1969

A Pilot Study on the Comparison of the Effect of a Traditional Physical Education Program and a Movement Exploration Program on the Self Concept of the Special Education Student

Sherrie Ann Chrysler
Central Washington University

2240

A PILOT STUDY ON THE COMPARISON OF THE EFFECT OF A TRADITIONAL PHYSICAL EDUCATION PROGRAM AND A MOVEMENT EXPLORATION PROGRAM ON THE SELF CONCEPT OF THE SPECIAL EDUCATION STUDENT

A Thesis

Presented to

the Graduate Faculty

Central Washington State College

In Partial Fulfillment

of the Requirements for the Degree

Master of Education

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by

Sherrie Ann Chrysler

August, 1969

APPROVED FOR THE GRADUATE FACULTY

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John E. Davis, COMMITTEE CHAIRMAN

_____

Robert N. Irving, Jr.

_____

Darwin J. Goodey

ACKNOWLEDGEMENTS

The writer wishes to express her appreciation to Dr. John Davis, committee chairman; Mr. Darwin Goodey and Dr. Robert Irving, committee members; who so generously contributed their time and suggestions to this study.

To my husband, Jim, for his patience and understanding, a very special thanks.

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I. THE PROBLEM

Background of the Problem

A primary objective of the Physical Education teacher is to help each student find enjoyment in the performance of activities and to create a desire for continued participation in adult life. When working with the special education child this objective becomes even more important for these children do not play spontaneously or create and make up games as do normal children. They have to be taught to play as individuals or in a group. Much of the incidental learning of normal children, such as in the area of motor skills and abilities, must be taught to the retarded.

Dubin states:

> It is so important to remember each child, especially the retarded child, needs that feeling of success and of being able to do something well that will give him the feelings of happiness and security that every human being needs. Physical education, properly administered, lends itself so beautifully to guaranteeing this happiness and security for all our children (26:9).

There is nothing about a retarded person that prevents him from attaining the same degree of physical fitness as anyone else--if he has the program, if he has the supervision, if he receives the patience, the attention and the care (76:18).

If it is possible to find a physical education program that will offer students the opportunity to gain mentally as well as physically, we as educators must attempt to determine if this potential developer is possible. The educational time of special education students is a premium as many are years behind before they begin. It is hoped that this pilot study will give insight into developing a meaningful program that will have the double benefit for these students.

Eunice Kennedy Shriver, in an article on recreation for the mentally retarded states:

> The chance to play - the chance to learn a sport is so very important. If he can do well in some physical activity it can change his whole outlook. For once he feels comfortable in his skin and feels self confidence for the first time (76:18).

What greater service can educators do special education than make this possible through the area of physical education?

Realizing the importance of developing a sound self concept and its relation to the success of the student, this study would help determine if the type of physical education program a special education student experiences affects his self concept.

Purpose of the Study

The purpose of this pilot study, which was exploratory in nature, was to determine if the type of physical education program a special education student experiences affects his

self concept.

The problem to be researched was stated in the following null hypothesis:

> There would be no significant difference found between the effect of a traditional physical education program as compared to a movement exploration program on the self concept of the special education student.

The results of this study would prove beneficial in determining a physical education program that would benefit the special education student mentally as well as physically.

Significance of the Study

This pilot study should prove beneficial to education and research in the following ways: There have been very few studies done on movement skills and its relation to the self concept, or the effects of various types of physical education approaches related to the special education child. This study would serve as a basis for further research in these areas.

Wickstrom states:

> Movement exploration is so pregnant with possibilities that we have not begun to know what its real worth is, particularly in terms of development outcomes. More research must be done, experience must be accumulated and evaluated and the total results interpreted in terms of what happens to the child. Then perhaps we shall have a greater insight into the true nature of movement exploration (91:67).

In all the available literature on physical education for the special education student, there was a complete lack

of research methods used. Most authors pointed out the great need for research in this area.

If it were possible to determine if a physical education program could effect the self concept of a special education student, this would be beneficial in determining a program that would benefit these students mentally as well as physically. This would have an important role in helping these students in other areas of learning. From the research available there was found to be a definite relationship between learning and self concept. Perhaps physical education could be the "shot in the arm" needed to open new avenues of learning success within the classroom. This alone would make a study of this type a real value in curriculum design.

Limitations of the Study

This pilot study was limited to the one available junior high special education class in Ellensburg School District.

The study covered a twelve week period during February - May, 1969.

The study was further limited to an analysis of the results of the self concept tests and an analysis of the drawings done by the students participating in the study. No attempt was made to determine the effectiveness of either program in terms of physical fitness scores.

II. DEFINITION OF TERMS

Self Concept

For purposes of this study, self concept will be considered as the attitudes one has about one's self. It will include capabilities, body image, relationships with others and feeling of worth.

Special Education Students

This denotes those students which are enrolled in a special program due to their inability to benefit from the regular program. Selection of students for the special education class was guided by school policy which supplements guidelines contained in the Washington State Manual.

Movement Exploration

This refers to the exploration of body movement. Natural activities with or without equipment are used in the form of a problem to insure maximal diversification and development of motor skills. The child is challenged to perform a task but not told how to do it. He must find his own solution. By addition of related problems, the child is able to progress to the mastery of effective and economic use of the body in all kinds of movement activities.

Traditional Physical Education Program

For purposes of this pilot study, the Washington State Physical Education Guide definition of Physical Education will be used for the traditional physical education program:

> Physical Education is that part of the general education which emphasizes a variety of motor experiences selected and taught with full regard for their values to the growth, development and behavior of each individual (89:7).

III. OVERVIEW OF THE THESIS

Chapter II of this study presents the review of the literature and research concerning self concept, interpretation of figure drawings as related to self and body image, physical education programs for the retarded, and movement exploration approach to physical education.

Chapter III will contain the procedures used in this study in selection of subjects, the program of instruction, and collection of data.

Chapter IV will contain a presentation and analysis of data.

Chapter V will contain the summary, conclusions, and recommendations for further study.

CHAPTER II

REVIEW OF THE LITERATURE

Snyggs and Combs believe that all behavior is related to the perception of self (78), and Ted Landsman says specifically that learning is determined and influenced by one's self concept (52). Body concept is a very important part of the self concept especially in adolescents when the physical concept must change. Leela Zion concluded from a study of body concept as it related to self that . . . "The security one has in one's body is related to the security with which one faces one's self and the world" (93:494).

Benoit discusses the extension of the mind through the body when he states:

> An area to which physical education can address itself is precisely the one that is currently being appreciated as having far more importance than has been attributed to it in the past. It included health, strength, vigor, reaction time and inner well being. To these one might well add wholesome self awareness, a sense of purpose and achievement, motivation for self improvement, sense of belonging and sharing, ability to relate to others, self control, comfort in the social group. As one views this long list of traits, one can appreciate that they all tie together, that they grow more or less together - that a good self-image leads to action yet springs out of physical well-being (10:29).

Benoit's statement underlines the important potential of physical education as well as the challenge offered to educators to develop this potential. Howard Schaub, in a statement in the Foreword of the Physical Fitness Test Manual

for Elementary Schools, states "In order that boys and girls reach their maximum potential, the mind and the body must be provided the opportunity to develop together" (73:III).

As stated earlier, there is evidence that learning is determined and influenced by the self concept. Perhaps through physical education we can help students develop a positive self concept which includes helping them develop a feeling of adequacy, a capability of dealing with the world, a sense of personal worth and value as an individual. From these personal feelings come self confidence, self respect, dignity, honor, great happiness and the joy of living. For anyone these are much needed qualities--for the retarded these truly open a whole new world that isn't available to them otherwise.

Many would agree with the statements above, however if the reader turns to literature and research to help determine the type of program these cited writers mean and the type that will help a special education student experience both mental and physical rewards, there is a void, especially in research. How then can a physical educator attain this important objective? One alternative was to investigate the areas separately as there are materials available concerning self concept and physical education.

In reviewing literature for this study the writer chose to review literature in the two areas mentioned above

and added to this movement exploration and the use of figure drawings to interpret self concept. Each of these areas will be treated separately.

I. SELF CONCEPT

Jersild shares a variety of authors' opinions used in defining the self and its properties:

> The self is a composite of thoughts and feelings which constitute a person's awareness of his individual existence, his conception of who and what he is. A person's self is the "sum total of all that he can call his" (James). The self includes, among other things, a system of ideas, attitudes, values, and commitments (Jersild). The self is a person's total subjective environment. It is a distinctive "center of experience and significance" (Howie). The self constitutes a person's inner world as distinguished from the "outer world" consisting of all other people and things.
>
> The self is "the individual as known to the individual" (Murphy). It is "that to which we refer when we say 'I'." It is the "custodian of awareness"; it is the thing about a person that has awareness and alertness, "which notices what goes on, and . . . notices what goes on in its own field" (Sullivan). The self is reflexive--it is an object to itself (Mead) and it can be both subject and object. . . As a knower, the self is able to take a "panoramic view of the total personality" (Wenkart) . . . It is both constant and changeable (48:9-10).

From this one can see that the self has a broad range of definitions. Many authors use the term self and self concept interchangeably, others deal with terms of self actualization, self perception, and self realization. Snygg and Combs deal with the phenomenal self that includes far more than just the physical aspects of self. They define the phenomenal self as follows:

> The phenomenal self includes all those parts of the phenomenal field (the entire universe, including himself, as it is experienced by the individual at the instant of action). . . which the individual experiences as part or characteristic of himself (78:15; 58).

They go on to define self concept as it relates to the phenomenal self in this way:

> The self concept includes those parts of the phenomenal field which the individual has differentiated as definite and fairly stable characteristics of himself (78:112).

Landsman equates self concept and self image: The self concept is thought of as being an organized group of feelings, and attitudes which an individual has about himself (52:289).

From the standpoint of literature review the area of self concept can be thought of as popular and confused. A review of Wylie lists 493 articles and research reports on the self concept. When one specifically looks for information on the retarded and self concept there are only a few studies available and none dealing with the physical education program and self concept for the retarded. The studies reported on self concept and the mentally retarded dealt specifically with placement in educational setting, academic success and failure, and the quest of the mentally retarded for self identity.

Phelps points out the position of the mentally retarded and self concept and the need for deep consideration

educators should have for the mentally retarded and his self concept.

> Mental retardation, in our present society, often foredooms an individual to many embarrassing failures and disappointments. Mental retardation is a difficult handicap to accept, however the handicap is part of reality and must eventually be accepted by the individual (67:296).

The mentally retarded student goes through the same quest for self identity and self realization that any normal youngster does. The quest is made more difficult by the lack of social acceptance and by the situations that mentally retarded students are placed in daily. A good portion of their day is spent in the educational setting. The success that the mentally retarded have is very closely related to the social adjustment that these individuals can attain. Snyggs and Combs point out that all behavior is related to the person's self concept and his perception of self. This could serve educators with some understanding of the retarded and his reasons for behavior. Ruth Wylie points out that Rogers seems to imply that only when a feeling or item of information about the self or environment comes at least dimly into awareness will it influence behavior. Rogers states:

> The self concept or self structure may be thought of as an organized configuration of perception of the self which are admissible to awareness. It is composed of such elements as the perception of one's characteristics and abilities; the percepts and concepts of the self in relation to others and of the environment; the value

> qualities which are perceived as associated with experiences and positive or negative valence (70:136).

Perkins relates that self concept appears to be a valuable tool concerning psychological factors which influence learning and development:

> The growing importance of the self concept as a construct is particularly evident in those theories which postulate that the individual's perception of himself is the control factor influencing his behavior. This formulation suggests that a more adequate interpretation of behavior can be achieved when the observer increases his knowledge of the behaver's perceptual field including his self concept (43:204).

The normal student is more capable of "rolling with the punches" but what about the mentally retarded? We know that a goal for them must also be facing reality but we must realize that for the retarded a major concern is the enhancement and defense of self. The retardant is unduly occupied with the defense of self since he meets so much failure. In most situations he reacts with that defense in mind. Long, Zeller, and Henderson stated that the emotionally disturbed more often place self in a central position (56:213).

It becomes the responsibility of the school and the various educational experiences to relieve the emotional tensions that go with a mentally retarded child's quest for self identity and self acceptance. The setting that will cultivate realistic aspirations and realistic self confidence are those which provide opportunities for realistic success experiences.

> A child's successes and failures provide him with a self concept which in turn influences his personality development and his approach to new tasks and experiences (74:15).

A study done comparing the self concept of the mentally retarded children in regular classes with the self concept of the mentally retarded children in special classes by Imus points out that the task of all those involved with the mentally retarded child is to do what is in their power to help that individual develop a positive self concept (43).

Ellsworth states: "I have never seen a person with emotional problems who did not have negative feelings about himself" (27:54). The lack of success experienced by the retarded is reflected in their total personality. If these children are faced with a series of failure experiences throughout life this lack of success, disappointment and frustration reduces the willingness to attempt challenging experiences. This again points up the vital role of the self concept in the retarded child. If the retardates are exposed to an unsatisfactory school situation for a long period of time, areas of social adjustment may be affected and this is directly related to the child's self concept. Attention was brought to this idea in a study by Kern and Heinz. They found that the overall adjustment of special education students was better than those of mentally retarded children in educational setting other than the

special class (50).

It was interesting to note that in studies dealing with the educational placement of mentally retarded students those left in the regular classes had greater academic increases than those in the special class setting. In the area of personal and social adjustment those in the regular school setting were encountering great difficulty while those in special classes were making much better social and emotional adjustments. The studies were limited and we must consider the many variables such as programs used, programs available, the teachers, and the background of the students. However, some insight for the educational placement of the mentally retarded may be gained from these studies. Jersild drives quite a point when he reminds us that emotion and feelings can be communicated between people even though their intellectual ability is miles apart. The "slow learner," even the mentally retarded, knows anger and is acquainted with sadness, hurt, and grief much as his peer who has a high I.Q. The language we use when we evaluate ourselves has meaning that transcends the differences of age, sex, I.Q., and socio-economic status. In other words the mentally retarded child has feeling just like everyone else. These children must be accepted as individuals and their needs must be met if they are to develop a positive self concept.

Ellsworth compares the negative and the positive self concept in this way:

> The negative self concept - people feel inadequate, incompetent, unwelcomed, mean, cruel, ugly and stupid . . . Positive self concept - can be defined as feeling adequate, capable of dealing with the world, likeable, valued, intrinsically worthy and free. From these personal feelings come self respect, self confidence, dignity, and honor, not to mention great happiness and the joy of living (27:54-56).

These two definitions bring our attention again to the vital role of the self concept of the mentally retarded child. In a glance it can be determined which one the mentally retarded child most likely has. The "bill" for a positive self concept is mighty big in terms of the retarded child and reality. If the mentally retarded child is unduly occupied with his self concept as Phelps has stated, then we as educators should become unduly occupied with helping develop and mold that self concept.

Phelps summarizes this aspect well when discussing the role of the mentally retarded in society:

> He (M.R.) must not only proceed in the same direction as the normal child in development of self image but must also base this self image development in terms of his limited capacities (67:297).

Phelps goes on further to explain the role of educators in regard to aiding the mentally retarded:

> The provision of special activities where children can experience success, the building of an "educational" program on an area of strong interest, and the use of love and sympathy with the realization of the child's limitations all afford excellent techniques for the educator . . . He must some day live in this society and

> should experience its joys and frustrations. However the method exposed to should be gauged (67:298).

The negative self concept aspect presented earlier by Ellsworth needs some consideration. He points out that many children have this concept and this is their self concept. They will do all in their power to hold on to this even if it is negative because at least it is theirs. The educator needs to stop a moment and ponder this thought. In order to help re-establish a child's self concept they must not threaten him by awareness of trying to destroy or replace this negative self concept in order to develop a positive one. The educator needs to find the "back door" technique that will allow him to slip in unnoticed and very gradually change environment and experiences in order to develop a positive direction for the self concept. This underlines the idea that in order to do something well one must have experienced it: in order for the mentally retarded to like, he must be liked and in order to respect he must be respected. The educator has the opportunity to promote this attitude if he will only accept the challenge.

How is the body image related to self concept? Ted Landsman defines the self concept as being an organized group of feelings and attitudes which an individual has concerning himself (52). The self concept may also be thought of as referring to specific objects, ideas, persons, or even

physical parts of the self. According to Kephart:

> We need a point of reference around which to organize all external information. We use our bodies for this. This is why it is important to have a clear accurate and complete picture of the body and its position in space. . . . Body scheme or body image is built up by sensations we receive and forms a picture in our mind about our body. It is this body image which becomes the point of origin for all the spatial relationships among objects outside our body (49:50).

These definitions bring in the body image as related to the self concept.

Body image is a concept that is learned from observation of movements of parts of the body and the relationship of the different parts of the body to each other and to external objects (49).

The importance of body image is emphasized by Schilder and Bender. They point out that it is necessary for the initiation of any movement. Thus, Schilder writes, "When the knowledge of our own body is incomplete and faulty, all actions for which this particular knowledge is necessary will be faulty too (49:50).

Zion in a research study on the relation of body concept and self concept brings to mind the fact that there is limited research available in this area. She does express the concern that physical educators should know how the body influences other aspects of a student's life as well as what they are doing to the body concepts of the students (93). The acceptance of one's body is so closely related to mental

health that it should deserve the consideration of the physical educator. Echoing this concern are Landsman and Erikson on the importance of self concept and the physical self during adolescence (52;28). This is a period of great physical and emotional development. The group pressure of peers and how one relates to them is great at this time.

Figure Drawing as a Means of Self Concept Interpretation

Interest in human figure drawing developed around 1940. It was extremely prevalent until about 1955 and then became much more subdued. Its emphasis was on use as a measurement of intelligence.

In the last twenty years the use of figure drawing as an assessment of personality has promoted a renewed interest in its use. The ease and simplicity with which it is administered and its acceptance by the subjects has given it an advantage and caused favorable and frequent use of it as a projective technique. In fact, Sunberg's survey indicated that projective drawings have risen to become the second most frequently used projective tool, preceded only by the Rorschach (68:386).

Buck and Machover led the way in introducing this technique. In Buck's House-Tree-Person Test, the rationale he uses is that any total drawing may represent projections of the drawer or a self portrait. And any drawing, no

matter what the subject, is capable of reflecting the projected self (37).

The use of children's drawings as a projective device was prompted by Bell's summary in 1948. The summary included the concept that when a child draws he may reflect the many impressions he has of his own body. Children draw what they feel rather than what they see (37).

With these ideas in mind the potential of interpreting self image is great. Machover's hypothesis is that:

> . . . the self image is projected into the drawing of the human figure. . . the drawing of a person, in involving a projection of the body image, provides a natural vehicle for the expression of one's body needs and conflicts (37:43).

The subject becomes more absorbed in his drawing and for that reason perhaps a "sounder" picture of the self is evident. The emphasis placed on different elements within the drawing tells a good deal of what matters to the child, what it does to him, and what he does about it. An awareness of the knowledge that man's deeper needs (1) color his creative effort, and (2) show an affinity for "speaking" in pictorial images gives the experimenter and/or clinician a technique for eliciting submerged levels of human feelings.

> In projective drawings, the subject's psychomotor activities are caught on paper. The line employed may be firm or timid, uncertain, hesitant or bold, or it may consist of a savage digging at the paper. . . the subject's concious and unconcious projections of himself and significant people in his environment determine the content of his drawings (68:366).

Hammer lists eight foundation stones of empirical interpretation of projective drawings. These deal mainly with a more technical appraisal of drawing. He does pose three theoretical postulates for the field of projective drawing interpretation that are helpful for a layman's knowledge:

> (a) There is a tendency in man to view the world in an anthropomorphic manner, that is, in his own image. (b) The core of the anthropomorphic view of the environment is the mechanism of projection. (c) Distortions enter into the process of projection to the extent which the projection has a defensive function, that is, the projection is in the service of ascribing to the outer world that which the subject denies in himself (68:369).

Caligor, in his publication on the Eight Card Redrawing Test (8CRT), gives the rationale for more than one drawing as a means of interpretation. In the 8CRT, after the subject completes a drawing, a transparent sheet is placed over the drawing and the subject is asked again to make a drawing of a person. This gives the subject the opportunity to add or subtract any details on the previous drawing. This is repeated seven times so there is a collection of eight interrelated drawings (15).

Caligor feels this technique is more valid than a single drawing as an assessment of personality. The advantage of this approach was tested and demonstrated in the following manner: Three experienced psychologists were asked to evaluate by clinical inspection technique a single

drawing and a 8CR Test noting the presence or absence of strong paranoid trends. All the drawings had been done by hospitalized paranoids. The psychologists judged twenty-five per cent of the drawings showing strong paranoid trends on the basis of a single drawing and eighty-five per cent on the basis of the 8 CRT. This verified Caligor's concern that more than one drawing should be judged (15).

Although most authorities didn't express the same concern as Caligor, they did stress the fact, over and over, that one should never make a judgement on a single characteristic of a drawing or take something out of context. They expressed the need to look at a total drawing and all the indicators before making an assessment. It was suggested that the figure drawing be included with some other measuring technique and that it served as a good forerunner to other devices used in evaluating personality characteristics. The danger of misuse of the figure drawing comes about when unqualified people tend to use it as the sole assessment of personality or choose one characteristic upon which to make an analysis.

There was little material available that dealt with figure drawing and the mentally retarded adolescent. The information available stressed the fact that there was instability from drawing to drawing in the retarded child who develops more slowly. In a study in the Netherlands, Statyn

Egge used mentally retarded subjects up to fourteen years old. They compared with normals three to eight years old. This would indicate that the mental age of a retarded person shows in their drawings. This also gives insight on how these youngsters perceive the world (37).

In comparing mentally retarded subjects with "normal" subjects, the fact that they are slower to achieve suggests they are more deficient on items of proportion and dimension, the treatment of shoulders, elbow joints and fingers. Extra objects in the drawing may display a sense of self worth and be objects that are important to the subject.

Stevens pointed out some items that distinguish the drawings of the retarded from the normals. These were:

> . . . short arms in relation to the rest of the figure, frequent cliches, meticulous workmanship, automatism, lack of proportion between parts, a large amount of asymmetry and a tendency to give undue attention to detail (83:89).

A knowledge of the differences is important to prevent a misinterpretation of a common drawing characteristic of a retarded subject. Some of the above mentioned have different interpretations when not done by the retarded. This again points up the need to have qualified interpretations made before assuming an assessment. A person should study children's art more thoroughly and be aware of some of the well known authors in this area, such as Arnheim, Lowenfeld, Gombrich, Schaefer, and Simmern. These authors deal more

with a general analysis of children's art rather than use art as a projective technique, this however, gives a person the needed background to utilize the projective technique effectively.

Abt and Bellak have a great deal to offer to the basic knowledge of figure drawing as a projective technique even though their book was copyrighted in 1952. Levy stresses the importance of the notion of body image and of the distortions that occur in it as significant psychological constructs around which a clinician can organize certain kinds of clinical data.

> I regard drawing analysis as so fruitful and economical a source of information about personality that I believe the practice of prefacing other more complicated techniques of personality assessment with the "drawing-a-person technique" is a defensible clinical practice (1:258).

There are many ways to approach the use of drawings and the amount of information possible varies with the skill and experience of the interpreter and from subject to subject.

People usually draw figures that convey expressive ideas. Self concept oriented figures tell an interpreter many different things. The dynamic relationship between the subject and his environment or between the subject and parent figures can be parallelled by the relationship between size or drawing and the space. An example of this is if self

concept figures are small the hypothesis may be formulated that the subject feels small and his reaction to the environmental press is one of feeling inferior. If the figure is large it may be a sign of expansion and aggression.

The location of the drawing on the paper also serves as a key to self concept. There are five general placements possible: a drawing may be placed in the upper-half, the lower half, to the right side, the left side, or the center of the sheet. The following interpretations are possible on location: the upper half indicates high standards of achievement; the left side indicates self conciousness or introverted; the location at the bottom shows more stability, firmaly rooted and calm, or it may mean the subject feels depressed or defeated; the carefully centered drawing shows self directed, adaptive, and self-centered; rarely are drawings located on the right side, however, this shows negativism or rebellion. It is important not to make interpretations out of context (1).

All figure drawing denotes or suggests some movement. The range may be from rigidity to extreme mobility. Distortions and ommissions suggest conflicts that may be related to the part that this appears on. Most people draw a whole figure and when there is only a partial figure it reveals a basic discomfort with one's sense of adequacy and body image.

There are many other fascinating "clues" to personality

that can be seen in figure drawings. This again stresses the need to be well informed on the technique of analysis and the fact that one never uses one area of interpretation as a reliable diagnosis unless it is clearly supported by the total patterning of the drawing analysis.

Thomas has compiled a figure drawing atlas that has well over 800 drawings collected and analyzed. It is the first book of its kind to do such a wide span of drawings. It makes no special plea for the validity of figure drawings. It simply presents the raw data, describes carefully in detail how this was handled, and challenges the research-minded reader to use and test his own speculations and hypothesis. All the drawings are by healthy adult subjects (86).

There is within the literature a good deal of disagreement and controversy about the validity of the use of figure drawing as a means of personality assessment. Much of this stems from the lack of research to assess the merit of this approach and measure its capabilities. Abt gives a clear assessment of this technique when he states:

> Figure drawing is a useful technique for clinical and research purposes if used with the same caution, artistry, and skill that are applied to other clinical instruments. It may frequently prove to be a fruitful and economical source of insights about the personality of the subject (1:288).

Hammer shows the current assessment in the following statements:

> My own experience, derived from teaching the Annual Summer Workshop in Projective Drawings, is that in the hands of some students projective drawings are an exquisitely sensitive tool, and in the hands of others, those employing a wooden, stilted approach, they are like disconnected phones. It may be because of this that, in spite of the contradictory research findings, clinicians who can use drawings with some artistry . . . continue to use them in the projective battery . . . The remarkable staying power of the projective drawing tool attests to the unshakeable conviction of clinicians that this technique has within it the capacity to provide them useful information about clients (68:385-386).

II. PHYSICAL EDUCATION AND THE MENTALLY RETARDED

Until recently there has been little written about the role of physical education in the life of the retarded child. Beck and Dubin were forerunners in concerns of physical education and the retarded (8;26). In 1962, Julian Stein appeared on the scene. As a physical educator with an interest in the educable mentally retarded and a prolific writer, literature concerning the retarded and the role of physical education was soon available. He now serves as a Project Director in Recreation and Fitness for the Mentally Retarded through the Office of the American Association for Health, Physical Education, and Recreation, Washington, D.C. The investigator attended a workshop in Longview, Washington, February, 1969, where Dr. Stein was guest speaker. Some of his comments from addresses and chats will be found in this section as a supplement to the review of literature.

In Beck's study, questionnaires were sent to various school districts concerning the special education students' physical education program. Most of the responses felt that there was definitely a need for research in this area, however none of them were doing any research. There was little information gained from this study as it showed the districts were in agreement to the objectives for physical education, but these were very broad and general, and that the means of obtaining them were varied and not overly successful. Many districts placed the special education students with the regular physical education classes so they could have contact with normal students. This being the main objective, most of the special education students didn't have the needed skills to compete and ended up standing around or playing by themselves. Beck felt that the physical education program would be a means to better mental health for special education students if they could be taught to excel in some particular activity (8).

Dubin's study dealt more with observations on the place of physical education in building a program for the mentally retarded child. He expressed the importance physical education, if properly administered, could play in the life of such a child (26). If one then turned to the literature to find what was meant by properly administered, no help was in sight. It wasn't until the emphasis around the

1960's on youth fitness that there was much concern for the retarded in this area. The rise in interest could be credited to two factors. First, special classes were becoming more popular on the educational scene. Secondly, President Kennedy's attention on the fitness of America's youth. The whole area of physical education was in the spotlight and there was a real shadow in the retarded's corner.

There is not a wealth of information available, but through the efforts of Dr. Stein, Bryant Cratty, Hollis Fait, and the American Association of Physical Education, Health and Recreation, some materials are available for educators to look at when considering a program for the retarded. In the area of research there is still a big void.

Stein, in response to the idea that retarded children can't benefit from physical activities due to their handicap, states:

> Recent trends in research show that the lack of intellectual ability resulting from arrested mental development need not affect the levels of physical fitness and motor development of the retarded (81:25).

He goes on to emphasize the importance that physical educators have to teach these children to play and that many of the abilities and motor skills that normal children learn from association and play with others are not present in the retarded. They must be taught skills that others learn incidentally. On the same token, educators must not put a

"ceiling" on the challenges they give to the retarded. In an address entitled, "Ceilings Unlimited," Stein pointed out that the degree of motivation will determine what the mentally retarded will do and the key to this is the rapport between the student and the instructor. He went on to say, "Our lack of expectation causes lack of performance. We must raise expectations, keep them realistic but don't put a ceiling on what the retarded can do." Greater emphasis needs to be placed on physical education for the mentally retarded child and greater demands should be made on each of these children. In another article he does point out the fact that the mentally retarded tend to perform two to four years behind their normal peers in psychomotor function but that this does not affect the degree that they can achieve, only when they can achieve it (82:36-38).

Fait goes deeper into the effect of the lack of play by the retarded and how it contributes to personality maladjustments and the development of undesirable behavior patterns. Because this type of child has no interest in group play he has not acquired the social maturity or made the satisfactory adjustments that are made possible through group play. The mentally retarded child will find himself rejected by his normal peers which in turn creates a sense of failure to this child. Fait suggests:

> The physical education program must present a variety of activities directed toward the special needs of the mentally retarded. Because these youngsters have poor body mechanics and low physical fitness much attention must be focused on exercises and activities which improve these conditions (29:258).

He further states:

> Perhaps the greatest need of these children is an opportunity for successful participation in group play. . . . In addition to physical benefits there exists in play many opportunities for social development and emotional growth (29:254).

The mentally retarded child is confronted with a multiple handicap because his lack of mental ability compounds itself into psychological, physical, social, and emotional problems. A physical educator needs to be aware of the characteristics of the retarded in these areas. Stein has pinpointed the characteristics. The list is very complete and indicates the real need to consider more than the physical aspect. The physical educator must be particularly concerned with the mental, emotional, and social aspects as well (79:30-31).

In the past, educators have spent too much time dealing with the unlikeness of the mentally retarded rather than their likeness as compared to other children. Educators sometimes lose sight of the fact that they are more like "normal" children than different. They have the same needs, drives, and desires as their normal counterparts.

The American Association of Health, Physical Education,

and Recreation has published a guide dealing specifically with guidelines for a physical education program for the retarded. In reviewing this guide one finds a very healthy, positive approach to physical education. It deals with criteria for judging growth in mental health through play; the different kinds of stimuli educators can use, the area of physical fitness, the fact that specific consideration should be given strength, power, agility, flexibility, endurance, balance, speed, and general coordination. If these elements are present in a physical education program, the mentally retarded will have the skills necessary to accomplish a variety of motor skills. The guide clearly emphasizes the need to consider readiness, motivation, and past experience. The underlying tone of this guide is that students achieve success and failure is minimized. The educator must teach in slow motion. Effective instruction for the retarded comes when all activities or skills are broken down into small progressive steps. Yet the educator is not to overlook the importance of challenging the individual.

Stein has proposed six guidelines that summarize the basic ideas presented in the guide. These are: (1) Mental age is the most important guide to activity; (2) Selection of activity should be based on the background, needs, interests, and abilities of each individual; (3) Basic play and recreation need not be different; (4) The use of few

rules due to intellectual capacity; (5) Little transfer of learning from one skill to another; and (6) Once motivated the handicapped can learn complex motor skills (79:31).

Cratty emphasizes that the introduction of activities to the mentally retarded should be activities that enhance their body image, and include tasks to improve their perceptions of their body parts and the body's relationship to objects in space. Kephart also emphasizes this importance in learning development.

The challenge for physical educators in the physical education for the mentally retarded is provided by Dr. Stein when he states:

> The mission is not to make champions or even talented athletes, but to use the full impact and potential of physical education to enable each individual to become better prepared physically, mentally, emotionally, and socially to take his place in society as a self-sustaining adult who is capable of living the fullest, most satisfying and worthwhile life possible within the limitations of his handicap (79:31).

III. MOVEMENT EXPLORATION

Description

The movement exploration approach to physical education is an attempt to meet the individual differences of children. Natural activities with or without equipment are used in the form of a problem to insure maximal diversification and development of the motor skills of each child. The child is challenged with a movement problem but not

told how to solve it. He must find his own solutions. By the addition of related problems, the child is able to progress to the mastery of effective and economic use of the body in all kinds of movement activities.

An important technique of movement exploration is the phrasing of the questions or challenges since that is the medium through which movement exploration is conducted. The challenges are a form of task set for the child to accomplish. This is done in a "leading" method and most of the challenges are introduced by one of the following lead-in phrases: "Who can . . .," "Can you . . .," "What can . . .," "How can . . .," or "Show me . . .." "Who can balance on three parts of their body?" "Can you find another way to move different than the way you are now?" "Show me how big you make your circle?" In this way a pattern is set:

1. To increase the feeling of security in movement by exploring its unlimited possibilities.

2. To develop a sense of quality and form by observing others and making comparisons.

3. To increase performance (51:11).

Special emphasis of tasks is given to:

1. Tasks of building a strong and flexible body:
   To strengthen the trunk and feet
   To increase flexibility and elasticity
   To develop a "feel" for bending, stretching, twisting, and thereby a good posture.

2. Tasks of developing basic movement skill:
   To ensure varied skills in running, jumping, throwing, and weight supporting activities.

3. Tasks of developing a sense of balance:
   To refine coordinations, more economical applications of energy, a greater awareness of space and rhythm, and an increased ability to adjust variations (24:3).

A sample lesson follows:

Part I:

1. Opening Activity

   a. Take a ball and find ways of bouncing it.

   b. After a practice period, use a demonstration of several children to show the variety of ways. Follow by additional practice.

   c. Can you bounce the ball with other parts of your body?

   d. By observation of the teacher, stop the class and have individuals show the part they are using. Resume practice.

   e. Return your ball and find a space that isn't near anyone or another object.

2. Leg Work

   a. Can you move around the room using all the empty spaces you can find? Try and visit every part of the room.

   b. See if you can change direction. Can you move backwards? Look over your shoulder. Don't go too fast.

   c. How quickly can you move? Can you move quickly and low? How slowly can you move?

   d. Can you find a different part of your feet to walk on? Use demonstration to bring out different parts. Resume practice.

   e. From your own spot see how high you can jump. Use demonstration and discussion to bring out what helps us get high on our jumps. Resume work.

f. While jumping how lightly can you come down? Use demonstration and discussion to figure out how your students can land softly. Try it again.

g. Try putting a turn in your jump? Can you run and jump?

3. Whole Body

a. Find a way of curling your body up.

b. Can you find other ways? Can you find three different ways of curling?

c. Can you use your three ways of curling and change from one to the other?

d. Demonstration and observation by some of the children. Resume work.

4. Weight on arms

a. Place your weight on your hands and your feet. Can you change the weight from your feet so that it is all on your hands? Keep your head up and come down lightly.

b. Try keeping your legs curled to your body as you change your weight.

c. Can you stretch your legs and run your feet in the air, while the weight is on your hands?

d. Find other things you can do with your feet and legs while your weight is on your hands.

Part II:

Can you get into groups of ____ and find a space?

Make bridges with your body and support each others weight. Remember you merely support the weight, not bear it. How long of a bridge supporting shape can your group make? Find ways of going over and under bridges made by one another. Continue group activity.

Use of games: Examples--Horse and Rider, Tag, Shark and Fish, and Steal the Bacon.

Related Literature

Movement Education has been a dynamic aspect of the total education program in England, and was introduced some twenty-five years ago (42:31). Since then it has grown in depth and breadth and found its way to the United States. Movement exploration is an aspect of movement education. It is an approach to physical education that requires total physical and mental involvement. There is a definite lack of research in the area of movement exploration.

In its simplest terms it is exploring movement with the use of the body. Students are given a problem but they must experiment and explore the possible solutions. The problem may be either a single concept or a combination of concepts. Various equipment can be incorporated in the problem. There can be individual as well as group work in this type of an approach. It requires a minimum of supplies and equipment.

Hackett and Jensen find great value in its simple approach when they state:

> The greatest value of movement exploration is its simplicity of the concept. Movement indicates that some action is used in seeking a solution to a problem. Each child is separately engaged in analyzing the problem and seeking a solution within the limitations of his own physical and mental abilities. By having to concentrate on the solution of a problem rather than solely on himself, the child, becomes completely involved in the lesson (35:2).

The individual development of each student is of paramount importance. The same degree of physical fitness is not required of each participant, however the movement exploration approach to physical education is an attempt to meet the individual differences of the participants. It requires only that the participants be permitted to participate at their own level and rate and be permitted to gain skills and confidence that will develop a realization of the fun and enjoyment which active physical education programs can offer. This approach has as its prime goal, the developing of each individual's competencies in such a way that the world of recreation and fun is available to all--no matter what their size, handicaps, or past experiences.

The goals of movement exploration are identical to those of any physical education program in that they are: developing fitness, motor, social, and emotional growth. The approach and techniques used are the unique aspect of the program.

The movement exploration approach involves seven steps:

1. Teacher identifies particular movements and skills child should experience.
2. Movements and skills introduced in the form of challenge geared to level of participant.
3. Challenges should increase in difficulty in a logical progression both during single class periods and over a longer range of time.

4. Teacher should phrase the question in a way that is specific enough for most of the responses to be anticipated and yet of sufficient latitude to encourage individual interpretation.

5. Once the question is presented the teacher should be able to distinguish between correct and incorrect responses.

6. Individual interpretations of the challenges should be expected and encouraged.

7. The teacher should strive to be creative and spontaneous in the presentation of the challenges (35:5).

In previewing literature on the subject, the reader needs to be aware of the range of the word "movement" in physical education. During this time of educational change there is new emphasis on the field of physical education and movement. The reader needs to realize that movement in this sense deals with basic skills or the science of human movement and not the approach or methodology which is the concern of this thesis. The literature available on movement exploration is rather limited. A Guide to Movement Exploration by Hackett and Jensen is the most recent American publication that deals entirely with the approach. The most recent books on physical education have a small portion on movement, but more in passing than concentrating on the subject.

There are many sources available from England and Germany since it has been in use there for a period of time. More recent articles are beginning to appear in

physical education journals that deal with the philosophy and guidelines. These however, are sketchy.

Names that appear in the foreground as "experts" on movement include Methany, Deach, Broer, Cassidy, Glassow, Oberteuffer, Humphrey, and Laban. These people have been trying to encourage teachers to incorporate this approach into their elementary school physical education classes. The use of experimentation and exploration is being encouraged in our modern education of today and the "experts" feel it should be utilized in the physical aspect of education.

Movement has been around for quite awhile but not being developed to its fullest potential. It appears to be limited to organization and integration of various movement skills in the physical education program rather than a unique approach to the development of these skills.

Smith states the following as basic beliefs about movement education:

Movement can be an important factor in learning.

Movement experiences can stimulate thinking.

Movement experiences can help children develop social interaction.

Movement can be a form of communication.

Movement experiences can help children understand their own ideas and feelings, and provide self expression.

Movement experiences can help children understand other people.

Movement provides physical skills in common and unique activities and provides opportunities for cooperation and competition.

Movement education can help children clarify concepts about their environment (77:181).

In all the literature available on movement exploration the same two words stand out: creativity and success. These are "built in" features of the movement exploration approach. The freedom to be able to perform in terms of what a child chooses, implies a choice which in turn implies the need to think in order to exercise that choice. This allows the child freedom to think for himself and determine the "whys" and "hows." It also allows the child to move as he feels, rather than how someone else feels he should. This encourages creativity. A main philosophy behind movement exploration is that the child is led, not told, into discovering means of physical accomplishments. There is no wrong way in movement--perhaps a better way--and no class standard is imposed on the child. The important fact is not the way he solves a movement problem but that he is successful. Because of this, the child's capabilities are emphasized.

The more we enlarge the variety of our movement experiences, the more we add to our personal stock of meanings and understandings. The less we move, the less we know about this meaningful area of living and the "fabric"of our lives

is accordingly less vivid.

One of the primary jobs of physical educators is to provide a wide opportunity of ways children can move and in turn give meaning to these movements. The educational significance of this is dependent upon the ability of instructors to provide challenging and satisfying movement experiences for all children. By helping the child to realize the infinite possibilities in movement, creativity is being inspired.

Success is a vital outcome of movement exploration. It stems from the approach and is part of it. The varieties of levels or grouping so evident in the classroom seem to be all but forgotten when the child gets to the playground or gym. There is an awareness of limitations but usually no real concern on the part of anyone to provide meaningful physical education experiences for <u>all</u> children. In the physical realm as well as the mental realm, children have a readiness for things and opportunities must be provided to meet individual differences. The educational responsibility is to challenge the more skilled and yet meet the needs of the poorly skilled and provide a means for improvement and refinement. The movement exploration approach does this. This "spot-light" isn't always on the highly skilled. All children can share some portion of the "spotlight" in this approach. This is made possible through the

uniqueness of their individual approaches to solving the problems posed. In movement the child is accepted at the level he comes with and led to discover the other ways of utilizing his body in movement. The basis of the framework of development is on successful experiences. Because the child can solve the problem posed, confidence is built into the child. The old adage, "Nothing succeeds like success" is applicable here.

Participants of the Second Annual Anglo-American Workshop on Movement Education in summarizing their observations made in England, stated:

> The student learns to respect his own abilities as well as the abilities of others.
>
> The movement approach seems to draw out the shy, self-concious child, and lead him to other experiences.
>
> Continuous activity was emphasized throughout the lesson.
>
> The sense of adventure, daring, creativity, and ability to handle themselves on large equipment impressed me . . .
>
> The major contribution to learning is that movement education tends to develop a positive self concept (42: 33).

CHAPTER III

METHODS AND PROCEDURES

The purpose of this pilot study was to determine if the type of physical education program a special education student experiences effects his self concept. The pilot study involved the only junior high special education class at Morgan Junior High School, Ellensburg, Washington, during the 1968-69 school year. The study ran from February, 1969, to May, 1969.

I. SELECTION OF SUBJECTS

The study involved two groups. One group consisted of special education students that were involved in a regular traditional physical education class in the junior high. Their placement in the regular class was on the basis of the decision of their special education teachers who felt they could handle the program taught by the regular junior high teachers. This group was designated the control group.

The other group consisted of special education students in the self contained classroom that were involved in the movement exploration approach to physical education. They were taught by the same two special education teachers, one being the investigator. The instructors had a background in physical education and movement exploration. This group

was designated the experimental group.

Prior to the pilot study a pre-test was administered to the students involved to measure their self concept at that time. An adaptation of the Tennessee Self Concept Scale was used. Norms were established to meet this adaptation. A copy of the test and norms is found in the Appendix. Following the study, a post-test of the same adaptation was administered to measure their self concept after the twelve week period.

In connection with the test on self concept, a series of three drawings were done by the students at four different times: once prior to the pilot study, twice during the study, and once after the pilot study. These were evaluated to see if there was any significant affect on the body image as part of the self concept. Each series included three drawings: one of themself as an individual in some situation, themselves with friends, and themselves with their families. These drawings were done at four week intervals, so there were four sets done including the pre and post-sets. These were interpreted and rated with the help of the Department of Psychology, Central Washington State College.

II. PROGRAM OF INSTRUCTION

The control group experienced the traditional physical education classes within the junior high school. The

physical education units in which they participated during this period of time were volleyball, basketball, softball, dancing, and gymnastics. In addition the male subjects experienced handball and soccer, while the female subjects experienced a unit on folk dancing. The classes were conducted in the traditional style of physical education with the exception of the flexible scheduling which took place in the modular program at the Junior High School. The average class of control group students met three times a week for a period of five mods or approximately eighty-five minutes daily. The total weekly time of the control group was approximately four hours and twenty-five minutes.

The experimental group participated in a movement exploration approach to physical education. The classes met four times a week for forty-five minutes a day or three hours weekly. Both male and female subjects experienced the program together.

The subjects from both groups were involved in a Friday swim program provided through the school district and held at Central Washington State College.

Since there were no published curriculum guides on movement exploration available, the investigator and team teacher developed a series of lessons for the study from existing literature on movement. The approach used was taking the eight basic qualities in physical education and

the area of basic and intermediate rhythms and developing a week's series of lessons on each quality or aspect. The twelve week series included an introductory unit dealing with terminology and approach necessary to movement exploration; a unit on each of the following qualities: strength, endurance, flexibility, agility, balance, speed, hand-eye coordination, foot-eye coordination; a unit on basic rhythms; a unit on advanced rhythms; and a culminating unit that involved a series of activities from all the previous units. The rationale for taking this approach was that in a twelve week period a well rounded program that would be comparable to a miniature model of movement exploration was possible. It was assumed this would give a fair representation to the movement exploration approach to physical education and that the program was not weighted one way or the other.

The team teachers then developed the units into the form of four lesson plans for each unit. The lesson plan approach was used in movement exploration to insure the use of a variety of activities for harmonious development. A basic structure was used for each of the lesson plans and involved the following framework:

Part I	Part II
1. Opening activity	1. Class activities
2. Leg work	2. Small group activities
3. Whole body activities	3. Games
4. Weight on arms	

Part I of the plan was used basically to warm up the various parts of the body. In Part II, the activities were geared to develop the quality or concept that was being emphasized that day. At times, Part I would include activities from the previous day as review. A balanced lesson was one in which parts one and two of the lesson were used in one class period.

To nullify the teacher variable in this approach to movement exploration, the two teachers each developed six series of lesson plans and rotated teaching the class every two weeks. The lesson plan that they utilized was usually not the one they personally had developed.

A variety of equipment was used to implement the approach. The small equipment used included: six inch, eight and one-half inch, and ten inch rubber balls; volleyballs; soccer balls; basketballs; mush balls; jump ropes; Chinese jump ropes; bean bags; various sized hoops; Indian clubs; scooters; and automobile tires of various sizes. The large equipment included a barrel, colored boxes, clown head targets, vaulting box, climbing ropes, benches, mats, and a small stage bleachers. The equipment was utilized throughout the study in a variety of ways.

III. COLLECTION OF DATA

An adaptation of the 1964 Tennessee Self Concept

Scale was developed for the study.

Finding a reliable instrument for measuring self concept of special education students of junior high school age, took much consideration. Many instruments have been designed for specific studies and dealt with a younger age group. Published information concerning validity and reliability of tests is somewhat limited. There was found to be no instrument available that has been designed, utilized, and standardized on a population of junior high special education students.

The reasons for selecting the Tennessee Self Concept Scale were: (1) the instrument appeared to be suitable for special education students in the age range of the subjects; (2) the instrument could be administered orally to the group; and (3) the instrument was easy to administer, score, and interpret.

The need for adapting the original instrument stemmed from necessity to remove the religious oriented statements in a public school testing situation, and the need to rephrase some of the statements in language familiar to the subjects. The instrument included eighty statements divided into categories of: (1) the individual's identity--what he is; (2) self satisfaction--how he accepts himself; (3) behavior--how he acts; (4) how the individual perceives himself in terms of: (a) physical self, (b) moral-ethical self

(least emphasis), (c) family self, (d) social self, (e) personal self, and (f) self criticism. A copy of the adaptation appears in Appendix A.

The investigator, with the help of the Department of Psychology, Central Washington State College, established the norms used in this study. Therefore, it was felt that the adaptation did not affect the validity of the results obtained since it was not being compared to standardized norms.

The instrument was administered orally to the entire group of subjects prior to the start of the study. The responses of the pre-test were recorded on a master sheet for each subject. The instrument was re-administered orally to the subjects at the end of a twelve week period and the responses were recorded on the subject's master sheet.

In addition to use of the self concept test, a series of subject-drawn pictures were collected in connection with the study to determine if there was an effect on the subject's body image as it related to self concept. Prior to the study the subjects were asked to draw three pictures: one of themselves involved in some situation; a picture of themselves and their friends in some situation; and finally, a picture of themselves and their family in some situation. A topic of safety was given to help the subjects have some area to relate to and it was allowed to be either negative

or positive points on safety. The reason for this was it gave some meaning to the "assignment" and was related to their current science unit.

Four weeks after the study began the subjects did another series of drawings related to activities that teenagers enjoy doing. This was related to a current health unit, however if the students had another idea they were free to pursue it. The basic requirements of the three pictures remained the same.

The next series of pictures were completed after another four weeks had elapsed and dealt with hobbies and interests they had. Again freedom prevailed and possible situations were given only as suggestions.

Following the twelve week period, the conclusion of the study, the subjects did a final set of pictures. The over-all theme dealt with outdoor sports, job ideas, summer activities, or things they enjoyed doing.

The series of pictures done by each subject were then coded for name and order with a small written notation of what was happening in the picture. The subjects related this orally to the investigator following each set. These were then filed in preparation for analysis by students in the Psychology Department of Central Washington State College. The investigator was not involved in rating the pictures so that an unbiased, knowledgeable rating could be

obtained. The people involved in rating the pictures were qualified to do so and did not personally know the subjects so that the rating was strictly based on interpretation of the drawings.

IV. TREATMENT OF THE DATA

The scores of the adaptation of the Tennessee Self Concept Scale were compiled by sub tests and by total scores for each subject. These scores were then analyzed to determine the significance of any changes, as measured by the adapted Self Concept Scale within the control group and experimental group. Fisher's *t* Test was used as a test of statistical significance. Findings are reported in Chapter IV.

The figure drawings were analyzed by three independent raters. Raters were instructed to interpret the drawings in relation to self concept and for body image of the drawers. A five-point range was utilized. The raters were instructed to assess the following values to the drawings:

Value of:

1 - Strong Self Concept
In terms of the drawing do you feel this individual displays strong self confidence, a good strong adjustment to environment, and is extremely at ease in his surroundings and relations with others, as well as having a strong sense of personal worth.

2 - Above Average Self Concept
In terms of the drawing do you feel this individual displays above average self confidence, is well adjusted in his surroundings, and especially at ease with others and has an above average sense of personal worth.

3 - Average Self Concept
In terms of the drawing do you feel the person displays acceptance of one's self and physical capabilities, appears adjusted in his surroundings, and happy in relation to environment and others.

4 - Weak Self Concept
In terms of the drawing do you feel this individual displays uncertainty in terms of adjustment to surroundings and acceptance of self, lacks self confidence and sureness in relations with others.

5 - Very Weak Self Concept
In terms of the drawings do you feel this individual displays the feelings of complete lack of self confidence, is afraid to make a mistake.

Tabulations were then made of the rater's interpretations of the drawings. These were analyzed to determine if there were significant changes as indicated by the interpretation of the raters within the experimental and control groups. A Pearson r correlation was used. The correlations were statistically significant. Findings are reported in the following chapter.

CHAPTER IV

ANALYSIS OF THE DATA

The purpose of this study was to: (1) determine if the type of physical education program experienced by a special education student affected his self concept; (2) to provide a rationale for teaching physical education to special education students using the movement exploration approach. For purposes of accomplishing these objectives, an experimental group of special education students from Ellensburg, Washington, participating in a movement exploration program were compared to a control group of special education students from Ellensburg, Washington, participating in a traditional physical education program with regular junior high students. These two programs were described in Chapter III.

An adaptation of the Tennessee Self Concept Scale was administered prior to the study and following the study. The scores were analyzed using the Fischer t Test as a test of statistical significance.

In addition to the adapted Self Concept Scale, the series of figure drawings were analyzed.

I. ADAPTATION OF THE TENNESSEE SELF CONCEPT SCALE

The analyses of the Adaptation of the Tennessee Self Concept Scale were made by comparing pre and post-test scores between the experimental and control groups. Table I depicts the raw data of this statistical analyses for the experimental and control groups on the adapted Self Concept Scale.

TABLE I

ADAPTED TENNESSEE SELF CONCEPT SCALE SCORES

	E X P E R I M E N T A L (N=10)		C O N T R O L (N=6)	
(N)	Pre	Post	Pre	Post
1	263	273	323	326
2	265	328	259	273
3	269	276	265	256
4	246	243	255	277
5	264	285	269	292
6	271	272	266	280
7	293	286		
8	297	280		
9	300	285		
10	245	260		
	2,713	2,788	1,637	1,704

Experimental Group - Movement Exploration

The mean of T_1 was 271.3. The mean of T_2 was 278.8. The mean difference between T_1 and T_2 was 7.5. The standard error of the difference between means was 9.264. This resulted in a t ratio of .809 which was not statistically significant at the .05 level of confidence.

Control Group - Traditional

The mean of T_1 was 272.66. The mean of T_2 was 284. The mean difference between T_1 and T_2 was 11.34. The standard error of the difference between means was 12.983. This resulted in a t ratio of .873 which was not statistically significant at the .05 level of confidence.

Further statistical analyses was conducted to determine if there was any statistically significant difference within the categories of the test measurement. These categories were: (1) The Individual's Identity: what he is; (2) Self Satisfaction: how he accepts himself; (3) Behavior: how he acts; (4) How the individual perceives himself in terms of: (a) physical self, (b) moral ethical self, (c) family self, (d) social self, (e) personal self, and (f) self criticism. No statistically significant difference was found within these categories in either the experimental or control groups. For this reason no analyses were presented in table form. The raw data of these categories appears in Appendix B.

Analyses of the control group and the experimental group on comparison of the Adaptation of the Tennessee Self Concept Scale showed that there was no statistically significant difference in over-all scores between the groups. Within the categories of the test measurement, there was also no statistically significant difference found between the groups.

II. FIGURE DRAWING ANALYSES

A series of three drawings were done by the subjects in the experimental and control groups at four different times: once prior to the study, twice during, and once after the study. Each series included three drawings: one of themselves as an individual in some situation; themselves with friends; and themselves with their family. These drawings were done at four week intervals, so that there were four sets completed, including the pre and post-sets.

The drawings were interpreted by three different raters who had a background in children's drawings and figure drawing as a projective technique. The raters were given an instruction sheet and rating form, which served as a guideline for interpreting the drawings. The interpretations were made without previous knowledge of other interpretations or the subjects involved other than their age and that they were junior high special education students in a special classroom setting. A copy of the

guideline sheet given the raters appears in Appendix C.

The scores were totaled and statistically analyzed using the Pearson r correlation to compare raters. No statistically significant change was indicated by the figure drawing analyses as related to self concept within either the experimental or the control groups.

III. SUMMARY

An analyses of the data showed no statistically significant difference in change in the self concept of subjects in either the experimental or the control groups, as measured by the Adaptation of the Tennessee Self Concept Scale and the analyses of figure drawings.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

I. SUMMARY

Based upon evidence of published research, it was assumed that the physical education program, in the traditional sense, of the special education students and other retardates, was lacking. With this assumption was the concern that it was possible to develop a physical education program that would help the special education student grow mentally as well as physically.

The purpose of this study was to determine whether or not the self concept of a special education student could be affected by the type of physical education program experienced by the student. An existing junior high population was utilized for the study. The experimental group was composed of special education students in the self contained classroom that were involved in the movement exploration approach to physical education. The control group was composed of special education students that were involved in a traditional physical education class in the junior high school. The following null hypothesis was assumed for this study:

There would be no significant difference found between the effect of a traditional physical education program as compared to a movement exploration program on the self concept of the special education student.

Specific concerns of the study were to: (1) provide a meaningful physical education program for the special education student; (2) determine if the self concept is affected by the type of physical education program experienced; and (3) provide rationale for teaching physical education to the special education student using the movement exploration approach.

Procedures

The study was limited to a twelve week period during February - May of 1969. Subjects used were special education students from Ellensburg, Washington.

An adaptation of the Tennessee Self Concept Scale was used as a pre-test and post-test to measure self concept. The changes in scores that occurred were analyzed through application of the *t* ratio as based on Fisher's formula (25).

In addition to the scale measurement of self concept, a series of figure drawings were used to measure any change in self concept and body image. The pictures were analyzed by three independent raters obtained with the aid of the Department of Psychology, Central Washington State College. The rating scores were compared using the Pearson r Correlation.

II. CONCLUSIONS

At the completion of the study the following conclusions were made.

Statistically, there were no significant differences in self concept as measured by the adapted form of the Tennessee Self Concept Scale or the figure drawing analyses. Therefore, the null hypothesis as stated was accepted.

The writer, based on observations during the study, became aware of some possibly meaningful implications to be derived from this study. While the group changes were not statistically significant, there were some interesting changes observed within the groups. The changes that took place may have been meaningful to the subjects involved.

From observations of the students participating in the movement exploration approach, the writer noted the apparent pleasure brought about by success in accomplishing tasks. The fact that most of the students could experience success in the program generated enthusiasm and mutual satisfaction with each other's achievements. The opportunity afforded the students to frequently demonstrate various tasks appeared to create a true feeling of being a real part of the group.

The ease and ability in making decisions reached by some of the students by the end of the study, appeared to

carry over into some classroom situations, as observed by the writer.

The anticipation of the students to participate in the physical education class, and the observed disappointment at the end of the classtime, appeared to indicate a real enjoyment of the movement exploration program on the part of the students.

It would appear that each individual was appropriately placed in his respective physical education program. This conclusion was reached through observations made during daily contact with each student. The possibility of some special education individuals benefiting from a traditional physical education program with other regular students, has not been ruled out if care in placement is considered.

As evidenced by the raw data, a decrease in the self concept score was noted. This decrease does not necessarily indicate an undesirable change but rather may indicate a more realistic appraisal of one's self. This may be a healthy situation for a special education student to experience.

III. RECOMMENDATIONS

As a result of this study the following recommendations were made:

1. Daily programs of physical education for special education students should be provided by educators.

However, careful consideration must be given to the appropriate placement of the special education students which will best meet their individual needs.

2. The potential of a program of movement exploration should be studied further. It would appear that such a program could meet the individual differences of students, since it is based on an individual self-discovery and problem solving approach.
3. Further research in the area of physical education programs for the special education student should be undertaken.
4. Research comparing the benefits of movement exploration is needed. It is recommended that a larger sampling be used comparing the benefits of movement exploration to a traditional program. Such sampling could include a comparison based upon specific variables such as I.Q., age, and physical fitness. Research studies of this nature should also continue over a longer period of time.
5. Colleges and Universities should include classes in physical education for the mentally retarded child.

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APPENDIX A

ADAPTATION OF THE TENNESSEE SELF CONCEPT SCALE

1. I have a healthy body.
2. I am an attractive person.
3. I consider myself a sloppy person.
4. I am a decent sort of person.
5. I am an honest person.
6. I am a bad person.
7. I am a cheerful person.
8. I am a calm and easy going person.
9. I am a nobody.
10. I have a family that would always help me in any kind of trouble.
11. I am a member of a happy family.
12. My friends have no confidence in me.
13. I am a friendly person.
14. I am popular with boys.
15. I am not interested in what other people do.
16. I do not always tell the truth.
17. I get angry sometimes.
18. I like to look nice and neat all the time.
19. I am full of aches and pains.
20. I have alot of self control.
21. I am an important person to my family and friends.
22. I am not loved by my family.
23. I feel that my family doesn't trust me.

24. I am popular with girls.
25. I am mad at the whole world.
26. I am neither too fat or too thin.
27. I like my looks just the way they are.
28. I would like to change some parts of my body.
29. I am satisfied to be just what I am.
30. I am just as nice as I should be.
31. I dislike myself.
32. I am satisfied with my family relationships.
33. I understand my family as well as I should.
34. I should trust my family more.
35. I am sociable as I want to be.
36. I try to please others but I don't over do it.
37. I do not like everybody I know.
38. I am neither too tall or too short.
39. I don't feel as well as I should.
40. I wish I could be more trustworthy.
41. I am as smart as I want to be.
42. I am not the person I would like to be.
43. I wish I didn't give up as easily as I do.
44. I treat my parents as nice as I should.
45. I am too sensitive to things my family say.
46. I should love my family more.
47. I am satisfied with the way I treat other people.
48. I should be more polite to others.

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

50. I gossip a little at times.

51. I take good care of myself physically.

52. I try to be careful about my appearance.

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

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

55. I sometimes do very bad things.

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

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

58. I do things without thinking about them first.

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

60. I take a real interest in my family.

61. I give in to my parents.

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

63. I get along well with other people.

64. I do not forgive others easily.

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

66. I feel good most of the time.

67. I do poorly in sports and games.

68. I am a poor sleeper.

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

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

71. I solve my problems quite easily.

72. I change my mind alot.

73. I try to run away from my problems.

74. I do my share of work at home.

75. I quarrel with my family.

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

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

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

79. I find it hard to talk with strangers.

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

APPENDIX B

TABLE II

IDENTITY--"WHAT HE IS"
SUB TEST SCORES

	EXPERIMENTAL		CONTROL	
(N)	PRE	POST	PRE	POST
1	87	88	115	113
2	82	104	80	95
3	83	95	88	88
4	75	71	91	99
5	90	88	84	96
6	89	91	87	94
7	102	104		
8	103	103		
9	104	96		
10	74	86		
	889	926	545	585

TABLE III

SELF SATISFACTION--"HOW HE ACCEPTS SELF"
SUB TEST SCORES

	EXPERIMENTAL		CONTROL	
(N)	PRE	POST	PRE	POST
1	82	85	90	87
2	88	109	75	77
3	78	78	79	77
4	72	81	72	78
5	70	77	83	85
6	81	80	78	83
7	79	77		
8	88	76		
9	85	84		
10	79	78		
	802	825	477	487

TABLE IV

BEHAVIOR--"HOW HE ACTS"
SUB TEST SCORES

	E X P E R I M E N T A L		C O N T R O L	
(N)	PRE	POST	PRE	POST
1	94	100	118	126
2	95	115	94	101
3	100	103	98	91
4	99	99	92	100
5	104	120	102	111
6	101	101	101	103
7	112	105		
8	106	101		
9	111	105		
10	92	96		
	1,014	1,045	605	632

TABLE V

PHYSICAL SELF
SUB-TEST SCORES

	EXPERIMENTAL		CONTROL	
(N)	PRE	POST	PRE	POST
1	55	56	64	69
2	53	62	52	59
3	54	59	56	57
4	53	45	49	65
5	57	60	62	64
6	56	56	56	54
7	64	58		
8	61	56		
9	66	62		
10	48	49		
	567	563	339	368

TABLE VI

MORAL-ETHICAL SELF
SUB TEST SCORES

	EXPERIMENTAL		CONTROL	
(N)	PRE	POST	PRE	POST
1	27	30	36	37
2	26	35	24	24
3	25	28	28	28
4	24	24	24	27
5	28	35	24	27
6	28	29	31	31
7	33	32		
8	33	30		
9	32	30		
10	25	27		
	281	300	167	174

TABLE VII

FAMILY SELF
SUB TEST SCORES

	EXPERIMENTAL		CONTROL	
(N)	PRE	POST	PRE	POST
1	66	56	76	75
2	60	84	64	61
3	61	67	57	59
4	58	59	69	67
5	52	54	62	66
6	62	61	60	66
7	61	70		
8	64	65		
9	67	70		
10	52	62		
	603	648	388	394

TABLE VIII

SOCIAL SELF
SUB TEST SCORES

	EXPERIMENTAL		CONTROL	
(N)	PRE	POST	PRE	POST
1	47	56	63	64
2	49	64	44	53
3	56	55	50	46
4	44	45	46	52
5	56	59	52	56
6	49	50	47	55
7	57	53		
8	60	55		
9	57	51		
10	46	47		
	521	535	302	326

TABLE IX

PERSONAL SELF
SUB TEST SCORES

	EXPERIMENTAL		CONTROL	
(N)	PRE	POST	PRE	POST
1	44	51	62	59
2	57	61	54	55
3	55	50	52	47
4	47	53	49	65
5	53	57	62	64
6	59	54	56	54
7	55	50		
8	60	55		
9	63	58		
10	52	49		
	545	538	311	308

TABLE X

SELF CRITICISM
SUB TEST SCORES

	E X P E R I M E N T A L		C O N T R O L	
(N)	PRE	POST	PRE	POST
1	24	24	22	22
2	20	22	21	21
3	18	17	22	19
4	20	17	26	28
5	18	20	19	22
6	17	22	20	22
7	23	23		
8	19	19		
9	15	14		
10	22	26		
	196	204	130	134

APPENDIX C

EXPLANATION OF ADMINISTRATION OF FIGURE DRAWINGS

Each series of pictures were related in some way to a classroom activity or unit of study. The subjects were asked to draw three pictures: one of themselves involved in some situation; a picture of themselves and their friends in some situation; and finally, a picture of themselves and their family in some situation. They could use color if they wanted and the use of stick figures was acceptable.

The activities or topics were used to help give ideas for drawing and were as follows: series one - Safety - they could show either positive or negative points on safety; series two - Things Teenagers Do; series three - Hobbies or Interests; series four - Outdoor sports, Job ideas, Summer activities, or Things they enjoyed doing. The subjects realized these were only suggestions and if they wanted to draw something else they were free to.

Along with most of the pictures there is a little explanation of what is happening in the picture. The subjects related this orally to the teacher following the drawing.

Rating Guidelines

In rating the drawings, use the following as a guide - Value of:

1 - Strong Self Concept
In terms of the drawing do you feel this individual displays strong self confidence, a good strong

adjustment to environment, and is extremely at ease in his surroundings and relations with others, as well as having a strong sense of personal worth.

2 - Above Average Self Concept
In terms of the drawing do you feel this individual displays above average self confidence, is well adjusted in his surroundings, and especially at ease with others and has an above average sense of personal worth.

3 - Average Self Concept
In terms of the drawing do you feel the person displays acceptance of one's self and physical capabilities, appears adjusted in his surroundings, and happy in relation to environment and others.

4 - Weak Self Concept
In terms of the drawing do you feel this individual displays uncertainity in terms of adjustment to surroundings and acceptance of self, lacks self confidence and sureness in relations with others.

5 - Very Weak Self Concept
In terms of the drawings do you feel this individual displays the feelings of complete lack of self confidence, is afraid to make mistakes.