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SAMUELSON, GENELLE FAYE. The Effects of a Specially Structured Seven Week Physical Education Class upon the Self-Concepts of Low Self-Esteem Tenth Grade Girls. (1969) Directed by: Dr. Gail Hennis. pp. 98.

The purpose of this study was to investigate the effects of a specially structured seven week physical education class upon the self-concepts of low self-esteem tenth grade girls. The study was conducted at Ben L. Smith Senior High School in Greensboro, North Carolina with twenty-eight students serving as subjects, fourteen as members of the seven week experimental class and fourteen as controls. Prior to and following the seven week period each subject rated herself on Coopersmith's Self-Esteem Inventory (SEI) and was rated on her self-esteem by two of her teachers using Coopersmith's Behavior Rating Form (BRF).

Non-parametric techniques were used in the treatment of the statistical data. The Fisher exact probability test revealed that the experimental group scored significantly higher on the post test self-esteem inventory than did the control group.

The Sign test showed there were no significant changes within either group from pre to post test on SEI and BRF scores, grade point averages or days present in school.

In case studies kept on the experimental subjects, several of them showed increased self-confidence and self-direction in their physical education activities.

Based on the results of this particular study, the following conclusions appear warranted:

1. Following the special class, the eleven experimental subjects evidenced significantly higher

scores on the self-esteem inventory than did the nine control subjects.

2. Several of the experimental subjects showed improved self-confidence and self-direction in their regular physical education class following the seven week class.
3. Physical education can serve as a medium in which low self-esteem girls have opportunity to experience degrees of success and feelings of self-worth.

THE EFFECTS OF A SPECIALLY STRUCTURED SEVEN WEEK  
PHYSICAL EDUCATION CLASS UPON THE  
SELF-CONCEPTS OF LOW SELF-ESTEEM  
TENTH GRADE GIRLS

by

Genelle Faye Samuelson

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## CHAPTER I

## INTRODUCTION AND STATEMENT OF PROBLEM

## I. INTRODUCTION

Our psychological selves may become crippled in much the same way as our physical selves may be crippled by disease or by an accident. When we see ourselves as inadequate, we lose our 'can-ness.' There becomes less and less that we can do. (1:11)

The person who disrespects and dislikes himself is in a real sense crippled. He enters each facet of life with a handicap: the conviction that he is not loved, cannot achieve, will never improve. Studies have shown that this conviction predisposes him to underachievement, low sociometric status, low level of aspiration, and delinquent behavior. (1) And since these factors tend to produce additional feelings of inadequacy, a vicious cycle is set in motion.

A person's feelings of inadequacy result from his seeing himself as unsuccessful and unaccepted year after year. Understandably, such feelings are not readily reversible. Yet because it is increasingly apparent that growth in self-esteem can lead a person into a happier more productive life, a number of agents in society are consciously endeavoring to improve the self-esteem of their members.

Public school staffs can be especially vital agents in helping an individual gain self-esteem. They deal with a growing

person whose self-views are still being molded; they are personnel especially trained and interested in optimal human development; and they are an integral part of an individual's life over a period of many years. Next to the home, they are probably the most influential factor in the development of a child's self-concept.

Even a child who comes to school from a background of failure and rejection learns to accept himself if he perceives that his teachers like and accept him. If he is helped to find one skill in which he but partially succeeds, he begins to recognize his self-worth. If he is persistently yet gently made to substitute desirable for problem behavior, he has the chance to learn self-control and self-respect. If he feels assured that at least one person values him as a person, he gains the ability to relax at least part of his defense.

How this can actually happen within the schools is a puzzling question. Ideally each classroom and each student-teacher relationship should generate an atmosphere that builds positive self-concept. Realistically it often takes the creation of a special class to bring this about. Certainly the creation of such classes is justified and is to be encouraged. Just as special in-school programs are planned to benefit the slow-learner and the physically handicapped, similar programs can be specifically designed to improve the self-concept of the low self-esteem student.

Pioneer programs of self-concept improvement have been modified versions of English or social studies classes or experiments in group counseling. When mixed with creative methods and a patient

teacher, any academic subject makes a suitable starting point. It is the feeling of this writer that physical education is also a possible foundation for such a class.

Physical education can help improve a student's negative body image which is often a component of low self-concept. The activities alone may not reduce his body weight or improve his overall skill level, but they can help him respect his body for the abilities it does have. For instance, after a 3-4 week track unit, most every student jogs farther in twelve minutes than he did before the unit. When the student realizes that he has won a victory in competition with himself, that his body is working better than it did, the gain in body image is significant though small.

Movement experiences help a student, often force him, to express himself completely spontaneously, allowing him to see himself in a new way. A low-esteem student who normally withdraws from social interactions seems to forget his inadequate feelings when he and his teammates are winning a softball game in the bottom of the seventh inning. His out-of-character behavior, a momentary openness with his peers, may surprise him, but it is probable he will accept it as a new element of his self-concept and begin to feel a bit more confident in future social interactions.

The physical education teacher has an especially good opportunity to help the student improve his self-concept. In physical education class a student's success or failure is observable to all his classmates; if he strikes out with the bases loaded and

loses his temper, his failures are doubly damaging to his self-concept because everyone sees them. But the teacher meanwhile learns of two specific ways in which to help the student. If his batting and temper control improve only a little, the results, this time more successful, are also public knowledge and thus give a substantial boost to the student's self-concept.

It will take much thoughtful study to discover exactly how physical education and other school subjects can be best utilized for self-concept improvement. Once the schools realize more fully the fundamental importance of positive self-concept in better learning and better living, such study will certainly increase rapidly. To fulfill their purpose of educating the total student, the schools have the obligation to be the leaders in this study. "The self is learned. What is learned can be taught. What can be taught is fair game for the public schools." (1:101)

## II. STATEMENT OF PROBLEM

The purpose of this study was to investigate the effects of a specially structured seven week physical education class upon the self-concepts of low self-esteem tenth grade girls.

## CHAPTER II

## REVIEW OF LITERATURE

Whether or not a person realizes it, he has within himself a certain set of attitudes toward each person and object in his environment, attitudes that determine his behavior in that environment. Likewise he has a set of attitudes toward himself, a self-concept, which in turn determines and makes meaningful all the other attitudes. Thus the key to what motivates an individual's behavior is found by understanding what he thinks of himself.

The attitude toward self--what is it like? According to Rosenberg (7:5) the attitude toward self takes the same form and includes the same variety of components as does any attitude toward any object. It is a whole of many parts. Rosenberg feels that understanding the nature of a person's self-concept is essentially a matter of knowing how he feels in each of these self parts. He proposed considering the self in eight such parts:

- content: What does he think are his traits, skills and social status?
- direction: Does he think of himself favorably or unfavorably?
- intensity: How strong is his opinion of self?
- importance: How important is his self in relationship to other parts of his environment?
- salience: How much of the time is he conscious of himself?
- consistency: Are the elements in his self-picture contradictory or consistent?
- stability: Does his self-concept remain relatively stable despite external circumstances?
- clarity: Is his self-picture definite or vague? (7:7)

Although a study of self-concept actually involves consideration of all these questions, researchers have concentrated almost entirely upon the second one, the issue of self-esteem. They feel it is the factor that most directly influences individual behavior. Thus even though self-esteem is theoretically only one facet of self-concept, the terms "self-esteem" and "self-concept" have come to be nearly synonymous. Self-concept is most often described not in terms of stability or intensity but in terms of direction. Is it positive or negative? High or low?

#### I. ADEQUATE AND INADEQUATE SELF-CONCEPT

With this thinking as the basis of assessment, it follows that "the total self-concept of an individual may vary from extremely poor or negative, to very good or positive." (6:255) At one end of the continuum, a person with high self-esteem is one who is satisfied with himself yet not smug. He does not consider himself better than others but feels that he is "good enough," a person of worth. (7:31) He knows what he is, is aware of his virtues and deficiencies and accepts what he sees without regret. (7:31) His self-esteem is not dependent upon perceived personal perfection. That is, the flaws that external circumstances might reveal in him do not surprise him or cause him to panic. Rather, he can accept the fact that, yes, these are perhaps true of him. He has the type of self-accepting attitude that Combs and Snygg claim is indicative of good adjustment. (2)

Taylor and Combs thought that if the self-accepting person were well adjusted, he would be better able to accept unflattering

facts about himself than would a low self-esteem individual. They administered the California Test of Personality to 205 sixth graders and on the basis of the test scores divided them into two groups, the better adjusted and the less well adjusted. They then gave to all the subjects a list of statements which are probably true of all children but which are damaging to self if admitted (e.g., "I sometimes disobey my parents." "I sometimes tell lies.") As predicted, the better adjusted group admitted to significantly more items than the poorly adjusted group. (21:91)

Perry (32:317) did a similar study with 63 children and obtained statistical data that supported both Taylor and Combs and Snygg and Combs.

A person's ability to accept himself also has been found to facilitate his acceptance of others. When a person feels secure in his own right, he does not need to use other people for his own self-enhancement; instead he is free to relate to them for what they are in themselves and not for the contribution he hopes they will make to his self-esteem. He thus conveys to others an attitude of openness and spontaneity. It is no wonder that researchers find "good self-concepts are associated with popularity and effectiveness in group relations." (6:291)

Sheerer did in-depth case studies on ten counselees and reported a "definite and substantial correlation between attitudes of, acceptance of and respect for self and attitudes of, acceptance of, and respect for others." (20:175)



McIntyre (16:625) tested 224 college male freshmen and also found positive and significant correlations between attitudes toward self and attitudes toward others.

Many studies have found that a positive self-concept is also a facilitating factor in academic performance. It would appear that the person who feels he is adequate meets life expecting to be successful. (2:52) He is less anxious about how he will do. (13:1) And, since the majority of his self needs are satisfied, he can more readily expand his perceptual field so as to effectively concentrate on interests outside the self.

Comparing the self-concepts of high school achievers and underachievers, Shaw, Edson, and Bell (19:195) concluded that male achievers feel relatively more positive about themselves than do male underachievers. In a similar study of honor roll college sophomores as compared to those on probation, Stevens noted that academic achievers have a "much greater degree of self-acceptance than non-achievers who tended to reject themselves." (36:2532)

Roth (18) followed the progress of college students who volunteered to be part of a reading improvement program. For low self-esteem defensive students the program proved a threat because it attempted to change their reading habits. Most of them dropped out of the program or showed no improvement while the less defensive students were able to register improvement.

Alexander (24) obtained five measures for each of his subjects: self-concept, student self-concept, self-acceptance, school marks, and intelligence. In relating the three self ratings to

each other and to the two objective measurements, he found that "certain self measures correlated significantly as highly with school marks as did intelligence." (24:3229) For the boys a significant correlation existed between self-concept and marks and for the girls between student self-concept and marks.

In examining the general self-concept, the student self-concept, the motivation, and the academic success of college freshmen, Borislow (26:150) noted that general self-concept scores of scholastic achievers and underachievers did not differ. But underachievers did register a lower academic self-concept.

The Alexander and Borislow studies make it clear that the direction of the total self-concept is not necessarily the direction of its many components. It is how a student feels about his intellectual ability--his academic self-concept--rather than his general overall self-concept that determines his achievement.

What then are the factors that shape the academic self-concept? The thinking of Brookover (12:86) on this may have a startling impact on educators. He hypothesized that the academic self-concept is determined by teachers' influences upon a student, i.e., by the expectancies they have of him regarding his achievement. As the student's perceptual mechanisms assimilate these expectancies, a "looking-glass self" develops: he believes himself to be what he perceives the teachers think he is.

Findings of Davidson and Lang (14) support Brookover. They devised a Checklist of Trait Names and administered it to 203 children in fourth, fifth, and sixth grades. The children were

first asked to rate each adjective on the checklist according to what "My teacher thinks I am," and, secondly, according to what "I think I am." Classroom teachers then rated the students' academic achievement and behavior. Statistical analysis of data indicated:

1. There is a positive correlation between children's perception of their teachers' feelings toward them and children's perception of themselves.
2. There is a positive relationship between favorable perception of teachers' feelings and good academic achievement.
3. There is a positive relationship between favorable perception of teachers' feelings and desirable classroom behavior. (14:107)

At least two authors reported findings contrary to those cited above. In one representative study, Beaird compared the self-concepts of sixty-one high school drop-outs with those of sixty-two non drop-outs. She found no significant difference between the two with respect to self-concept and concluded

that factors such as intelligence, socio-economic status, and academic achievement more adequately differentiate the drop-out from the non drop-out than the patterns of self-concept. (25:5724)

Nicholson (31:6063) hypothesized that a significant relationship would exist between self-concept and reading achievement. He administered three different self-concept tests to 47 nine year olds of average intelligence but obtained results that did not confirm his hypothesis.

The bulk of the literature reviewed indicated agreement that positive self-concept can be appropriately associated with academic achievement as well as with desirable adjustment and acceptance of others.

In contrast to the self-accepting person is the individual at the opposite end of the self-concept continuum who basically does not like himself. To many who believe it is desirable to think humbly of one's self and who equate low self-esteem with humility, it should be emphasized that low self-esteem does not imply humility--which indeed can be healthy--but rather self-rejection, self-dissatisfaction, and self-contempt. (7:31) These are self-attitudes that can produce definitely unhealthy behavior patterns such as defensiveness, aggression, anxiety, and underachievement.

Inherent in every self is the fundamental need for enhancement; in the last analysis everyone wants to think well of himself. Snygg and Combs (2) explained that this drive toward self-enhancement is what causes maladjusted behavior in those with low self-esteem. When a person is consciously or unconsciously self-derogatory, his inner self nonetheless strives to build itself up by narrowing its field of perception; that is, it tries to believe only those things about itself which are self-enhancing.

For example, if a teacher were to in some way reprimand a student of low self-esteem for misbehavior, the student would probably become immediately defensive and deny the misbehavior. Because he has little self-esteem, his self cannot afford to accept this self-damaging perception. The student may lie and deny the misbehavior almost automatically. Such action will further harm his status with the teacher and cause him to see himself as more disliked and worthless. Later if he tries to assert his self worth by aggressive or show-off behavior, he will again elicit the

teacher's reprimand and the downward spiraling cycle will begin anew. (1)

It is easy to see why such low self-esteem individuals are consistently found to manifest low sociometric status, "problem" behavior, and achievement below their potential. (33:2472) Just as the high-esteem person expects that he will do all right, his low-esteem counterpart begins an endeavor supposing he will fail. As Kelly said, he has lost his "can-ness." (1:11) Instead of applying the abilities he does have, he tends to withdraw, claiming that the endeavor does not matter to him anyhow. (9:186) This apparent indifference and "sour-grapes outlook" prevents him from attaining his potential productivity and wins him few friends.

Allowing a personality to assume this posture for any length of time is a pre-disposing factor in pervasive personal maladjustment. This was a conclusion arrived at by many writers in self-concept theory. (2, 9, 21, 32) That such a situation is unfortunate and undesirable seems readily apparent. The question that then follows is: "How can a low self-concept undergo a positive change?" And basic to that question is another: "How does any self-concept grow to be 'low' or 'high'?"

## II. SELF-CONCEPT DEVELOPMENT

"The self-concept, we know, is learned." (1:53) That is, a person's self-concept is "the apex--the culmination--of all the social and personal experiences" he has had. (6:254) More specifically, the self-concept is a product of how a person views or perceives these learned experiences.

The objective nature of a person's environment is, of course, important. It should help to be surrounded by love and acceptance, but this does not guarantee an adequate self-concept. More crucial is the person's subjective appraisal of his environment. What does he perceive that others think of him in comparison to themselves? (4:23) Or how well does he think he is succeeding in relationship to others?

This perceptual self-assessment is so private that theorists can at best only speculate as to how it actually shapes the self-concept of each individual. Thus when speaking of the determining factors in self-concept development, they usually discuss not the mechanics of the perceptual process itself, but more observable influences like the family, body image, and socio-economic status.

Zion, for instance, set out to investigate the relationship between body image and self-concept. Using a sample of 200 college freshman women, she correlated measurements of self-concept, as obtained on Bills' Index of Adjustment and Values, with measurements of body-concept, obtained with a test she had developed. Results indicated that

there is a significant linear relationship between self-concept and body concept in most dimensions measured. It appears that the security one has in one's body is related to the security with which one faces one's self and the world. (23:494)

Doudlah (28) did a similar study but used as subjects only freshman women with average or low motor ability. She took Q-sort measures of each subject's self-concept, body-image, and movement-concept and found a positive correlation between self-concept:body-image and body-image:movement concept.

However, Sebastian, (34) in a study of fifty-five adolescents, found that height, weight, and height/weight ratio did not correlate significantly with a measured global self-concept. Physical self-concept as a facet of global self-concept did correlate significantly, however, with "physical behavior output" as assessed by the adolescents' teachers and peers. Two other measured facets, social self and emotional self, did not correlate significantly with their respective behavior outputs. It seems an adolescent acts physically in accordance with his body image but that socially and emotionally he often conforms to prevailing adolescent behavior patterns regardless of how he feels.

Wylie, whose volume The Self-Concept is a classic and thorough review of literature in the field, indicated most theorists agree "that body characteristics which are lowly valued by a subject may be expected to undermine his general self-regard, while highly valued body characteristics should enhance self-regard." (9:159)

It would seem that the social class to which a person belongs would also influence his self-regard. Rosenberg (7) who studied a random sample of 5024 high school juniors and seniors noted that adolescents from the higher social classes were somewhat more likely to accept themselves. But a close review of his data suggested it was not the status of any particular social class but its child-rearing practices that affected an individual's self-esteem.

For instance, Rosenberg's male subjects in upper classes showed higher self-esteem than those in lower classes, but the girls' self-esteem varied only slightly from class to class. Because there is variance only in boys' scores, Rosenberg implied self-esteem was not affected as much by status concepts as by parental attention. Lower class boys in general had less contact with their fathers than did upper class boys, while mother-daughter relationships were more stable from class to class. From additional statistics of the entire boy-girl sample, he concluded that

adolescents who report close relationships with their fathers are considerably more likely to have high self-esteem and stable self-image than those who describe these relationships as more distant. (7:44)

Other authors have investigated the effect of birth order (17) and parents' education (22) upon individual's self-concept but the nature of the parent-child relationship is undoubtedly the more crucial element in the family structure.

Parents' attitudes toward the child can positively influence self-concept development in several ways:

1. If the parents genuinely love and accept the child, he will come to love himself.
2. If they help him acquire acceptable behavior, he will come to respect himself for it.
3. If they help him to understand he has both abilities and limitations, he will view these realistically and accept them.

If, on the other hand, parents continually make undue show of their



child's accomplishments as if to enhance their own status, the child will come to hold unrealistic "notions of omnipotence" about himself. (10:181) Such attitudes cannot be linked directly to negative self-concept, but they do tend to result in emotionally immature behavior (10) and will undoubtedly lead the child to disillusioning experiences later in life.

Low self-esteem will develop not only when children perceive themselves rejected but also when they sense parental indifference. According to Rosenberg, parents' indifference to a child's friends or school marks is more closely related to low self-esteem than is parental punishment. (7:136, 138)

It is appropriate to conclude, then, that a child defines his self-image mainly by internalizing the attitudes and expectations he perceives that others who are important to him, especially his parents, have toward him. (12:86) Yet, his self-image is also directly affected by the positive or negative regard he has for his body and its capabilities and by the success or lack of success he experiences at school.

### III. SELF-CONCEPT MEASUREMENT

The worth of the theories and studies cited previously ultimately depend upon the measurement of self-concept. If self-concept cannot be expressed as a quantity or quality and shown to affect personality adjustment and individual behavior, it is just an idea without much real meaning. (6:260) Researchers realize this and have devised several instruments that make self-concept measurement possible.

The available instruments are designed to elicit a self-description from the subject. Some ask him to answer the question "Who am I?" Psychology experts then judge his answer as indicative of positive or negative self-concept. Usually, however, the measurement instrument is a printed list of descriptive adjectives or statements on which the subject rates himself. For instance, if the adjective is "dependable" or the statement reads "I am dependable," the subject indicates whether or not he thinks of himself as dependable.

On the simpler rating scales, the subject merely checks "like me" or "unlike me" after each item. In the more complex Q-sort method, he chooses "like me" or "unlike me" and also indicates on a five, seven or nine point scale the degree to which each item is like or unlike him. A Q-sort involves printing the items onto cards which the subject sorts into appropriate piles, such as "always like me," "sometimes like me" or "never like me."

For either a rating scale or Q-sort, response to each item is scored according to a pre-determined index of desirability. Since "dependability" is a desirable trait, an individual who checks it as "like me" indicates a positive concept of himself on that item. When all items are scored and added up, it is possible to know if the subject's overall self-regard is positive or negative.

A second type of self-concept measure can be obtained by knowing the amount of discrepancy between a subject's real and ideal selves. Using either the rating scale or Q-sort, a subject

first rates the items according to what he is actually like, and, on a second rating, according to what he would like to be like. Since most everyone would like to be better than he is, the ideal-self score is higher than the real-self score. The total self-concept score is then determined by subtracting the real-self score from the ideal-self score. The larger the discrepancy between the two, the greater is the subject's self-dissatisfaction and the lower his self-concept. (9, 15)

Studies in self-concept utilize both types of measurement. Lipsitt (15) discovered however that the discrepancy score is almost perfectly correlated with the real-self score, implying that one real-self measurement is just as reliable as a two-part real-self:ideal-self measurement.

The basic problem in any of the methods is the questionable validity of a self-report. (8:175) A subject is often consciously or unconsciously selective about what he reveals of himself. For this reason, it is common practice to obtain an observer's appraisal of the subject's self-concept in addition to the subject's self-report. If not more accurate, it is at least more objective.

Writers in self-concept literature readily admit neither the observer or self report is to be regarded as scientifically reliable. They admit it is impossible to know what a person really thinks of himself, what has produced those thoughts or what conditions effect positive changes in them. So even though they have

based their studies on the careful use of self-concept measurement, the conclusions they reach must remain somewhat speculative.

#### IV. RELATED GENERAL STUDIES

Assuming from the preceding review that positive self-concept is a desirable personal possession, and acknowledging that its content and direction are affected by many complex and interrelated factors, the question of the present study becomes: Can the senior high school, and, in particular physical education in the high school, assist students in developing a positive self-concept?

School personnel in general can influence the self-esteem of all students in basically the same ways as do parents, and the teacher in each classroom can modify her actions so that more students will perceive adequate "looking-glass selves." (see page 9) But there will have to be additional and special consideration given to the task of effecting positive changes in those students who have already developed distinctly inadequate self-concepts.

Exactly how these changes could be induced to occur in a high school or for that matter any school setting has been the concern of an increasing number of educators and psychologists in the last few years.

Torrise (38) wondered if extra teacher attention and enrichment activities would improve the achievement, school attendance, and self-concepts of underachieving seventh graders. In "Project Able," Mt. Vernon, New York, he identified 52 boys and girls who were average or better in ability but below average

in achievement and divided them into four experimental groups of thirteen students each. An additional number of underachievers was assigned to four control groups. Each experimental group met with a teacher four hours per week outside of school time for group and individual counseling, tutoring, and field trips, as outlined by Torrasi for the teachers. Achievement tests and self-concept inventories were administered to all eight groups before and after "Project Able" which was in operation from September to May. Resulting data indicated that:

1. pupils in experimental groups showed significantly greater achievement than those in control groups
2. experimental pupils did not differ significantly from control groups in the number of school days attended
3. experimental pupils overall did not differ significantly from control groups in their self-concepts of their general or specific abilities
4. boys in experimental groups did demonstrate a significantly greater self-concept of general ability than did boys in control groups
5. on an overall basis pupils in experimental groups 'performed more effectively than those in control groups at termination of experiment.' (38:925)

In a similar study, Butterfield (27) set out to evaluate the effect of certain group activities upon the self-report of boys and girls in the tenth and eleventh grades. He assigned ten subjects-- five girls and five boys--into each of five groups: The E1 group had "client-centered" group discussions with no stimuli; the E2 group had "client-centered" group discussions with stimuli; the E3 group led its own discussions; C1 was a control group to offset

the Hawthorne effect; and C2 was a control group to offset normal growth. As self-concept measures, all fifty subjects took Bills' Index of Adjustment and Values and a sub-test of the Tennessee Self-Concept Scale. The tests were administered twice before and twice after the sessions in order to obtain measures of real-self and ideal-self. All groups met for eighteen sessions during school hours, except C2 which met only for the testings.

Butterfield hypothesized that the three types of experimental groups would show significantly different changes in (a) real self-report and (b) in the amount of discrepancy between real self-report and ideal self. Both hypotheses were rejected. Changes did occur, but they were found not to be statistically significant when compared with changes that took place in the group controlling for Hawthorne effect. (27:488-89)

Another author, Storey, (37) tested the relative effectiveness of two types of group counseling upon the self-concepts and observed classroom behavior of "low-motivated" eleventh grade boys. She assigned forty-two boys to the "A" group which had group counseling sessions only, and forty-two boys to the "B" group which had individual plus group counseling. A "C" group was the control. There were no pretests. After the final session boys who had attended at least sixteen times were measured on self-concept by the Minnesota Counseling Inventory and on classroom behavior by an abbreviated form of the Haggerty-Olson-Wickman Scale. Findings showed that "group counseling was effective with or without the addition of individual counseling for all variables tested." (37:1711) Also

the "B" group exceeded the "A" group in "producing teacher estimates of more conforming classroom behavior." (37:1711)

A study by McBride (29) tried to determine if exposure to counseling or motivation techniques or enrichment activities or a combination of these caused changes in the self-concepts of disadvantaged children. McBride defined "disadvantaged children" as those who cannot achieve full development for functioning socially or economically because of ethnic background, skin color, or poverty. From a sample of disadvantaged seventh graders in Phoenix, Arizona, he randomly selected fifty subjects and assigned ten each to five different groups which he described as follows:

Group 1: 12 sessions of "personal involvement" as members of Neighborhood Youth Council.

Group 2: 12 sessions of "motivation and enrichment" such as field trips and speakers.

Group 3: 12 one-hour sessions of group counseling.

Group 4: 6 sessions of "motivation and enrichment" and 6 sessions of group counseling.

Group 5: Control.

Self-concepts were measured before and after the sessions by the Combs' School Apperception Test. Group four showed the most significant changes between pre and post measures. Changes for groups one, two, and three did not differ significantly from the control group. McBride concluded that enrichment techniques can and did affect the self-concepts of pupils who participated and that the effect was in the direction of increased feelings of adequacy.

Lastly, "English in Every Classroom," a curriculum innovation by Fader (5) helped produce positive changes in the self-images of delinquent boys by increasing their reading and writing activities. In designing the English curriculum for W. J. Maxey Boys' Training School in Whitmore, Michigan, Fader prescribed that English teachers use newspapers, magazines, and paperback books in their classes instead of textbooks. Also, he persuaded teachers in all other academic subjects to assign pupils some type of written work five times every two weeks. Fader wanted the teachers not to be overly concerned about the length or content of written papers; he thought the repetitive act of writing itself was the essential element that would start the boys on the way to language competence. Because the curriculum began to produce several kinds of encouraging changes among Maxey students, Fader and a teaching colleague designed a study that would compare the progress of Maxey boys with the progress of a control group of boys in another midwestern training school. Before and after an academic year both groups were measured with Teacher's Behavior Rating Sheet, Teacher's Evaluation Form, "How Much Do You Like" (things at school) questionnaire, the Coopersmith Self-Esteem Inventory, and a Literary Attitude Scale. Results pertinent to the present study showed that during the year self-esteem rose among the Maxey boys but deteriorated in the control group.



## V. RELATED PHYSICAL EDUCATION STUDIES

While an increasing number of studies focus upon the self-concept as it is affected by special programs and classes within general education, few studies in comparison have explored the effects of in-school physical education upon self-concept.

Nelson (30) studied the relationship between the motor ability, real self-concept and ideal self-concept of eighth grade girls. She began by administering the three-item Scott Motor Ability Test to eighty girls in two different physical education classes and used the test results to classify them into low, average, and high motor ability groups. She then measured the girls' self-concept, real self-concept, and ideal self-concept with a seventy-five statement Q-sort devised by Doudlah (28). Motor ability and self-concept tests were re-administered following a seven week basketball unit during which the girls' classes met two days per week. Thirty-eight of the original eighty subjects were dropped from the study for lack of complete data. Major findings inferred that:

1. For the group as a whole, motor ability scores improved significantly after basketball unit, but within the total group only the average motor ability group improved significantly.
2. Girls in the average and high motor ability groups showed a change in concept of self (amount of real-self:ideal-self discrepancy) following the basketball unit.
3. Each motor ability group changed significantly in concept of real self following basketball unit.
4. In the initial self-concept testing, there was no significant difference between the motor ability groups in concepts of self.

5. There was no significant statistical support for assuming that there are differences between the motor ability groups in concepts of self following a basketball unit. A statistical trend did seem to indicate, however, that students in the high and average motor ability groups did increase in awareness of self-concept following the basketball unit. (30:56)

Research done on the effects of camping upon self-concept provides supportive guidelines for the present study even though outdoor education is technically not a part of the physical education program in most schools.

Beker (11) hypothesized that school camping produces the kind of social climate that stimulates improvement of self-concept and social relationships. He worked with seventeen different sixth grade classes, thirteen of which participated in a five day camping experience (the experimental group), and four of which remained in their regular classes (the control group). Self-concept checklists were administered before and after the camping experience to both groups. The experimental group showed marked positive shifts on more checklist items than did the control group, the greatest difference between the groups appearing on these items:

1. "I am a dependable person."
2. "I have trouble making up my mind."
3. "I get upset too easily."
4. "I worry about what others think of me."
5. "I have some outstanding abilities."

Beker added that the effect of the camping experience "was not a transient one, but was evident in even greater magnitude after a

lapse of more than 10 weeks." (11:356) He concluded "that school camping can have a marked positive impact on children's self-concepts; the precise nature and depth of this influence and its specific determinants, however, remain obscure." (11:356)

Sise (35) wanted to find out if there was a significant change in girls' self-concepts following an eight week camping session. With the assistance of personnel in four private camps, she tested 78 subjects, ages twelve through fourteen, before and after their eight weeks in camp. Her measurement instrument was the Q-sort statements as developed by Perkins, which yield measures of real-self and ideal-self. Her results indicated:

1. There was significant change in campers' self-concepts in each camp after the eight weeks. The change was no greater in one camp than in any other.
2. Campers made about equal changes in concept of ideal self and concept of real self.

It is apparent from the studies cited above that changes in self-concept can occur through specially designed programs within a school context and also through the types of activities that characterize a typical physical education class. The purpose of the present study was to determine if a combination of these two elements could produce self-concept changes in high school girls.

## CHAPTER III

### PROCEDURE

This study was designed to investigate the effects of a specially structured seven week physical education class upon the self-concepts of low self-esteem tenth grade girls. The study was conducted at Ben L. Smith Senior High School in Greensboro, North Carolina, with twenty-eight selected Smith students as subjects. The experimental class in the study was taught by the writer.

Arrangements for the study began during October of the 1968-69 school year when the writer conferred with Miss Robberta Mesenbrink, a physical education teacher at Smith. Miss Mesenbrink expressed enthusiasm and support for the proposed study and introduced the writer to the Smith principal, Mr. William McIver. Later after conferences with Mr. McIver and Greensboro physical education supervisor, Miss Doris Hutchinson, permission was granted for the study to be conducted at Smith during February and March of the following semester.

#### I. SUBJECTS

Once permission to conduct the study had been granted, the first concern was the identification of possible subjects. They were to be sophomore girls who had apparently inadequate self-concepts as manifested by academic underachievement, aggressive or

withdrawing behavior, or excessive unexcused absences. A total of at least thirty-two subjects was needed: sixteen as the desired number for the experimental class, and sixteen for a control group.

Smith's three guidance counselors, Mr. Harold Estep, Mrs. Margery Lane, and Mrs. Mary Whiteside, along with Miss Mesenbrink, agreed to participate in the selection process. During November and December they each compiled a list of possible subjects. In January names of all students suggested were combined into one list and the total reduced to the thirty-two girls who, in the opinion of the counselors, most clearly demonstrated characteristics of inadequate self-concept. Later during the second semester scheduling process, those sixteen girls whose schedules permitted it were assigned to sixth period physical education, the time at which the special class would meet; they became the experimental group. The remaining girls were assigned randomly to regular physical education classes and became the control group.

Before the new semester began, girls assigned to the experimental group were told briefly what the special class would be like and allowed to transfer back into a regular class if they so desired. Fourteen girls agreed to participate in the experimental class; however, three withdrew from school at some point during the seven weeks.

In order to match the number in the experimental group, the control group was reduced to fourteen subjects, all of whom were still in school at the end of the study.

Once the names of the subjects were known, biographical sketches of each were secured from the cumulative student records

at Smith High School. Information obtained included the subject's family background, I.Q. and achievement test scores, freshman year grades, and a list of the subject's first semester classes and teachers. This material was used as a reference in sending out rating forms to each subject's teachers and in compiling case histories of the experimental subjects at the end of the study.

## II. MEASUREMENT INSTRUMENTS

The self-esteem of each girl in both groups was measured before and after the seven weeks experimental period by Coopersmith's Self-Esteem Inventory. (See Appendix A) The SEI contains a total of fifty-eight items: fifty that assess self-esteem in relationship to an individual's peers, parents, school and self; and eight that determine the extent to which the student lies or is defensive about his self-report.

Although it was originally designed for fifth and sixth graders, the inventory is currently being used with populations ranging from age nine to adult level. Coopersmith reported a test-retest reliability coefficient of .88.

Many authors use Q-sort items with high school populations, but the SEI was chosen for this study because it is easier for students to understand. It was thought important, especially with students who lack self-confidence, to use an instrument that did not discourage or frustrate them.

The SEI was considered a good choice also because it has a teacher's Behavior Rating Form accompanying it. (See Appendix A)

The BRF has a total of thirteen items each to be rated on a five-point scale. Ten items provide an appraisal of behaviors associated with assurance and self-acceptance, and three items provide appraisal of behaviors considered defensive in nature, such as bragging, dominating others, and attention seeking. These three items on the BRF should theoretically correlate with the eight-item lie scale on the SEI, but Coopersmith noted that such relationships are low or non-existent. Nonetheless, the BRF provides something of a validating index for the SEI.

### III. MEASUREMENT PROCEDURES

The SEI was administered to members of the control group during their various study halls on a total of four different days both before and after the seven week class. The SEI was administered to the experimental groups the first and last day of their seven week class.

The BRF forms were used to obtain two teachers' opinions on the behavior of each subject in both groups. During the week before the experimental class began, BRF forms were sent to each subject's English and biology teachers. Of the forty-four forms sent out, forty-three were returned.

One month after the seven week class ended, BRF forms were sent to the English and biology teachers of each subject still enrolled at Smith. Of the forty-four forms sent out, thirty-one were returned. At this time also, a separate thirteen-item behavior rating scale (see Appendix A) was constructed by the

writer in order to obtain a more specific description of any changes evident in the experimental subjects. Copies of this scale were filled out by Miss Mesenbrink, who was the physical education teacher of all the experimental subjects after their special seven week class.

#### IV. CLASS ACTIVITIES

The stated purpose of the experimental physical education class was to provide opportunity for low self-esteem girls to gain a more adequate self-concept. Specific objectives were for each girl:

1. to develop feelings of self-confidence by experiencing some degree of success in basic recreational activities such as folk dancing and campcraft;
2. to see herself as an equal among others through participation in non-competitive activities new to everyone in the group, such as movement exploration;
3. to learn self-respect through accomplishing tasks without the supervision and help of teacher or peers.

The class met during the sixth period each day from Thursday, February 6 until Monday, March 31, a total of thirty-five class sessions with approximately thirty-five minutes of activity time each session. During the first week, sessions were held on the stage of the auditorium; remaining sessions met in a large hall lobby and later in a wooded area across the street from the school.



Activities planned for the class had to be those that did not require standard gymnasium equipment such as basketball goals, volleyball nets, or tumbling mats. Equipment that was available included a record player and records, rhythm balls, Tinikling poles and blocks, and ropes. The main activities scheduled for the class were:

1. Exploring basic movement possibilities (group and individual exercises; problem solving; learning the Hora)
2. Rhythm balls (basic swings, bounces, tosses; assigned group routine; individual expression)
3. Tinikling
4. Ropes (individual, partner and group problem solving)
5. Learning the "slop" (a teen-age dance step)
6. Role plays, verbal and non-verbal
7. "Bombardment"
8. Mimetics
9. Lummi sticks
10. Scavenger hunt
11. Charades
12. Campcraft skills (building camp fires; lashing; using hatchets; setting up tents)

Lists of suggested exercises were used at the beginning of many classes. After the various exercises were explained and tried by the group together, it was up to each girl to decide which ones she wanted to do.

Additional details of class sessions are included in the lesson plans which may be found in Appendix B.

With the permission of Smith principal, Mr. McIver, an overnight camp-out for the class members was scheduled for March 28-29 at the YMCA Triangle Y Camp. The purpose of the camp-out was to give the girls an opportunity to use their newly-learned campcraft skills in situations that required group cooperation.

Permission slips and letters (see Appendix C) explaining the camp-out were sent to parents of all class members, emphasizing that it was an optional activity of their daughter's physical education class. Only four of the thirteen class members attended.

#### V. DATA TREATMENT

Scores on the Coopersmith Self-Esteem Inventory (SEI) and the Behavior Rating Form (BRF) were tallied for both groups and used as a basis for statistically comparing the groups with respect to self-concept.

According to Coopersmith most scores obtained from the SEI have resulted in distributions skewed in the direction of high self-esteem. Therefore, it was assumed that the scores obtained from the sample used in this study could not be considered to be representative of a normally distributed population. For this reason non-parametric statistical techniques were used in the treatment of data.

The Fisher exact probability test was used to determine whether the subjects in the experimental and control groups differed

in the proportion of each falling above and below the median with respect to:

- SEI scores (pretest)
- SEI scores (post test)
- SEI lie scores (pretest)
- SEI lie scores (post test)
- BRF score of biology teachers (pretest)
- BRF scores of biology teachers (post test)
- BRF scores of English teachers (pretest)
- BRF scores of English teachers (post test)

Secondly, the Sign test was used to determine whether there were any differences between the pre and post test data for the experimental or control group. The following differences were tested for each group:

- Pre and post SEI scores
- Pre and post BRF scores (biology teachers)
- 1st and 2nd semester grade point averages
- 1st and 2nd semester days present in school

The .05 level of significance was established as the criteria level for all comparisons.

In addition to the statistical analyses, case studies were compiled for each of the experimental class members. After every class session the writer recorded the responses and comments of the subjects. Their regular physical education teacher also wrote comments about the subjects after observing them throughout the

month following the completion of the special class. These observation notes and the background information previously obtained served as the basis for the case studies.

## CHAPTER IV

## PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to investigate the effects of a specially structured seven week physical education class upon the self-concepts of low self-esteem tenth grade girls.

Subjects in the study were twenty-eight students at Ben L. Smith Senior High School in Greensboro, North Carolina. Fourteen of them were members of the experimental class; the remaining fourteen attended their regular physical education class and served as the control group.

To measure the effects of the experimental class, the two groups were compared on several variables. Self-Esteem Inventory (SEI) ratings were obtained from all twenty-eight subjects prior to and following the seven week period. However, because three experimental subjects withdrew from school during the seven weeks and incomplete SEI forms were obtained on five control subjects, the statistical analyses were based on eleven experimental and nine control group subjects.

In addition to the SEI ratings, pretest and post test Behavior Rating Form (BRF) ratings of subjects' behavior were obtained from their teachers. The SEI scores were used more extensively in the group comparisons because several of the BRF post test forms sent to English and biology teachers were not returned.

Subjects in the two groups were also compared on the basis of their first and second semester grade point averages and total days present in school.

In attempting to determine whether there were differences between the control group and the experimental group, eight null hypotheses were formulated and tested with the Fisher exact probability test. These hypotheses were as follows:

1. There is no difference between the proportion of the experimental and control groups above and below the median with respect to the pretest SEI scores.
2. There is no difference between the proportion of the experimental and control groups above and below the median with respect to pretest SEI lie scores.
3. There is no difference between the proportion of the experimental and control groups above and below the median with respect to pretest BRF scores from the biology teachers.
4. There is no difference between the proportion of the experimental and control groups above and below the median with respect to the pretest BRF scores from the English teachers.
5. There is no difference between the proportion of the experimental and control groups above and below the median with respect to the post test SEI scores.
6. There is no difference between the proportion of the experimental and control groups above and below the median with respect to the post test SEI lie scores.

7. There is no difference between the proportion of the experimental and control groups above and below the median with respect to the post test BRF scores from the biology teachers.
8. There is no difference between the proportion of the experimental and control groups above and below the median with respect to the post test BRF scores from the English teachers.

Data obtained in testing these hypotheses are presented in Table I. In every instance except one the hypothesis was found tenable. The exception was hypothesis five which was rejected at the .05 level of significance: on the post test SEI scores, the experimental group was found to have a higher proportion of scores above the median than the control group.

Secondly, the Sign test was used to determine if there were differences within each group on the pre and post test data. The following four null hypotheses were formulated and tested:

1. The median of the differences between the pre and post test SEI scores for experimental group is zero.
2. The median of the differences between the pre and post test biology teachers' BRF scores for the experimental group is zero.
3. The median of the differences between the first and second semester grade point averages for the experimental group is zero.

TABLE I  
 FISHER TEST OF EXACT PROBABILITY BETWEEN SCORES  
 OF EXPERIMENTAL AND CONTROL GROUPS

Variables	A + B	C + D	B(A)	D(C)	Needed for .05 level of Significance
Pretest SEI	10	10	7	4	2
Pretest SEI Lie scores	11	9	7	4	1
Pretest BRF (Biology)	7	7	5	4	0
Pretest BRF (English)	7	7	4	2	0
Post Test SEI	10	10	8	3	3*
Post Test SEI Lie scores	10	10	7	5	2
Post Test BRF (Biology)	5	5	2	0	0
Post Test BRF (English)	5	5	4	2	0

\*Significant at .05 level.



4. The median of the differences between the first and second semester days present in school for the experimental group is zero.

These same four hypotheses were tested for the control group. The data obtained in testing these hypotheses for the experimental and control groups are presented in Table II. Results indicated none of the hypotheses could be rejected at the .05 level of significance: neither the experimental or control group evidenced significant changes in data from pretest to post test. On the third hypothesis the control group did show considerable improvement in their grade point averages from first to second semester, but the gain was not significant at the .05 level.

In analyzing the data in both tables, the only apparent difference in the two groups is found on the SEI post test where the scores of the experimental group were significantly higher than those of the control group. It cannot be assumed, of course, that the experimental class was totally responsible for this difference. Circumstances in the personal lives of the experimental subjects and normal maturational forces may have affected their improvement.

These data suggest, however, that participation in the special physical education class did help the experimental subjects experience a positive change in self-esteem which the control subjects did not experience. How the special class was instrumental in this change, it is difficult to say. Research done with small select groups such as these is definitely influenced by the Hawthorne effect. It is not unusual for students to grow in their

TABLE II

SIGN TEST OF SIGNIFICANCE BETWEEN PRE- AND POST-TEST  
SCORES FOR EXPERIMENTAL AND CONTROL GROUPS

Variables	N	x	p
Experimental			
SEI scores	9	4	.500
BRF (biology)	7	2	.227
Grade point average	10	4	.377
Days present in school	8	2	.145
Control			
SEI scores	8	3	.363
BRF (biology)	4	2	.500
Grade point average	7	1	.062
Days present in school	8	2	.145

For significance p must be = .05.

self-acceptance and self-confidence when they realize they are receiving special attention.

However, it is the opinion of this writer that the nature of the physical education activities themselves also facilitated the growth evidenced by the experimental group. All of the activities were basic ones, some almost elementary; but they afforded consistent success experiences for the girls.

It is not as important to know what specifics about the class produced a change as it is to realize that perhaps such a class can boost the self-concept of low self-esteem girls.

## CHAPTER V

## CASE STUDIES

The purpose of the case studies was to specifically follow the progress of each experimental subject during and after the special physical education class. Frequently such studies are indicative of changes that occur within individuals that are not evidenced through statistical analysis of data for groups. Such appeared to be the case in this investigation.

Each day after the class session, the writer recorded the individual responses of the girls. Then one month after the completion of the seven week class, the subjects' regular physical education teacher wrote comments about their post experiment as compared to their pre experiment behavior.

Summaries of these comments are found in the following case studies preceded by a brief description of each subject's family background and the reason she was selected for participation in this study.

## SUBJECT #1

Subject #1 was born August 29, 1953 in South Carolina and moved to Greensboro with her family in 1963. She is the middle child of seven children with two brothers and one sister who are older and one brother and two sisters who are younger. She was 15 years old and a sophomore during this study.

When tested in October 1968, Subject #1 had an I.Q. of 95. During the semester preceding the experimental class, she passed all of her subjects, achieving a grade point average of 1.4. She also continued the perfect attendance record she had begun in fourth grade.

Subject #1 was suggested for the experimental class because she lacked self-confidence and the ability to interact successfully with classmates. She was described as "quiet" but also known to seek teachers' attention by teasing with them.

Twice during the first week of class, Subject #1 sneaked away from the group and hid among the curtains on the auditorium stage, initiating hide and seek games with this writer. She delighted in being found, indicating that the incidents were expressions of playfulness and a need for special attention rather than attempts to avoid the class experience.

Subject #1 had above average motor skill yet was continually hesitant to join class activities. The day the girls learned the Hora step, she refused to try it saying that she "couldn't do it." Each day afterward she half-heartedly practiced it but quit trying as soon as she made a mistake. While the other girls danced together in a circle, she watched them closely yet claimed she did not care to learn the dance. About a week later, she began practicing the step on her own and soon joined the group when they did the Hora.

A similar pattern developed during the third week with Subject #1 and the Tinikling dance. In her first attempts at jumping in and out of the poles, she made only a few minor mistakes but

became quickly discouraged and sat out most of the activity. However, on the second day of Tinikling, she showed the most improvement of anyone in the class. She did not seem pleased with her progress or with the praise from this writer but later when she received a written evaluation that noted her good work in Tinikling, she was excited. She showed the evaluation to a classmate and spontaneously shook hands with this writer at the end of the class.

In most instances Subject #1 had to be prodded into activity. However, she showed an above-average amount of self-direction with the individual exercise format used in class. She was usually the first to be dressed and ready for class and often started exercising on her own, perhaps to gain the praise of the writer.

Subject #1 especially disliked the activities that involved self-expression. On days when the class was using balls or body motions to show feelings of "love" or "discouragement" she stayed against the wall and watched her classmates. She responded positively for the first time in the individual work with jump ropes. For some reason she did not hesitate to participate in the movement exploration situations using ropes, e.g., "can you make your feet hold the rope above your head?" She was uninhibited and eager to try each new problem.

Subject #1 was not well liked by her classmates, perhaps because she was unusually blunt in expressing her thoughts about people. She gave the impression of being self-sufficient, rarely approaching any of her classmates except one. However, one day

during a racial disturbance, she seemed to gain the respect, if not the affection, of her classmates by forcefully voicing her opinions. Subject #1, a Negro, openly argued with a white classmate while the class listened and began taking sides. Nothing said gained any friends for Subject #1, but it indicated that she was sensitive and perceptive, although she acted defensive and aloof toward her classmates.

Throughout the seven weeks, Subject #1 was reluctant to work with any partner except Subject #11 and even with her would not contribute opinions or any enthusiasm. She waited for her partner to take the initiative and then helped her only as long as their work was going well.

This behavior changed somewhat during the fifth week when she was assigned to work with Subject #4 on ball handling skills. Subject #1 never took a leadership role but did begin each new problem on her own initiative and did not give up and sit down as she had done previously.

During the sixth and seventh weeks of class, Subject #1 was less self-derogatory and noticeably absorbed in the campcraft skills the class was working on. She and her partner were the first to get their fire started and the first to lash together a table that would stand up. Subject #1 began to stand close to the writer during the demonstration of campcraft skills and ask questions as she had not before. On many days toward the end of the seven weeks she waved when leaving class or stopped to shake hands with the writer.

During the second semester Subject #1 earned a 2.2 grade point average and was absent only one day. After her experience in the experimental class, she was described as more willing to begin a task on her own initiative, more able to move freely without seeming self-conscious, and more confident that she was accepted by her classmates. However, two of her teachers observed that she still hesitated to enter into class activities and seldom expressed herself in any way. Her teachers also noted that she did not seem to improve in her ability or desire to get along with her peers.

#### SUBJECT #2

Subject #2 was born July 28, 1953 in Texas and later moved to South Carolina before moving to Greensboro with her family in 1965. She had one older sister, one younger sister, and one younger brother. Her recorded I.Q. was 124.

A year before the experimental class, when Subject #2 was in the ninth grade, she was doing fine in school even though her parents were separated. Her older sister was at the time a senior and an honor student at Smith High School.

When Subject #2 began her sophomore year, her parents had been reunited and the family situation was improved. However, the attitude and achievement of Subject #2 had reversed themselves. During the fall semester of her sophomore year, Subject #2 passed only one of her school subjects while failing four others, and she was absent, often truant, twenty-eight days. Her parents and school counselor were at a loss to explain the sudden change.



During her seven weeks in the experimental class, Subject #2 was a constant companion of Subject #4. Neither of them willingly joined class activities but stayed off to one side and talked and giggled. Most of the time Subject #4 was the instigator of their actions but Subject #2 never hesitated to imitate her.

Subject #2 was absent twenty of the thirty-six times the experimental group met. When she did come to class, she was seldom in her proper uniform. On the few days when Subject #2 was in class while Subject #4 was absent, Subject #2 was active and cooperative throughout the class period.

The times she responded positively were during the folk dancing sessions. Once when the class was asked who could dance the Hora through the playing of the entire record, Subject #2 answered right away that she could, even though Subject #4 was present and did not respond. Subject #2 and three others did manage to keep dancing through the whole record and later on in the seven weeks she reminded the instructor of that success.

In Tinikling, Subject #2 showed the most positive signs of confidence and initiative. On two days when Subject #4 was absent, Subject #2 began practicing the Tinikling steps on her own and kept working all period. She learned them quickly and asked what she could do next. For the first time, she was willing to mingle with other girls in the class and readily gained Subject #5 for a partner.

Subject #2 consistently showed disinterest toward class activities, especially the campcraft skills. She showed some

enthusiasm for the movement exploration problem, e.g., "what letters of the alphabet can you make with your bodies?" When she decided to participate, she was creative and persistent.

On the Self-Esteem Inventory Subject #2 scored third highest among the experimental subjects both before and after the seven week class. However, on the Behavior Rating Forms her teachers indicated that she rarely, if ever, gave evidence of self-esteem or an appreciation of her own worthiness.

On a behavior rating scale filled out by her physical education teacher one month after the experimental class, Subject #2 had shown no improvement in attitude or behavior. Furthermore, she failed all of her school subjects during the second semester and was absent a total of fifty-three days.

#### SUBJECT #3

Subject #3 was fifteen years old and a sophomore when the experimental class began. She was born June 16, 1953 in West Virginia and had moved to Greensboro with her family during her freshman year. She is the oldest of three children, with one younger brother and one younger sister.

On an I.Q. test administered in October of her sophomore year, Subject #3 scored 117. During her freshman year and the first semester of her sophomore year, she received slightly below average grades. The counselors suggested her for the experimental class, thinking it would facilitate her adjustment to her new surroundings.

Much of the time Subject #3 seemed more well adjusted than the other girls in the experimental class. She did not stand out as a leader or as a highly-skilled girl but was friendly to her peers, conscientious and willing to try new things. During the first week of class she entered into the activities rather cautiously, but in the second week became noticeably more involved. She began to help carry the equipment to and from class and soon began volunteering to demonstrate new skills in front of the group.

At first Subject #3 did not know how to react after making a mistake but her experience in Tinikling seemed to change that. The first day of Tinikling she could not do even one step correctly. After two or three unsuccessful trials, she walked away to watch the other girls try it. When she saw one of the Negro girls having similar problems, she told her not to feel bad "because I'm an uncoordinate, too." That comment did a lot to boost the class spirit. At the same time it caused Subject #3 to admit that about herself. That night she found some poles at home and practiced until she could do the first few steps successfully. The following day in class she was able to learn more difficult steps.

In other ways, too, Subject #3 showed that she was a self-starter. More often than not, she did the optional exercises at the beginning of class. And if she did not have a partner to work with, she did not hesitate to ask a classmate to work with her. During the fourth week, she began to suggest activities the class could do.

Subject #3 was usually a follower but without realizing it became a leader while working with Subject #9, who was extremely self-derogatory. Several days when she became a self-appointed partner for Subject #9, Subject #3 was open and accepting about her own faults thus helping Subject #9 to worry less about her inadequacies. The seventh week of class, which was spent learning campcraft skills, helped Subject #3 to feel more secure in a leadership role because she had already practiced the skills as a Girl Scout member.

Subject #3 showed the most progress in the movement exploration situations. In the beginning she was slightly reluctant and self-conscious in her movements, but after some successful experiences in class role playing, she became one of the least inhibited girls in movement exploration.

On the Self-Esteem Inventory Subject #3 had the highest score in the class both before and after the seven weeks. Her teachers also rated her as possessing an above-average degree of self-esteem.

Subject #3 achieved a 2.0 grade point average and was absent three days during the semester before this study. During the semester of the study, she earned a 2.2 grade point average and was absent two days. One month following the study, her physical education teacher reported that she had seemed to acquire a self-respect which permeated all of her actions and that she was periodically asserting herself as a leader. She was rated as improved or much improved on all thirteen items of the Behavior Rating Scale.

## SUBJECT #4

Subject #4 was born May 9, 1953 in Greensboro, the second of seven children in a family of low socio-economic status.

On an I.Q. test administered in October prior to this study, Subject #4 scored 107. However, during that semester she failed to pass four of her five school subjects. She was described by her teachers as easily led by others and a poor worker.

Subject #4 never became really involved in the experimental class. She was absent more than half of the time, and when she did attend, she was usually not dressed for activity. She and Subject #2 were inseparable companions, consistently apathetic and often contemptuous toward the class.

Compared with other class members, Subject #4 had the second lowest score on the Self-Esteem Inventory. She admitted that things were all messed up in her life, that she was often upset in school, and that she did not care what happened to her. Her behavior in the experimental class supported these self-descriptions.

It seemed that Subject #4 socialized with Subject #2 as a way of avoiding possible frustration and failure in class activities. When Subject #2 was absent, Subject #4 was quiet and withdrawn but showed more interest in the class.

One day toward the beginning of the seven weeks, Subject #4 unexpectedly agreed to demonstrate a folk dance for the class even though Subject #2 was sitting along the wall teasing her about it.

She demonstrated the dance well and proved to be one of the few in the class who could do it, but she did not respond at all to the praise of the teacher. It seemed she did not believe the praise was valid.

Once toward the end of the seven weeks when Subject #2 was absent, Subject #4 showed encouraging progress. She and Subject #1 worked up a sequence of movements to show three emotions: anger, fear, and peace. Because Subject #1 was not one to initiate any planning, Subject #4 became involved in deciding what they should do. Their movement sequence proved to be the most expressive one done that day.

The following day Subject #2 was back in class but Subject #4 participated with the class without being coaxed. She went off by herself without Subject #2 and worked on the assigned movement problems.

Subject #4 achieved a .4 grade point average during the fall semester of her sophomore year and a .6 average during the semester of the experimental class. Her absences increased from twenty-eight during the fall semester to forty-six for the spring semester. Her self-rating and the ratings completed by her teachers showed that she made no apparent changes as a result of the experimental class.

#### SUBJECT #5

Subject #5 was born December 5, 1933 in Greensboro. When the experimental class began she was fifteen years and two months

of age and was the youngest class member. Subject #5 had attended school in several states. She was the only child of divorced parents who had both moved away from Greensboro leaving Subject #5 to live with her maternal grandmother.

On an I.Q. test administered in 1967, Subject #5 scored 133 but received below average grades during ninth grade and was a behavior problem in some classes. Her teachers noted that she craved their attention.

Subject #5 was outgoing and bold. Beginning the first day of class, she talked a lot to the instructor, many times about her high I.Q. score. She also felt free to interrupt the other girls' conversations to correct their English usage. She was enthusiastic and active the first days of class but became apathetic and sometimes defiant during the next few weeks.

A major problem with Subject #5 was getting her to wear her gym suit to class. Each day she had a different excuse for not being properly dressed. She seemed to delight in being coaxed and reprimanded about it. Finally one day when she said her gym suit was at home, this writer obtained another suit for her and waited by the locker room until Subject #5 had put it on. She complained about doing it, but was obviously pleased to be receiving special attention.

Subject #5 appeared to have almost too much self-esteem. In many situations she was not willing to be just one of the group but felt she merited special consideration. She boasted that she could do anything she tried. She did learn new skills very quickly

when she put forth the effort to try them. She felt she should be praised for possessing high potential even though she gave no indication of wanting to work up to that potential.

During the class she made progress toward changing her attitudes. By being in situations that she knew she could not handle alone, she became more willing to acknowledge the need of others. One blustery day when the class was having trouble setting up a tent, Subject #5 began asking for help with her part of the job. Later on the overnight camping trip when she was the last girl to get her fire started for breakfast, she admitted she needed someone to help her.

As she began working alongside others, Subject #5 began to gain friends in the class. She continued to boldly assert herself in a group and to almost automatically assume a leadership role, but she was more able to do so without giving the impression of being superior.

Still she did not have the motivation to put forth effort in the experimental class or in her other subjects. During the semester of the experimental class she had a .8 grade point average after achieving a 1.2 average during the previous semester.

However, in her physical education class following the seven week class, Subject #5 showed a definite attitudinal improvement. Her teacher reported that she was much more content to be treated like everyone else and much improved in accepting discipline without undue self-defense or pouting.



## SUBJECT #6

Subject #6 was born in Greensboro on April 2, 1953, the youngest in a family of three girls. During the year before the experimental study when she was in ninth grade, Subject #6 had average grades. She scored 96 on an I.Q. test administered in September 1968 during her sophomore year.

The counselors recommended Subject #6 for the class because she was withdrawn and distant in school although a conscientious and cooperative student. On the self-rating she made before the experimental class began, Subject #6 said that she spent a lot of time day-dreaming, was easily upset and was not popular with boys and girls her own age. Her teachers reported that she was occasionally chosen for activities by her classmates but that she was extremely cautious and subdued in expressing herself in any way.

For the first three or four weeks of the experimental class, Subject #6 moved as little as possible and then very rigidly. During individual movement exploration, she continually looked around to see if anyone was watching her. She did not speak unless spoken to and was very concerned about doing everything correctly, like wearing a complete and clean uniform every day.

The nineteenth day of class Subject #6 for the first time moved freely for a few minutes while doing a folk dance. On the same day she noticed this writer watching her act out "getting up in the morning," but she smiled and continued on instead of

becoming embarrassed and quitting as she had done previously when she learned someone was watching her.

Subject #6 took a step toward socializing with her peers when she began staying after class to help Subject #7 carry in the record player. She did not offer any conversation but began to quietly follow Subject #7 during class.

Subject #6 made the most progress when by herself because any girl that was her partner went ahead and did everything for her. Subject #6 learned how to lash together a table but did it slowly and precisely. So when she worked with Subject #7 on lashing, she did not get a chance to help because Subject #7 would finish her own side and then take over what Subject #6 had started.

When the girls were assigned to build their own teepee fire and roast a marshmallow, Subject #6 was reluctant to begin although she and Subject #7 had previously built a fire together. She became unexplainably nervous about keeping her fire going and seemed relieved when she could put it out.

The overnight camp-out was an especially good experience for Subject #6. Because only four of the class members went along, each of them had to do a lot of work. Subject #6 went off on her own to collect wood and took initiative in helping with supper. She was the first girl to get her breakfast fire going and her eggs cooking and was noticeably pleased about that. Her successes and the informality of the camping situation seemed to break down her wall of cautious reserve and helped her to talk and laugh freely, at least during the week-end.

When the girls rated their self-esteem at the end of seven weeks, Subject #6 had improved more than any other class member. A comparison of her second with her first Self-Esteem Inventory indicated that she felt more popular with her peer group, more confident in expressing her opinions, and better able to get used to new situations. She commented that being in a smaller class helped her feel "free" because she got to know most of the members.

One month after the experimental class had ended, Subject #6 was reportedly making steady improvement. She was as quiet and unassuming as before in her relationship to the whole physical education class but was more outgoing in her own small group.

#### SUBJECT #7

Subject #7 was born January 21, 1953 in Pennsylvania and moved to Greensboro with her family after completing the second grade. She had two older sisters and two younger sisters.

On the I.Q. test administered in 1968, Subject #7 scored 93. When suggested for the experimental class, she was earning average grades and had a very good attendance record.

The counselors felt that being in the small experimental class would help Subject #7 become better adjusted emotionally. During the semester before the experimental class, she had been nervous and talkative some of the time and then quiet and depressed.

Subject #7 responded to the low pressure experimental class situation with a consistently enthusiastic attitude. She usually did the optional exercises before class, often volunteered to

demonstrate and stayed after class regularly to help carry in equipment. She was the most talkative of the girls but did not appear nervous. She did act tense and inhibited during the work with rhythm balls but only for two days. Most of the time she was completely absorbed in whatever she did and moved freely, especially in the role plays for which she volunteered.

Subject #7 gained confidence by unwittingly becoming a leader within the class. She began helping Subject #6 and Subject #9 who lacked confidence to try new skills. Sometimes she helped them almost too much and did not encourage them to work by themselves. Yet knowing someone depended upon her made Subject #7 forget much of her nervousness and inspired her to express her opinions more freely.

No one was more excited about the camp-out than Subject #7. But once the group reached the camp site it seemed she wanted to be the center of attention. On her Self-Esteem Inventory she had indicated that she was not popular with her age group and that most people were better liked than she was. These feelings manifested themselves on the camping trip when Subject #7 appeared to be trying everything to gain the approval of her peers.

Subject #7 did average work in her other classes during the semester of the experimental class. When she returned to her regular physical education class, she at first showed a great improvement over her first semester behavior. She seemed confident of her place within the group and was an eager worker. However, at the time her teacher rated her behavior, she commented that

Subject #7 was beginning to lose her feeling of belonging and was again trying to elicit special attention in class.

#### SUBJECT #8

Subject #8 was one year older than most of the class members. She was born May 24, 1952 and was sixteen years old when the experimental class began. She had one older brother and had lived all of her life in Greensboro.

The counselors at Smith High School considered Subject #8 an underachiever. She had a recorded I. Q. score of 119 but consistently earned below average grades. During the semester before this study, she had a 1.8 grade point average and had failed to pass English.

On the Behavior Rating Forms filled out by each girl's teachers, Subject #8 was described as a frequent show-off in classes. One of her teachers said she became sullen when reprimanded and all of them noted that she tended to deprecate herself and her school work.

On her own Self-Esteem Inventory made before the class began, Subject #8 said she was not as nice looking as most people, became frequently discouraged in school and was prone to give up easily.

Subject #8 did not manifest any of these characteristics during the experimental class. Instead she was consistently cheerful and a self-appointed leader who buoyed up the others when their enthusiasm was low. She was eager to be active and,

as far as this writer knows, never deprecated herself or her performances. Perhaps this was because she was highly skilled and felt more secure in physical education than in other classes.

In the basic movement work done without equipment Subject #8 was especially outstanding because she could combine her intelligent thinking and motor skill. When the class was asked how they could use their bodies to make the letter "Y", Subject #8 did a handstand and spread her legs apart. She was the only girl in the class who had a high skill level and she took advantage of the opportunity to excel and be proud of herself.

While the seven week class was in progress, Subject #8 made no noticeable changes, but when she returned to her regular physical education class, her teacher reported that she had improved in several areas. She was more willing to keep working on things when she did not succeed right away and she was much improved at persisting in activity without being supervised. Perhaps most significant was her new ability to accept discipline without pouting or undue self-defense.

#### SUBJECT #9

Like Subject #8, Subject #9 was sixteen years old when the experimental class began. She was the youngest in a family of five children and had lived in Greensboro all of her life. Subject #9 lived with her mother since her father had died when she was in seventh grade.

In school Subject #9 had to work hard to make passing grades. She had an 88 I.Q. and earned a 1.2 grade point average for the semester preceding this study.

Teachers and counselors described Subject #9 as very lady-like but withdrawn and greatly lacking in self-confidence. She could not adapt to new situations and was extremely upset by failure.

Right at the beginning of class, Subject #9 began saying "I can't do it." She would not join in with the other girls to learn the Hora and would not work on it by herself along the sidelines. When she could be coaxed into trying the Hora step, she was very critical of the mistakes she made and said "See, I told you I couldn't do it."

A few days later when the group learned Tinikling, Subject #9 again refused to try. Finally, she consented to practice it with the writer in a space away from the other girls. After a few minutes' practice she returned to the group but tripped on a pole on her second jump. She sat against the wall the rest of that period but agreed to stay after class and practice. The following day, without any coaxing, she worked with the group all of the period.

Subject #9 said "I can't" so often that this writer finally suggested she stop herself whenever she felt tempted to say it and say "I'll try" instead. She liked that idea and even explained to her regular physical education teacher that she could no longer say "I can't." An important indication of her progress occurred some

weeks later when she corrected one of her classmates who had used the forbidden words.

Everyone realized that Subject #9 would not perform in front of others and avoided forcing her into it. Then during the fifth week when the girls were playing charades in small groups, Subject #9 unexpectedly began taking her turn without a fuss. Her actions in front of the group were not free or forceful but she was completely absorbed in doing them.

Outside of class Subject #9 was a different person. She frequently teased with this writer while walking to class and would make a special trip into the office to say good-bye when the dismissal bell rang.

At the end of the seven weeks, Subject #9 was still self-derogatory but, according to her physical education teacher, was able to relate much more easily to others. She was also rated as much improved in her willingness to try new things.

#### SUBJECT #10

Subject #10 was the oldest child in a family of three girls. She lived with her mother and step-father and her maternal grandmother. When the study began she was fifteen years old.

In school Subject #10 did below average work although she had an I.Q. of 115. Much of the time she behaved erratically, skipping classes when she became discouraged and lying to her teachers about where she had been. She constantly sought the attention of her teachers but did not mix readily with her peer group.



When this study began, Subject #10 was planning to get married even though she was not sure she wanted to marry and often did not get along with her boyfriend. Her romantic problems greatly affected her behavior in school; several times she started crying in the locker room because she felt her boyfriend had been inconsiderate of her.

In any individual activity Subject #10 worked feverishly to excel. She chose the most difficult steps to work on in Tinikling and tried to do more exercises than the other girls. On projects that required a team effort, like putting up a tent, she had to be coaxed into helping her classmates.

Subject #10 always worked as far away from the group as possible. On the day when each girl chose her own camp site and built a fire, she moved as far away from the others as possible.

Every day after class Subject #10 stayed behind the others and wanted to talk with the instructor. Sometimes she gave the instructor poetry or letters that she had written. Gradually, however, she did begin to identify more with her own age group. Because the class was so small, she could not sneak away and remain unnoticed in a corner. She was forced to join the others and found a companion in Subject #5.

Subject #10 was a deep thinker for a girl of her age. On the night of the camp-out when the other girls began getting ready for bed inside the tent, she stayed out by the camp fire with the writer and the other chaperone. She talked very seriously about what she termed her philosophy of life. The second day of the

camp-out was her most noteworthy day during the seven weeks. While struggling to cook her own breakfast and ride a frisky horse she seemed to completely unwind and interact freely with the other girls.

When the experimental subjects rejoined the larger physical education class, Subject #10 and the three girls who had gone camping were good friends. Her teacher observed that she still took life too seriously and consistently sought special attention but noted, too, that she had greatly improved in her desire to be a part of her peer group.

The post test Self-Esteem Inventory score for Subject #10 was considerably lower than her pretest score, perhaps because she had become more willing to admit what she thought about herself.

#### SUBJECT #11

Subject #11 had moved to Greensboro from South Carolina just before starting her sophomore year at Smith High School. She lived with her mother and stepfather and had one older sister. She was fifteen years old during the study.

Subject #11 attended school very inconsistently. She was absent for more than one-half of the experimental class sessions and never did become really involved in the activities.

When she did come to class Subject #11 wanted to be the center of attention. She was more skilled and more confident than most of the subjects but was not willingly accepted by them because she usually wanted to run things her own way. One day toward the end of the study, this writer pointed out to her she was potentially

a good leader if she could be more considerate of others. Subject #11 was unexpectedly eager to know how she could change her behavior. A few weeks later she dropped out of school to get married.

#### SUBJECT #12

Subject #12, who was born March 4, 1952, was seventeen and nearly two years older than the other subjects. During the year preceding the study she had become very emotionally unstable. She came to school only occasionally and could not maintain passing grades. When the experimental class began she was still a sophomore.

The counselors at Smith High School had referred Subject #12 to the Greensboro Vocational Rehabilitation Center in November 1968, a few months prior to this study. Later she was referred to the Mental Health Center and was under psychiatric observation when she became a member of the experimental class.

Most of the time Subject #12 was unresponsive in class. She shuffled slowly into class and sat along the wall apparently preoccupied. She usually wore bizarre clothes like a fur hat, tall rubber boots or an army jacket. She was very sensitive about her dress habits and was allowed to attend class even when she did not dress for activity.

The only activities Subject #12 seemed to like were the folk dances. Wearing her high boots and army jacket she willingly joined the other girls and danced until winded.

About the fourth week of the class, Subject #12 started sharing her thoughts with the writer. She prided herself on being a non-conformist although she said her former friends would no longer talk to her. She wrote a lot of poetry and gave some of it to the writer.

During the course of the seven weeks, Subject #12 left home and moved into an apartment with a girlfriend. She started coming to school about noon each day because she said there was no one to wake her up. She told the writer that she came to school only for her physical education class.

It was impossible to include Subject #12 in the statistical analysis of this study because she did not take the post test Self-Esteem Inventory and did not return to her classes following the experimental class. She withdrew from school and moved to another city.

## CHAPTER VI

## SUMMARY AND CONCLUSIONS

## I. SUMMARY

The purpose of this study was to investigate the effects of a specially structured seven week physical education class upon the self-concepts of low self-esteem tenth grade girls.

The study was conducted at Ben L. Smith Senior High School in Greensboro, North Carolina during the second semester of the 1968-69 school year. Twenty-eight Smith students served as subjects: fourteen as members of the experimental physical education class and fourteen as controls in their regular physical education classes. All of the subjects were selected for the study because they had manifested characteristics theoretically indicative of low self-esteem, e.g., academic underachievement, defensive or withdrawing behavior, excessive unexcused school absences.

A test retest experimental design was used to measure the effects of the special class. Prior to and following the seven weeks, the subjects rated their self-esteem on the Self-Esteem Inventory (SEI) and were rated in their self-esteem on Behavior Rating Forms (BRF) filled out by their biology and English teachers.

Both the SEI and the BRF were devised by Coopersmith. The SEI contains fifty-eight items: fifty regular items designed to

determine a subject's feelings about himself concerning home, school and social life; and eight items that are lies, designed to determine whether or not the testee told the truth on the inventory. The BRF contains thirteen items to be rated by a teacher on a five-point rating scale. It was used in this study as a validating index for the SEI.

Administration of the SEI to the experimental subjects was on the first and last days of their seven week class. The control subjects completed the inventory during their individual study halls on a total of four different days prior to and following the experimental class. BRF forms were filled out by the teachers during the week before the class started and again one month after the class ended.

The experimental class, which was taught by the writer, met daily from February 6 to March 28, 1969, for a total of thirty-six sessions. General objectives for the class were to provide opportunities for the girls to experience self-confidence, self-direction and improved social behavior. Included in the class sessions were basic movement activities, folk dancing, an individual exercise program, rhythm balls, and campcraft skills. As many of the activities as possible were taught from a problem-solving approach.

On the weekend following the final class session, an overnight camp-out for the class members was held at the YMCA Triangle Y Camp outside of Greensboro. However, it was possible for only four of the girls to attend.

Three subjects in the experimental group withdrew from school during the seven weeks and five in the control group did not finish their SEI forms. Thus the analysis of data was concerned with a total of eleven experimental and nine control subjects.

Non-parametric techniques were used in treatment of statistical data because, according to Coopersmith, most scores obtained on the SEI have not been normally distributed but skewed in the direction of high self-esteem.

The SEI and BRF scores compiled were used in two different ways: to compare the experimental and control groups on pre and post test data; and to determine the amount of change within each group from pre to post test. The Fisher exact probability test and the Sign test were used in the treatment of data.

Statistical analyses revealed that the experimental group scored significantly higher on the SEI post test than did the control group. On all other variables there were no significant differences between or within the groups on pretest and post test data.

Case studies compiled for twelve of the experimental subjects showed that many of them made attitudinal and social behavior changes during the study although most of them did not show statistical increases in grade point average, days present in school or SEI and BRF scores.

## II. CONCLUSIONS

Based on the results of this particular study, the following conclusions appear warranted:

1. Following the special class, the eleven experimental subjects evidenced significantly higher scores on the self-esteem inventory than did the nine control subjects.
2. Several of the experimental subjects showed improved self-confidence and self-direction in their regular physical education class following the seven week class.
3. Physical education can serve as a medium in which low self-esteem girls have opportunity to experience degrees of success and feelings of self-worth.



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## APPENDICES

Self-Report Inventory

Behavior Rating Form

Behavior Rating Scale

SELF-ESTEEM INVENTORY

Name \_\_\_\_\_

Read each statement in the following way: If the statement describes how you usually feel, put an "X" in the column "Like Me." If the statement does not describe how you usually feel, put an "X" in the column "Unlike Me."

	Like Me	Unlike Me
Example: It's a hard worker.	_____	_____

1. I spend a lot of time daydreaming. \_\_\_\_\_
2. I'm pretty sure of myself. \_\_\_\_\_
3. I often wish I were \_\_\_\_\_
4. I'm easy to like. \_\_\_\_\_
5. My parents and I get along together. \_\_\_\_\_
6. I never worry about \_\_\_\_\_
7. I find it very hard to talk in front of the class. \_\_\_\_\_
8. I wish I were younger. \_\_\_\_\_
9. There are lots of things about myself I'd change if I could. \_\_\_\_\_
10. I can come up with ideas without too much trouble. \_\_\_\_\_
11. It's a lot of fun to be with. \_\_\_\_\_
12. I get upset easily at home. \_\_\_\_\_
13. I always do the right thing. \_\_\_\_\_
14. I'm proud of my schoolwork. \_\_\_\_\_
15. Teachers always has to tell us what to do. \_\_\_\_\_

APPENDIX A

- Self-Esteem Inventory
- Behavior Rating Form
- Behavior Rating Scale

## SELF-ESTEEM INVENTORY

NAME \_\_\_\_\_

Date \_\_\_\_\_

Mark each statement in the following way: If the statement describes how you usually feel, put an "X" in the column "Like ME."

If the statement Does Not describe how you usually feel, put an "X" in the column "Unlike Me."

	<u>Like Me</u>	<u>Unlike Me</u>
EXAMPLE: I'm a hard worker.	_____	_____
1. I spend a lot of time daydreaming.	1. _____	_____
2. I'm pretty sure of myself.	2. _____	_____
3. I often wish I were someone else.	3. _____	_____
4. I'm easy to like.	4. _____	_____
5. My parents and I have a lot of fun together.	5. _____	_____
6. I never worry about anything.	6. _____	_____
7. I find it very hard to talk in front of the class.	7. _____	_____
8. I wish I were younger.	8. _____	_____
9. There are lots of things about myself I'd change if I could.	9. _____	_____
10. I can make up my mind without too much trouble.	10. _____	_____
11. I'm a lot of fun to be with.	11. _____	_____
12. I get upset easily at home.	12. _____	_____
13. I always do the right thing.	13. _____	_____
14. I'm proud of my schoolwork.	14. _____	_____
15. Someone always has to tell me what to do.	15. _____	_____



	<u>Like Me</u>	<u>Unlike Me</u>
16. It takes me a long time to get used to anything new.	16. _____	_____
17. I'm often sorry for the things I do.	17. _____	_____
18. I'm popular with kids my own age.	18. _____	_____
19. My parents usually consider my feelings.	19. _____	_____
20. I'm never unhappy.	20. _____	_____
21. I'm doing the best work that I can.	21. _____	_____
22. I give in very easily.	22. _____	_____
23. I can usually take care of myself.	23. _____	_____
24. I'm pretty happy.	24. _____	_____
25. I would rather be with kids younger than me.	25. _____	_____
26. My parents expect too much of me.	26. _____	_____
27. I like everyone I know.	27. _____	_____
28. I like to be called on in class.	28. _____	_____
29. I understand myself.	29. _____	_____
30. It's pretty tough to be me.	30. _____	_____
31. Things are all mixed up in my life.	31. _____	_____
32. Kids usually follow my ideas.	32. _____	_____
33. No one pays much attention to me at home.	33. _____	_____
34. I never get scolded.	34. _____	_____
35. I'm not doing as well in school as I'd like to.	35. _____	_____
36. I can make up my mind and stick to it.	36. _____	_____
37. I really don't like being a girl.	37. _____	_____
38. I have a low opinion of myself.	38. _____	_____

	<u>Like Me</u>	<u>Unlike Me</u>
39. I don't like to be with other people.	39. _____	_____
40. There are many times when I'd like to leave home.	40. _____	_____
41. I'm never shy.	41. _____	_____
42. I often feel upset in school.	42. _____	_____
43. I often feel ashamed of myself.	43. _____	_____
44. I'm not as nice looking as most people.	44. _____	_____
45. If I have something to say, I usually say it.	45. _____	_____
46. Kids pick on me very often.	46. _____	_____
47. My parents understand me.	47. _____	_____
48. I always tell the truth.	48. _____	_____
49. My teachers make me feel I'm not good enough.	49. _____	_____
50. I don't care what happens to me.	50. _____	_____
51. I'm a failure.	51. _____	_____
52. I get upset easily when I'm scolded.	52. _____	_____
53. Most people are better liked than I am.	53. _____	_____
54. I usually feel as if my parents are pushing me.	54. _____	_____
55. I always know what to say to people.	55. _____	_____
56. I often get discouraged in school.	56. _____	_____
57. Things usually don't bother me.	57. _____	_____
58. I can't be depended on.	58. _____	_____

## BEHAVIOR RATING FORM

Teacher's Rating Scale of Student Behavior

Student's name \_\_\_\_\_

Teacher's name \_\_\_\_\_

Date \_\_\_\_\_

On the basis of your observation of this girl in class, check the most accurate descriptive category following each question.

1. Does this girl adapt easily to new situations, feel comfortable in new settings, enter easily into new activities?  
 always    usually    sometimes    seldom    never
2. Does this girl hesitate to express her opinions, as evidenced by extreme caution, failure to contribute, or a subdued manner?  
 always    usually    sometimes    seldom    never
3. Does this girl become upset by failure or other stresses, as evidenced by pouting, whining, or withdrawing?  
 always    usually    sometimes    seldom    never
4. How often is this girl chosen for activities by her classmates? Is her companionship sought for and valued?  
 always    usually    sometimes    seldom    never
5. Does this girl become alarmed or frightened easily?  
 always    usually    sometimes    seldom    never
6. Does this girl often seek support and reassurance from her peers or her teacher, as evidenced by seeking their nearness or frequent inquiries as to whether she is doing well?  
 always    usually    sometimes    seldom    never
7. When this girl is reprimanded or criticized, does she become either very aggressive or very sullen and withdrawn?  
 always    usually    sometimes    seldom    never

8. Does this girl deprecate her school work, grades, activities, and work products? Does she indicate she is not doing as well as expected?
- always     usually     sometimes     seldom     never
9. Does this girl show confidence and assurance in her actions towards her teachers and classmates?
- always     usually     sometimes     seldom     never
10. How often does this girl show a sense of self-esteem, self-respect, and appreciation of her own worthiness?
- always     usually     sometimes     seldom     never
11. Does this girl publicly brag or boast about her exploits?
- always     usually     sometimes     seldom     never
12. Does this girl attempt to dominate or bully others?
- always     usually     sometimes     seldom     never
13. Does this girl continually seek attention as evidenced by such behavior as speaking out of turn and making unnecessary noises?
- always     usually     sometimes     seldom     never
14. Check the two most appropriate statements for describing this girl:
- high ability and disinterested                       high ability and motivated
- content with her present status
- putting up a bold front
- eager but little ability
- average ability and disinterested
- fighting to maintain position
- striving for perfection
- low ability and disinterested
- average ability and getting along

Student's name \_\_\_\_\_

Date \_\_\_\_\_

#### BEHAVIOR RATING SCALE

In rating this girl's behavior on the following items, evaluate her behavior of the past month as compared to her behavior before the seven-week experimental class of which she was a member. In the blank to the left of each phrase, write the letter of the most accurate response.

- a. much improvement
- b. improvement
- c. no change, but was adequate before
- d. no change, needs as much improvement as before
- e. no opportunity to observe.

1. \_\_\_ Is liked by her classmates.
2. \_\_\_ Seems confident that she is accepted by her classmates.
3. \_\_\_ Enters into group activity and discussion naturally without having to be pushed.
4. \_\_\_ Is content to be treated like everyone else; does not try to elicit special attention by "showing off."
5. \_\_\_ Is willing to try new things.
6. \_\_\_ Will begin a task on her own initiative.
7. \_\_\_ Will persist in activity without supervision.
8. \_\_\_ Will keep trying things she does not succeed at right away.
9. \_\_\_ Moves freely without seeming self-conscious and inhibited.
10. \_\_\_ Accepts discipline without undue self-defense or pouting.
11. \_\_\_ Is able to talk with teacher about her weaknesses without being self-derogatory.
12. \_\_\_ Shows that she wants to do well in class activities.
13. \_\_\_ Attends class consistently.

ADDITIONAL COMMENTS

LESSON PLANS

LESSON 1

- I. Explain how body awareness is an expression of personality.
  - A. A happy walk; a discouraged walk
  - B. Happy walk; discouraged shoulders
  - C. Stand and sit
- II. Learn to walk with respect-conscious realization.
- III. Learn to control balance.
  - A. Can you balance yourself on one foot? 20 or 30
  - B. Can you jump up from a crouch and land on tiptoe?
  - C. How many can you, feet on heels, chin on chest, etc.

APPENDIX B

Lesson Plans

- I. Jump the body over water.
  - A. How high off the floor can you jump? How low?
  - B. How can you jump over your own head?
  - C. Can you jump a rope in front of you and jump over it?
  - D. Can you jump up from a crouch and land in extension?
- II. Develop principles of relaxation.
  - A. Jump up, and land with knees bent and feet flat on floor.
  - B. Can you alternate landing on one foot, one foot, one foot, etc?

LESSON 11

- I. Talk about walking and being what you think.
- II. Teach the boys.

## LESSON PLANS

February 7

- I. Explain how body movements are an expression of personality.
- II. Experiment with expressions through movement.
  - A. A happy walk; a discouraged walk
  - B. Happy arms; discouraged shoulders
  - C. Clap out your name
- III. Learn to make body respond--conscious relaxation.
- IV. Learn to control balance.
  - A. Can you balance yourself on 6 points? 5? 3? 1?
  - B. Can you jump up from tiptoes and land on tiptoe?
  - C. Four steps on toes, four on heels, three on toes, etc.
- V. Jogging

February 10

- I. Ways the body can move.
  - A. How high off the floor can you jump? How low?
  - B. How can you make your body turn in the air?
  - C. Can you pick a spot in front of you and jump onto it?
  - D. Can you jump up from flexion and land in extension?
- II. Review principles of relaxation.
- III. Learn command of body in space (using hopscotch type pattern painted on oil cloth and laid on floor).
  - A. Jump up and land with right foot on red and left foot on blue.
  - B. Can you alternate landing on two feet, one foot, two feet, etc?

February 11

- I. Talk about saying and doing what you feel.
- II. Learn the Hora.

III. Balance problems

- A. Can you balance on one foot with the other one behind you?
- B. Can you bend over at the hips while balancing on tiptoe?
- C. Can you do that with your eyes closed?
- D. Can you balance on just your seat?

February 12

- I. Review the Hora.
- II. Partner exercises for flexibility.
- III. Conscious relaxation
- IV. More agility problems on the "hopscotch oil cloth."
  - A. Jump left foot, both feet, right foot, both, etc.
  - B. Jump left foot, both feet, left foot, etc.

February 13

- I. Practice walking
  - A. As you walk now
  - B. As you would like to walk
  - C. As a queen walks
- II. Individual stunts--crab walk, seal walk, etc.
- III. Talk about weight control; practice abdominal exercises.
- IV. Conscious relaxation
- V. Explain individual exercise sheets to be used in class.

February 14

- I. Be a wooden statue--walk, slide, jumping jack  
Be a rag doll
- II. Synchronized movements
  - A. Facing partner, slide in unison
  - B. Along side partner, jump in unison to end of room
  - C. Three in circle, feet in middle, holding hands, get up from floor in unison.
- III. Brief social time with cupcakes.



February 15

- I. Introduce rhythm balls.
  - A. Learn basic swings, bounces, and tosses.
  - B. Do them in any sequence to music "Love is Blue."
- II. Individual exercise program

February 16

- I. Review basic moves with rhythm balls.
- II. Practice new movements; spiral, body wave, bounce under leg, circling.
- III. Demonstrate basic routine for all to learn.
- IV. Practice assigned routine in groups of three.

February 20

- I. Briefly review ball movements.
- II. Individual problems with balls
  - A. Practice all ball movements in a front-back plane.
  - B. Practice them in a side-to-side plane.
  - C. Pick a color and decide which ball movements and what tempo best express it.

February 21

- I. Warm up doing the Hora.
- II. Emotional expression with balls.
  - A. Put ball on floor and pretend it is young child who is crying. You are trying everything you can to make him stop and laugh at you.
  - B. Pretend the ball is a puppy or kitten you like a lot and show what you would do with it.
  - C. Pretend the ball is something that made you angry.
- III. Conscious relaxation

February 22

- I. Explain and demonstrate Tinikling.
- II. Practice basic steps

February 25

- I. Individual exercise program
- II. Tinikling
  - A. Demonstrate more difficult steps
  - B. Each girl practice five steps to be evaluated soon.

February 26

- I. Individual exercise program
- II. Discuss and vote on doing exercises individually or in group.
- III. Practice Tinikling steps

February 27

- I. Warm-up exercises to Dixieland jazz record.
- II. Do written evaluations of Tinikling steps.
- III. Begin individual work with elastic ropes
  - A. How much space can you take up with your rope and your body?
  - B. Can you hold rope on hands and feet and have your feet higher than your hands?
  - C. Holding rope around one elbow and opposite foot, how much space can you make between the elbow and foot?

February 28

- I. Hike
- II. Hora
- III. Hand back and discuss Tinikling evaluations.

March 3

- I. Synchronized warm-up with partner--hopping, sliding.
- II. Have each girl demonstrate an exercise good for abdominal strength.
- III. Rope work with partners.

March 3 (continued)

- IV. Rope work in small groups
  - A. Two girls hold rope two feet above floor while third girl goes over rope.
    - 1. Using as much space as possible
    - 2. Staying as close to rope as possible
    - 3. With body in shape of triangle
  - B. How many different levels can you arrange yourselves on? Can you make the rope connect all the levels?

March 4

- I. Warm-up--jogging like rag dolls.
- II. Individual movement without ropes
  - A. What different ways can you stretch? Curl?
  - B. Can you go from a stretch to a curl in slow motion?
  - C. Can you do a fast stretch and slow curl?
  - D. Can you include a level change between them?
- III. Each girl do stretch-curl sequence to music.
- IV. Coordination exercise

March 5

- I. Demonstrate and practice the "slop" (teenage dance step). Use music "A World of Our Own."
- II. Individual movement emphasizing time and force
  - A. Pick spot on floor; how would you reach toward it with slow sustaining movement? Sudden sharp movement?
  - B. Move away from spot, then approach it, point toward it and move away in slow movement; in sharp explosive movement.
  - C. Pace off a square on floor in slow sustained walk; in sharp brisk walk.
- III. Role plays; first with words, then actions only.
  - A. A mother-daughter argument
  - B. An accident scene

March 6

- I. Review "slop."

March 6 (continued)

- II. Role play; teacher disciplining problem student.
- III. Movement review
  - A. Each girl portray a flower growing using level change, time change, stretches and curls.
  - B. Use same movement components to portray getting up in the morning.

March 7

- I. Teach and play "Bombardment."
- II. Do "slop"; who can dance through the whole record?
- III. Birthday party for Subject #12

March 10

- I. Movement "quiz" using rhythm balls.
  - A. Keeping ball still, can you move body in circles? Down? Up?
  - B. Starting on low level in curled position, how can you end up on a high level in stretched position?
  - C. Can you bounce ball while body is on low level? Keep it bouncing while you move to medium level? While moving backwards? Sideways?
- II. Written work
  - A. Think of person you admire and list some of his qualities.
  - B. What do you want most in life?
  - C. Name the people in this class.

March 11

- I. Individual exercise program
- II. Partner work
  - A. Use bodies to form letters "M", "Y", "K", "S".
  - B. Freeze in poses that show sharing, teaching, helping, protecting.

March 12

- I. No activity--student racial disturbance.

March 12 (continued)

- II. Discussion on racial issue.

March 13

- I. Warm-up--"slop"
- II. Individual mimetics; pretend to be washing machine; airplane; see-saw; scissors; grandfather clock.
- III. Demonstrate use of lummi sticks
- IV. Partner work with lummi sticks
  - A. Tap out name
  - B. Tap out nursery rhyme for class to guess.

March 14

- I. Scavenger hunt outside

March 17

- I. Play charades in groups of three.
- II. Follow the leader with partner; how many different whole body movements can two partners do during record? One invents three movements while second follows, then vice versa.
- III. Expressing emotions in movement. Partners portray sequence of any three emotions.

March 18

- I. Warm-up--leaping, rag doll running
- II. Ball handling problems for partners.
  - A. Bounce ball in time with partner's jumps
  - B. Toss up ball and bat to partner using head
  - C. Bounce back and forth while running together
- III. Freedom fling; during record move as many ways as possible using all space in room.

March 19

- I. Hike to woods
- III. Demonstrate proper way to collect fuel and build fire.

March 19 (continued)

- III. Each girl choose camp fire site and collect tinder, kindling and fuel.

March 20

- I. Hike to woods.
- II. Each girl build and light own fire, roast marshmallow.

March 21

- I. Learn square knot, clove kitch, principles of lashing.
- II. Partners lash together table between two trees.

March 24

- I. Individual exercise program
- II. Review knots
- III. Practice mixing up Bisquick for camp cooking.

March 25

- I. Written quiz on campcraft skills.
- II. Explain and demonstrate how to set up a tent.

March 26

- I. Review lashing; partners build four-legged table.
- II. Demonstrate proper use of hatchet.
- III. Each girl practice chopping wood with hatchet.

March 27

- I. Girls on their own put up and take down tent.
- II. Discuss details of camping trip.

March 28

- I. Whole body movements; do the biggest possible jumps, kicks, cartwheels, leaps.

March 28 (continued)

- II. Individual mimetics; pretend you are a top; a horse; water boiling; a fire burning, a tightrope walker.
- III. Partner mimetics; pretend you are windshield wipers; knife and fork cutting meat; a door opening.
- IV. Easter egg hunt outside.

Dear \_\_\_\_\_

In connection with your daughter's physical education activities this summer, we are planning an overnight camping trip for March 28-29, leaving after school on Friday and returning home after supper Saturday. The purpose of the camp-out is to give the girls opportunity to experience first-hand the fun and challenge of being outdoors and sleeping in the out-of-doors.

We will be camping at the Triangle Y camp, a camp about six miles southeast of town, owned by the Grayson YMCA. Our group of 12-14 will be the only ones using the campground at the time. Although there is a fee charged on that camp at all times, another adult woman and myself, both graduates of GHS, will be supervising the girls. . . . The girls' own tents will be used as well as provided for the girls' own use. We will have their other friends to sleep out and their own "relatives" with us there.

Tents, food, and transportation will be provided. Each girl should bring her own sleeping bag and a sleeping bag if possible. We will try to provide sleeping bags for girls who do not bring them.

APPENDIX C

Permission Slip and Letter

The camping trip is for \_\_\_\_\_ and is a school-sponsored activity. Mr. \_\_\_\_\_ has approved this. We are happy to have your daughter participate in this activity if she is unable to go.

If your daughter is planning to go, please fill out and sign the enclosed portion of this page and send it back to school with her. Further information about the trip will be given the girls in school. If you have any questions, please call me at 370-3197.

Sincerely,

\_\_\_\_\_  
Principal

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Dear

In connection with your daughter's physical education activities this semester, we are planning an overnight camping trip for March 28-29, leaving after school Friday and returning home after supper Saturday. The purpose for the camp-out is to give the girls opportunity to experience first-hand the fun and challenge of hiking, cooking, and sleeping in the out-of-doors.

We will be camping at the Triangle Y Ranch, a camp about six miles southeast of town, owned by the Greensboro YMCA. Our group of 12-14 will be the only ones using the campground at the time although there is a man caretaker on duty there at all times. Another adult woman and myself, both graduate students at UNC-G, will be supervising the girls. (. . . the girls don't know yet where we will camp; please don't tell your daughter since we don't want their other friends to find out and then come "visiting" while we are there.)

Tents, food, and transportation will be provided. Each girl should bring 50¢ to help pay for food supplies and also a sleeping bag if possible. We will try to provide sleeping bags for girls who cannot bring them.

The camping trip is not required nor is it a school-sponsored activity. Mr. McIver, however, is aware of our plans and has approved them. We are hoping to have your daughter included but will certainly understand if she is unable to go.

If your daughter is planning to go, please fill out and sign the bottom section of this page and send it back to school with her. Further information about the trip will be given the girls in school. If you have any questions feel free to call me at 379-5197.

Sincerely,

Genelle Samuelson

\* \* \* \* \*

\_\_\_\_\_ has my permission to attend the  
over-night camp-out March 28-29. I hereby release Genelle Samuelson  
from any responsibility in case of accident.

signed \_\_\_\_\_

date \_\_\_\_\_

## APPENDIX D

## Raw Data

Subject Number	Age		Height		Weight		Chest		Arm Length		Hand Length		Foot Length		Hand Breadth		Foot Breadth		
	Yrs	Mths	cm	in	kg	lb	cm	in	cm	in	cm	in	cm	in	cm	in	cm	in	
1	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
2	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
3	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
4	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
5	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
6	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
7	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
8	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
9	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
10	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
11	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
12	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
13	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
14	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
15	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
16	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
17	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
18	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
19	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12
20	26	3	173	68	68	148	100	38	15	24	9.5	18	7.1	28	11	19	7.5	30	12

RAW DATA

Subject Number	SEI		BRF (Biology)		BRF (English)		Grade Point Average Possible 4.0		Days Present in School Possible 90	
	Pre	Post	Pre	Post	Pre	Post	1st sem.	2nd sem.	1st Sem.	2nd Sem.
Experimental										
1	28	23	37	35	25	--	1.6	2.4	90	89
2	41	41	34	30	23	28	.2	0.0	62	37
3	45	44	inc.	inc.	44	45	2.0	2.2	87	88
4	26	26	29	29	28	--	.4	.6	62	44
5	29	33	40	36	39	38	1.2	.8	72	61
6	30	39	38	39	inc.	inc.	2.8	2.4	81	86
7	38	35	26	25	40	38	2.0	1.8	89	89
8	42	39	inc.	inc.	inc.	46	1.8	1.8	83	71
9	36	39	31	26	29	--	1.2	1.4	77	77
10	42	33	33	31	26	36	2.0	1.8	83	71
11	29	30	27	28	inc.	--	.8	0.0	68	Wd.
Control										
12	37	31	30	--	34	31	.6	1.4	75	77
13	27	26	inc.	inc.	inc.	42	1.0	1.8	86	85
14	34	37	--	--	38	32	.6	1.2	76	62
15	26	29	inc.	--	inc.	inc.	2.4	2.2	86	81
16	31	31	39	41	38	37	1.8	2.0	89	86
17	22	25	29	inc.	37	36	1.4	1.6	88	82
18	28	19	29	inc.	26	--	2.2	2.2	90	90
19	27	30	36	42	40	--	1.2	1.6	90	88
20	27	33	32	--	inc.	--	.6	.8	43	70