunden
Goshen College
Goshen, Indiana 46526

Dear Miss Gunden:

In the past few years many individuals pursuing advanced degrees in Physical Education have investigated the personality patterns of athletes compared to non-athletes, or athletes on various skill levels or of athletes within different sports. Review of literature makes it apparent that continuing research in a number of areas is necessary before any coherent theory is possible. Personality changes due to participation in sports and how women athletes view themselves as compared to women non-athletes are two such areas.

As a graduate student pursuing a master's degree at the University of North Carolina at Greensboro, I am engaged in research concerning personality differences between church-related college and state university athletes and non-athletes through a self-concept study. I hope to use four institutions of higher education as populations from which to select my subjects. Eastern Mennonite College in Virginia and Goshen College in Indiana were selected as the church-related colleges. Madison College and Purdue University were then chosen to represent the state universities because of their close proximity to the church-related colleges.

I have limited the athlete subjects to the freshmen and sophomore basketball players. The non-athletes will be randomly selected from the remaining freshmen and sophomore women. Non-Mennonites will be screened from the study in the two church-related colleges. In the state universities the Mennonites will be screened. In the selection of the non-athletes any women participating on another athletic team will be screened. I am sure you are busy, but I would certainly appreciate your assistance with regard to this project. I will need your help in screening these individuals and in scheduling testing periods for each subject. In addition, I would need two hours scheduled with the subjects - one hour before the basketball season begins and one hour after the basketball season is completed.

In order to meet a schedule, I would like to come to your campus as soon as you have chosen your team. Would you please indicate on the enclosed postcard whether or not you are willing to allow me to conduct this study? Please include a phone number at which you could be reached and the date by which you expect to have your team chosen. I would appreciate having your reply by November 24, 1970.

Sincerely yours,

Elizabeth H. Hunsberger
M. S. Candidate

Celeste Ulrich
Adviser

Attach: Postcard

INSTRUCTIONS FOR Q-SORT

1. You will be given a packet of 75 statements.
2. Sort the statements into three piles.
 - a. On the Left: the statements which are "least like" you.
 - b. An in between pile of statements.
 - c. On the Right: the statements which are "most like" you.
3. There are 75 pegs on the board arranged in 9 columns. The values of the range are from 1-9. Statements which are "least like" you will be placed toward the Number One side of the board. Statements which are "most like" you will be placed toward the Number 9 side of the board.
4. Place the statements on the board according to their proper value as you see it.
5. Statements in each column have the same value regardless of their order.
6. You will complete two sorts.
 - a. Sort One - Sort the statements from the point of view of how you see yourself at this exact moment in time. This is called the real-sort.
 - b. Sort Two - Sort the same statements from the point of view of how you would ideally like to be. This is called the ideal-sort. This will be done on the opposite side of the board.
7. Are there any questions?

SELF-CONCEPT STATEMENTS

1. I express my emotions freely.
2. Most of my troubles are not my own fault.
3. I feel happy much of the time.
4. I feel secure within myself.
5. It's quite important for me to know how I seem to others.
6. I put on a false front.
7. I often feel that I want to give up trying to cope with the world.
8. I have confidence in myself.
9. I am kept going by hopes for the future.
10. I have courage - the willingness to keep trying.
11. I usually like people.
12. I am a strong, competent person.
13. I am full of life and good spirits.
14. I feel free and unhampered.
15. I can stand up for my rights if I need to.
16. My decisions are not my own. I feel controlled by others.
17. I am liked by most people who know me.
18. I am ashamed of myself.
19. I have some originality or inventiveness in me.
20. I don't remake myself to satisfy each person who is important to me.
21. I have initiative. I can get started on my own.
22. It takes everything I've got to keep going.
23. If I can't have perfection, I don't want anything. Nothing in between will satisfy me.
24. I am shy.
25. Basically, I like myself.
26. I am no one. I am not a person in my own right.
27. I am fearful, often dreading what may happen.
28. My energies and abilities are fully available to me.
29. I am intelligent.
30. I have a feeling I'm just not facing things.
31. I am different from others.
32. I forgive easily - don't hold grudges or try to "get even."
33. I tend to feel envy at other people's good fortune.
34. I have to protect myself with excuses, with rationalizing.
35. I am satisfied with myself.
36. I am worth being loved.
37. I shrink from facing a crisis or a real hard test of myself.
38. I understand myself.
39. I have a feeling of hopelessness.
40. I often feel resentful.

41. I feel helpless.
42. I am disorganized.
43. I am too much the result of past experiences to hope for much change.
44. I feel inferior.
45. I am a failure.
46. I am emotionally mature.
47. I am confused.
48. I am optimistic.
49. I am pretty sociable, and really enjoy being with people.
50. I get pleasure out of life.
51. I am critical of people.
52. I am superior to most other people.
53. I get upset when old and familiar things are changed.
54. I'm a pretty calm and relaxed person. Few things really bother me.
55. I generally am fortunate.
56. I am really self-centered - don't care much about other people.
57. It is pretty hard to really be myself.
58. I am usually an aloof, reserved person.
59. I do care for others and want them to be happy.
60. I am an angry, hostile person.
61. I live largely by other people's values and standards.
62. I really am disturbed - close to the breaking point.
63. I often feel guilty.
64. I trust my emotions.
65. I am kind and gentle.
66. I have warm emotional relationship with others.
67. I just have to drive myself to get things done.
68. I am a submissive person.
69. I feel able to make up my own mind and stick to it if I want to.
70. I am adaptable. A strange situation is not a crisis to me.
71. I just wish I could be someone else, and forget all about me.
72. I just can't tell anyone my real feelings.
73. I feel adequate.
74. I am a pretty stable person.
75. I am conscientious and honorable - can be depended upon.

APPENDIX C

Q-Sort Score Sheet
Reproduction of Nomograph

	1	2	3	4	5	6	7	8	9	0	0'
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	1	2	3	4	5	6	7	8	9	0	0'
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FIGURE 2

Q-Sort Score Sheet

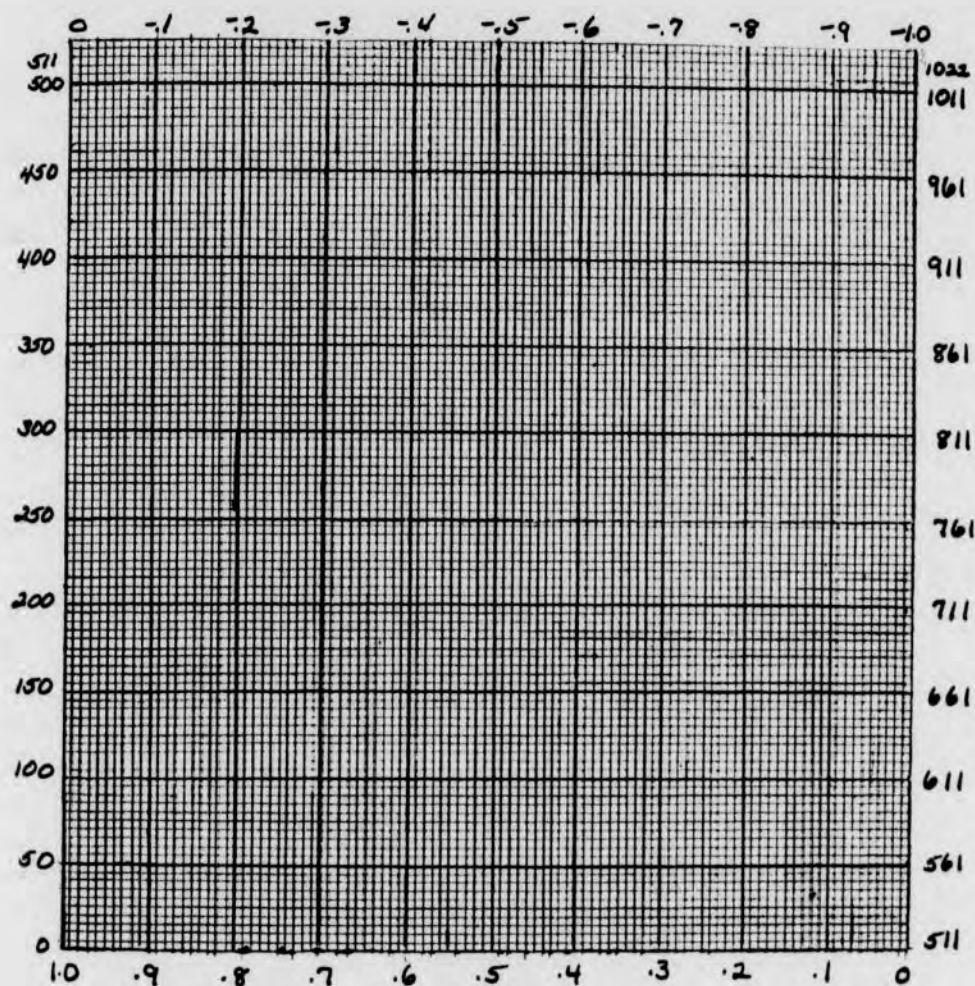


FIGURE 3

Reproduction of A Nomograph

APPENDIX D

Congruency Scores for Subjects

TABLE IV

REAL-IDEAL CORRELATIONS FOR
MENNONITE ATHLETES

Subject Number	Before	After
1	-.23	.70
2	.30	.22
3	.64	.67
4	.77	.65
5	.54	.80
6	.75	.78
7	.46	.74
8	.67	.81
9	.84	.74
10	.28	.69
11	.08	.80
12	.80	.85

TABLE V
REAL-IDEAL CORRELATIONS FOR
MENNONITE NON-ATHLETES

Subject Number	Before	After
13	.51	.42
14	.71	.69
15	.41	.51
16	.01	.23
17	.62	.49
18	.70	.67
19	.83	.80
20	.68	.76
21	.59	.58
22	.51	.79
23	.63	.67
24	.75	.70
25	.53	.52
26	-.02	.33
27	.40	.61

TABLE VI
REAL-IDEAL CORRELATIONS FOR
UNIVERSITY ATHLETES

Subject Number	Before	After
28	.90	.85
29	.93	.93
30	.61	.75
31	.32	.14
32	-.32	-.14
33	.56	.58
34	.71	.77
35	.69	.75
36	.69	.79
37	.62	.54
38	.81	.64
39	.70	.75
40	.63	.78
41	.79	.73
42	.22	.30
43	.43	.42
44	.37	.69
45	.75	.73
46	.85	.79
47	.47	.58

TABLE VII
REAL-IDEAL CORRELATIONS FOR
UNIVERSITY NON-ATHLETES

Subject Number	Before	After
48	.61	.68
49	.85	.84
50	.67	.61
51	.51	.43
52	.23	.29
53	.34	.47
54	.83	.87
55	.35	.74
56	.76	.82
57	.44	.40
58	.73	.86
59	.62	.75
60	.71	.57
61	.08	.48
62	.79	.86
63	.70	.74
64	.76	.67
65	.86	.80
66	.49	.55