

THE UNIVERSITY OF ALBERTA

A PRELIMINARY INVESTIGATION INTO THE EFFECTS OF TEACHER
BEHAVIOUR IN ELEMENTARY SCHOOL PHYSICAL
EDUCATION ON THE SELF-CONCEPT OF PUPILS

by



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A THESIS

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ABSTRACT

A theoretical framework linking teacher behaviours that occur in teaching elementary school physical education with the development of the self-concept of the pupils was established. A list of the effects that significant others have on the development of the self-concept was arrived at by referring to the literature pertaining to the self-concept.

Teacher behaviours occurring in teaching elementary school physical education were identified by reference to the instrument developed by Robbins (1973) for observing teacher pupil interaction in elementary school physical education. These two sources were then combined and linkages between the two were inferred.

An ex post facto exploratory study was then carried out to determine the feasibility of completing further research in this area. Two teachers who exhibited a high ratio of behaviours that were thought to positively affect the self-concept of the pupils were identified, and two teachers who exhibited a low ratio of behaviours that were thought to positively affect the self-concept of the pupils were identified. The self-concepts of fifteen of the pupils of each of the teachers were measured using the "Thomas self-concept values test." A significant difference in the self-concept scores of the pupils of the positive teachers and negative teachers was found. Pupils showing exceptionally high or low self-concept scores were identified. These pupils were interviewed and reasons for their high or low scores were suggested. The teaching styles of both the positive and negative teachers were investigated, and suggestions as to how the teaching style of a teacher could affect the self-concept of the pupils were made.

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The self-concept scores of the pupils of a teacher showing exceptionally high demonstration and personal involvement were investigated. The suggestion was made that the pupils could identify more closely with a teacher showing greater involvement, and hence he could affect the self-concepts of the pupils more readily.

The conclusion that this line of research is worth further investigation was made, and several broad suggestions for further research were given.

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To the teachers and pupils who cooperated without reserve, many thanks.

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CHAPTER I

THE PROBLEM

In studying the effects that a teacher has on the pupils, with the purpose of evaluating intended outcomes, the underlying objectives of the educational system must first be clarified. In fact Herrick (1965) has stated, "Without knowledge of the objectives of an educational program it is impossible to judge its adequacy [p.96]." It can be argued that one of the most pervasive values underlying our western civilisation, (and hence its educational system), is the belief in a democratic way of life. It is partly a function of democracy to mean different things to different people, but two central values are accepted by most democratic people. The first of these is the basic equality of rights of all people, which includes the right of all people to develop their many varied talents. Secondly, there is a need for people to subjugate some of their personal desires for the benefit of society. Thus it would appear that two basic objectives of education would be accepted universally in the democratic world: (1) The need to educate for society; and (2) The need to educate for the individuals' personal growth (Tyler 1968). In many cases it is almost impossible to separate these two objectives, and as Goodlad (1968) says: "The duality of individual development on one hand and societal welfare on the other begins to merge in growing understanding of how the two are inextricably intertwined [p.179]." The specific aims of education, then, could be stated as: (1) To produce people with high performance capabilities; and (2) To produce people with good personal and social

adjustment.

Background to the Study

Claims of Physical Education

Many claims have been made as to the effect that physical education has on the lives of children. Williams (1927) suggested that physical education is a major tool in upholding the democratic way of life. Randall (1952) states that taking part in a full physical education programme leads to the optimum development of a balanced personality. With the introduction of movement education, more specific claims were made with reference to both general motor abilities, and the effect of physical education on other facets of the child's life. Buckland (1969) claims: "The confidence gained by success in large muscular activities is often transferred to the classroom, and makes a considerable contribution to the happiness of the child [p.2]." Mauldon and Layson (1965) further claim that movement education will result in a growing self-confidence in the child. These references suggest that the aims of elementary school physical education include the development of the self-concept of the pupil as being inherent in both the subject matter and the teaching method of movement education. This claim can further be substantiated by reference to the curriculum guides in elementary school physical education from many provinces in Canada. The Alberta Curriculum guide (1969) refers to the contribution that physical education makes to the social and emotional development of the child. The Manitoba curriculum guide (1966) refers specifically to the development of ". . . desirable attitudes, . . . self-confidence, self-control, . . . generosity [p.11]." Reference has been found in most of

the Canadian elementary school physical education curriculum guides, with differing emphasis, to objectives in physical education that stress emotional and social development.

The Self-Concept

In many recent studies (Brookover 1962, 1965, 1967, Caplin 1969, Fitch 1969, Lamy 1963, Wattenberg and Clifford 1967, Sproull 1969, Padleford 1970) the self-concept has been shown to have a high positive correlation with both academic achievement and social adjustment. It is probable that by enhancing the self-concept of the individual both academic achievement, and social adjustment would be improved. One method, then, to implement the above stated aims of education is to enhance the self-concept of each individual pupil. In studying the effects of different reading programmes, Stephens (1968) noted that certain curriculum designs and certain teaching methods are more likely to enhance the self-concept of individual than others. It was with the possible effects of teacher behaviour in teaching elementary school physical education on the self-concept of individual pupils that this study was concerned. Doll (1970) summarises succinctly when he states:

A reasonably clear relationship has now been established between the learners self-concept and the effectiveness with which he learns. Findings from research studies show that the individual learner performs according to his self-concept, that high levels of self-concept correlate closely with school achievement, that achievers feel more positive about themselves and their abilities than do underachievers and the underachievers learn poorly partly because they underestimate their ability to perform well. Obviously teachers should do much more than they are now doing to build pupils' ego strength and self-confidence [p.47].

Purpose of the Study

It was the purpose of this study to identify teacher behaviours occurring in elementary school physical education lessons that could help

to enhance the self-concept of the pupils. Such behaviours were identified by reference to a theoretical framework concerning the development of the self-concept; and by reference to results obtained in developing an observational tool for analysing teacher-pupil interaction in elementary school physical education (Robbins 1973). An exploratory study was then carried out to delineate areas for further study. It was hoped that the exploratory study would identify teacher styles in elementary school physical education that could positively affect the self-concept of the pupils.

Limitations

The major portion of this study was concerned with the development of a theoretical framework linking teacher behaviours occurring in teaching elementary school physical education with the development of the self-concept of the pupils. Within such a design there is no possibility for conclusions as to cause and effect or contiguity.

The second part of the study was exploratory in nature with the aim of further clarifying the theoretical framework developed. Within this frame of reference the following limitations were recognised in the study.

1. The sample was small, involving only five teachers and seventy-five pupils.
2. The sample was a select one, involving teachers selected for a previous study.
3. Controls for other factors which could have affected the self-concept of the pupils were not imposed.
4. The study was ex post facto in nature.
5. Certain values on the Thomas self-concept values test were

subjective in nature.

Need for the Study

It has been shown (Brookover et al. 1962, 1965, 1967, Caplin 1969, Fitch 1969, Irwin 1967, Lamy 1963, Wattenberg and Clifford 1967, Sproull 1969, Padleford 1970) that the self-concept of the child has many far reaching effects. Brookover et al. (1962), tested over 1,000 grade seven students for self-concept, I.Q. and grade point average. He used different self-concept measures, some being of a general nature, and some being specific to a particular subject. The conclusions drawn from this study, which were later confirmed (Brookover et al. 1965, 1967) were:

1. There are significant and positive correlations between self-concept scores and performance in the academic role.
2. There are specific self-concepts of ability related to specific areas of academic role performance, which are correlated with, but differ from general self-concept.
3. Self-concept is significantly and positively correlated with the perceived evaluations that significant others hold of the student.

Irwin (1967) completed a similar study, and reported significant relationships between self-concept scores and academic achievement. In summarising his findings he stated:

It may well be that a positive conception of one's self as a person is not only more important than striving to get ahead and enthusiasm for studying and going to school, but that it is a central factor when considering optimal scholastic performance [p.271].

With such evidence, there is no doubt that the development of a positive self-concept is an accepted aim of education.

Several writers (Coopersmith 1967, Doll 1970, Hilgard 1949,

La Benne and Greene 1969, Yamamoto 1972) have stressed the need for teachers to actively work for improvement of the self-concept of their pupils. La Benne and Greene (1969) state: "The manner of the teacher in presenting the subject matter is of critical importance, because teaching activities have specific reference and meaning for the development of the students' self-concept [p.32]." Doll (1970) puts the case somewhat stronger when he says: "Obviously teachers should do much more than they are now doing to build pupils' ego strength and self-confidence [p.47]."

The majority of references found with regard to the teacher's role in developing the self-concept of the pupil have been very general in nature. No references could be found that identified specific behaviours of teachers in elementary school physical education that could affect the self-concept of the pupils. In fact Yamamoto (1972) states: "Unfortunately, not much is known about the dynamics of teacher-pupil interactions in the classroom and how they effect the development of self-concepts, although some clues are available [p.64]." That there is need for further research in this area is underlined by Alberti (1971), who concluded a report of her research with the statement: "These findings suggest the need for an extensive assessment, including predictive studies, of the teachers' impact on children's development [p.6]."

It was felt that by studying teacher behaviours occurring in elementary school physical education specific teacher actions could be isolated that could positively affect the self-concept of the pupil. It can be seen that, with the problems of professional preparation and professional improvement in mind, there is a definite need for a preliminary investigation into the problem.

Definition of Terms

Self-Concept. ". . . the person's total appraisal of his appearance, background, and origins, abilities and resources, attitudes and feelings which culminate as a directing force in behaviour [p.47]." (La Benne and Greene, 1969).

Self-esteem. The evaluation which the individual makes and customarily maintains with regard to himself. It expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful and worthy.

Interaction. This term refers to a relationship between persons such that ". . . the behaviour of one is stimulus to the behaviour of the other [p.270]." (English and English, 1958).

Teacher Behaviour. The behaviour patterns a teacher exhibits in performing professional duties when in interaction with pupils.

Elementary School Physical Education. As exemplified in the Alberta curriculum guide for physical education.

Teacher Styles. The probable temporal patterning of the different types of interaction a teacher exhibits with pupils.

Outline of the Study

The state of research in this area is at a very early stage. This study was therefore designed to be a preliminary study of an exploratory nature. The study was designed in two parts; the first part was concerned with identifying teacher behaviour that occurred (or that could occur) in elementary school physical education that could affect the development of a positive self-concept in the pupils; the second part was concerned with identifying teachers in an urban Alberta school

system who exhibited these behaviours, and in studying the self-concept of their pupils.

Development of the Theoretical Framework. A theoretical framework was developed in this section of the study on which to base further research.

A comprehensive review of the literature pertaining to the psychological construct of the self-concept was undertaken. It was found necessary to study two facets of the literature. First, work completed in describing self-concept per se was studied; secondly different viewpoints on the developmental processes of attaining a self-concept were studied. The effects of significant others on the development of the self-concept of the pupil were then identified by synthesis and extrapolation from the literature reviewed.

A general review of literature pertaining to teacher behaviour as identified by interaction analysis techniques was then completed. Special attention was given to the work completed in interaction analysis as applied to teacher behaviour in elementary school physical education. Teacher behaviour that actually occurs in teaching elementary school physical education was then identified.

These two sources were then combined and a theoretical framework linking teacher behaviours occurring in elementary school physical education and the development of the self-concept of the pupils was developed.

Exploratory Study. This part of the study was designed to take the form of an exploratory study to lend weight to the hypothesis generated in the first part of the study.

Teachers who exhibited the behaviours identified in the first

part of the study were identified from a sample of ten teachers studied in validating an instrument developed to analyse teacher-pupil interaction in teaching elementary school physical education (Robbins 1972). The teachers who exhibited a high percentage of positive reactions to their pupils were designated as those most likely to positively affect the self-concept of their pupils. The teachers who exhibited a lower percentage of positive reactions to their pupils were designated as those most likely to negatively affect the self-concept of their pupils. Due to the fact that the original sample was a select one, the differences in the effects that these teachers had on the development of the self-concept of their pupils was in degree only. Four teachers were thus selected from the original sample; two who appeared to positively affect the self-concept of their pupils; and two who appeared to negatively affect the self-concept of their pupils. In addition to these four teachers, another was selected for further study because of his greater participation and demonstration with his pupils.

The self-concept of the pupils of these teachers were then investigated. Due to considerations of time, and the non definitive nature of the study, only half of the pupils in each class were tested. The Thomas self-concept values test (1971) was used to measure the self-concept of the pupils initially. The means of the self-concept scores for the three groups were then compared. A null hypothesis was generated and a one way analysis of variance was completed to test the significance of the results. Pupils showing high scores or low scores on the initial self-concept test were then identified. These chosen pupils were then interviewed with the intent of eliciting the reasons for the scores shown. The teaching styles of the two groups of teachers were compared.

In interpreting the data from this part of the study it was noted that in a preliminary investigation of this nature, no conclusions as to cause and effect relationships, or contiguity relationships, could be drawn. Trends and directions for further research were identified.

CHAPTER II

THE SELF-CONCEPT

General terms such as self-confidence, self-esteem, ego development and self-concept have been in general use for many years. These similar terms have meant different things to different people in past years. With the absorption of the term self-concept into psychological terminology a specific definition must be arrived at in order to facilitate precise communication.

This chapter will briefly review several theories of the self. A definition of self-concept will be given. The mechanics of how the self-concept develops in a child will be studied, culminating in a list of the effects that significant others have on the development of the self-concept of the child.

Theories of the Self

James. James, as long ago as 1890, devoted much of his time to the psychological study of the self. In his definitive book "Principles of psychology" (1890) he wrote a complete chapter, (in fact the longest in his two volume book), on "The Consciousness of Self." He regarded the development of the ego as being the means by which a person gains a sense of identity. He also stated that this sense of identity was comprised of spiritual, material and social aspects. Thus it can be seen that James included aspects of the self which incorporate subjective interpretations and feelings.

Mead. Mead later expanded on these ideas of the self, and claimed that the person becomes self-conscious, from which arises the self.

That Mead (1934) recognised the self as being an entity within itself is shown when he says "The self has the characteristic that is an object to itself, and that characteristic distinguishes it from other objects and from the body [p.13]." Even though he views the self as being a separate and distinct unity within a person he did stress the fact that the development of self is caused by social interaction. He states "The self, as that which can be an object to itself, is essentially a social structure, and it arises in social experience [p.140]." At a much earlier date Cooley (1909) had suggested a similar basis for the development of the self, and like Mead, stressed the objectified self.

Freud. In contrast to these social theories Freud (1962) postulated that the behaviour exhibited by a person is a function of the balance between the id and the ego. The ego, in Freud's terms, being the equivalent to the self in other theories. In looking at the way the psychic balance of a person is maintained he viewed the ego as being a functional agent which determines what instincts to satisfy, and how to satisfy them. Thus Freud viewed the ego as involving function only. If this ego does not function properly in keeping a balance with the id then Freud would say that the person is maladjusted, and should undergo some form of psychotherapy.

Adler. Adler (1929) showed a much broader outlook than Freud, and developed theories of the self concerned with the life style of the child. He considered that the child's evaluation of self in a given situation gives unity to his personality. In this theory the resultant behaviour of any situation is regarded as being greater than the sum of the hereditary factors and the environmental factors. The life style (the self-concept in Adlerian terms) adds the creative power to

any situation which will make the end product greater than the sum of its constituent parts. Adler was one of the first psychologists who viewed the self as being determined partly by the perception that each individual has of himself.

Lewin. Lewin (1936) viewed the self as being comprised of a "life space." Unlike many psychologists Lewin claimed that the person is made up of many discrete functions of the life space; hence he says "In reality the person is not an entirely homogenous unity but a highly differentiated object [p.166]." The various life spaces that Lewin uses are made up of the goals, evaluations, ideas, perceptions, future plans of the various functions of the various parts of the body. In its entirety Lewin viewed the total life space, at a given time in a given environment, as being a complex internal mechanism which produced behaviour. Here we see the complexity, and universality of Lewin's topological theory.

Rogers. Rogers based his theories of psychotherapy on much of Lewin's work and although many similarities are apparent, there are certain basic differences which are of great importance. Rogers believes in the discontinuity of the unconscious and conscious, and unlike Freud, believes that the person behaves according to the way he consciously perceives himself. Although he allows for the existence of thoughts of self in the unconscious, he does not believe that these thoughts will affect the behaviour of the person until they are elevated to the conscious level. Rogers sees the self-concept as being an overall integration of the person's conscious thoughts and perceptions about himself, which finally regulate and decide that persons' behaviour patterns. It can be seen that Rogers (1951) has a wide view of self-

concept when he states that:

. . . the self-concept or self structure may be thought of as an organised configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of self in relation to others and to the environment; the value qualities which are perceived as associated with experience and objects; and goals and ideals which are perceived as having positive or negative valences [p.95].

Snygg and Coombs. Snygg and Coombs (1949) have developed the phenomenological theories of Adler, Lewin, and Rogers into a comprehensive and far reaching theory of self. In fact they go as far as stating ". . . all behaviour, without exception, is completely determined by and pertinent to the phenomenal field of the behaving organism [p.15]." They view the overall perceptions that the individual has in any given situation as being the phenomenal self. This aspect of the self, they see as being dependent on the interaction between the environment of a particular situation, and the perceptions the person brings to that situation. More important in their theory is the self-concept, which they see as being more central and more permanent than the phenomenal self. In defining the self-concept they limit the perceptual field ". . . to include only those perceptions about self which seem most vital or important to the individual himself . . . [p.127]." (Snygg and Coombs, 1949). Snygg and Coombs regard the self-concept as embodying both an objectified self and the self as a process, thus combining, and developing the ideas of previously cited psychologists.

A Definition of Self-Concept

Self-concept has been defined in many various ways, by many different psychologists. With the greater use of this term as an accepted psychological construct more consistency can be seen in the

various definitions.

Perkins (1958) argued that at the base of self-concept are ". . . those perceptions, beliefs, attitudes, and values which the individual views as part or characteristic of himself [p.224]." In similar terms Jerslid (1952) defined self-concept or the self as a ". . . composite of thoughts and feelings which constitute a person's awareness of his individual existence, his conceptions of who and what he is [p.9]." English and English (1958) further elaborate on these ideas and suggest self-concept to be:

Person's view of himself; the fullest description of himself of which the person is capable at any given time. Emphasis is less on the person as an object of his own self knowledge, but his feeling about what he conceives himself to be is usually included [p.127].

These statements of definition suggest that an individual forms impressions of himself from his perceptions of others responses to him. They also suggest that it is more than just self knowledge, but also includes evaluative information about oneself (good, bad, etc.).

From these definitions it can be seen that the self-concept of the person is that aspect of the persons psychological make up that determines the persons actions and interactions with his environment. La Benne and Greene (1969) draw on the work of many theorists, and define the psychological construct of the self-concept as:

. . . self-concept is the persons total appraisal of his appearance, background, and origins, abilities and resources, attitudes and feelings which culminate as a directing force in behaviour. We here hold that a persons conscious awareness, what he thinks and feels, is what primarily guides, controls and regulates his performance and action [p.47].

This definition has been used throughout this study.

Development of the Self-Concept

The child, when first born, has no clear perception of who or

what he is. He perceives himself largely as an excrecence of his mother. If the child has no perception of his actions per se then the self-concept of the child must develop with the development of other facets of the child. Mead (1934) states:

The self is not initially present at birth but arises in the process of social experience. It develops, in a given individual, as a result of his relations to the social system, as a whole and to other individuals within that social system [p.177].

That the development of the self-concept is largely a product of the social interactions that the child experiences is reiterated by many psychologists (Mead 1934, Sullivan 1947, Lecky 1945, and Horny 1945).

In his early stages the child is limited in both his capacity to perceive, and also in the environment that is available to him. Thus early in his life the immediate family (and more specifically his mother) has most effect on the child. In the view of Dinkmeyer (1965) the child gradually gains an awareness of himself as he begins his interactions with the various people in his environment. That the child's immediate family has a great influence on the development of the self-concept is underlined by Overstreet (1954) when he states:

The unique power of the home stems from the fact that it gets the new human being first - before any other institution has had a chance to make an impression upon him - and it remains his chief environment for so long a time that its "design for living" tends to move into him (in psychiatric terms, to become internalised) and becomes inextricably part of himself before the world outside has any consistent chance to exert a modifying influence. Thus, what life is experienced to be in the home becomes, in large measure, for each individual, what life is interpreted to be in the wider human sense [p.88].

During his growth and development the child is surrounded by many new experiences, not the least of these being the gradual accumulation of relationships with other people. Sullivan (1947) cites the growing up process as one where ". . . the child learns about him-

self from the mirror of other people [p.13]." In other words the child not only learns about other people due to his interaction with them, but he also learns about himself in the process. What a person believes, and perceives about himself is thus partly a function of his interpretation of how others see him. Sullivan (1947) points to the importance and effect of these reflections when he says "The self may be said to be made up of reflected appraisals. If these were chiefly derogatory . . . then the self dynamism will itself be chiefly derogatory [p.10]." Although Sullivan is speaking mainly of the origins of mental disorders, and hence dwells on the negative aspects in the development of the self, it can be assumed that the reverse would hold true of positive reflected appraisals.

That the self-concept is at least partly a function of the interactions a child has with other people has been well established. Sullivan (1953) refined this idea in trying to differentiate between the effects that different people have on the development of the self-concept. He suggested that certain people in the child's life have more effect on him than others. Those having a large effect he called significant others. That certain people in the child's life do in fact have greater or lesser effect on the development of the self-concept is intuitively attractive, and well accepted in the literature. At an early age the mother is by far the highest influencing significant other. As the child progresses through life other people come into view as significant others. The child's peers, siblings, teachers, friends, work-mates etc, all eventually become significant others to a greater or lesser extent.

It should be stressed here that it is the way that the person

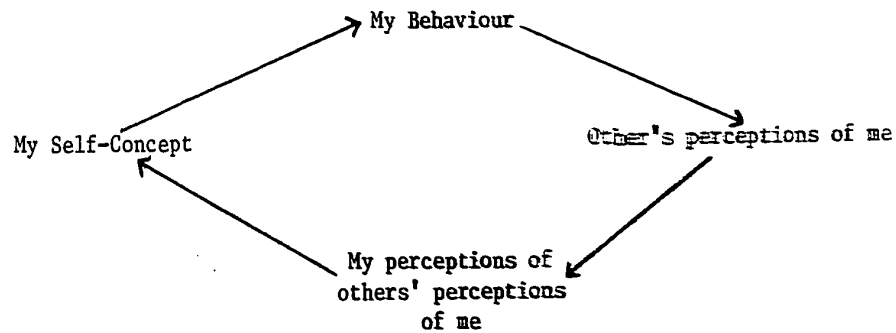
perceives the significant others' reactions to him, not the actual reactions, that goes toward affecting the self-concept of the person. Thus, if a person sees somebody smile at a statement he makes, it can be perceived by that person as meaning "He likes what I say," or "He is laughing at what I say."

Whereas Sullivan based his theory of the development of the self-concept on the relationships and effects with people, Mead based his theory on the total social interaction of the person. When Mead speaks of the "social system as a whole" he refers to the interaction due to the society in which the person lives as well as the interaction between individuals within that society. Thus Mead's theory tends to subsume Sullivan's theory, and broaden it to include factors which were not important in Sullivan's theory. Mead believes that the source of other's perceptions of the individual stem from the particular mores of a particular society. Thus what is perceived by significant others as being good and worthwhile in one society may well be regarded as bad and useless in another society. Thus the perceptions of peoples' abilities cannot be looked upon as being absolute, but rather must be looked upon in the context of the value system of a particular society. The genesis of the self then, in Mead's view, must be looked upon as being dependent upon the capabilities and actions of the person as perceived by significant others. It can be seen that the development of specific abilities within the individual can also be a factor in the development of the self-concept.

The development of the self-concept, then, can be seen to be somewhat circular in action. The development is related to the person's perception of significant others' perceptions; the significant others'

perceptions are related to the abilities and actions of that person in the context of that particular society; the behaviour is in turn affected by these perceptions, and so the circular action starts again.

Brookover (1965) has diagrammed this effect with the following model:



The Effects of Significant Others

It has already been stated that there are two basic forces working towards the development of the self-concept of the child. First, the type of society in which the child grows and develops is of great importance. Secondly the effects of certain significant others are also of great importance. Although it is fully realised that these two factors are largely interrelated, for conceptual purposes they will be separated. The position of the teacher within a school allows the teacher to affect both the general mores and expectancies of the school society, and also the quality of the inter-personal relationships between the students and himself. Within the context of this study the teacher-pupil interaction is of prime importance. It will be the purpose of this section of this chapter to identify actions and behaviours of significant others which could affect the development of the self-concept of children.

Wylie (1961) has pointed to the fact that there are no true

antecedent-consequent designs of studies pointing to the effects of behaviours of significant others on the development of the self-concept of the child. Thus Felsenthal (1972) has stated that ". . . we must glean our information from various realms of knowledge - from child development, psychology, sociology, history, and even from personal insight [p.179]." Coopersmith (1967), however, concluded from his study of the antecedents of self-esteem that general conditions associated with high self-esteem have been established but not all of these conditions are essential to the development of self-esteem in any given individual. Thus the factors identified in this part of the study will of necessity be general in nature.

Felsenthal (1972) has identified two basic needs of the child with respect to the development of a positive self-concept. These are: "(1) Consistent acceptance with respect and concern and (2) Freedom and independence within carefully defined limits [p.188]." The types of relevant behaviours of significant others will be identified by reference to these two rather broad points.

It is a truism to state that each child is unique to himself, but nevertheless a fact. The first, and most essential factor, in acceptance is the awareness of this uniqueness. Acceptance of the physical attributes of an individual is probably the starting place for accepting the person in all respects as a unique individual. Hence one of the first effects significant others have on the development of the self-concept of the child is in the attitude shown towards the physical attributes of the child. If the significant other tends to compare and contrast the physical attributes of one child with another then this will possibly be perceived by the child as a measure of his adequacy or

or inadequacy in the eyes of the significant other. Emanating from this early acceptance or non-acceptance of physical attributes comes the acceptance or non-acceptance of the many varied attributes of the child. If comparisons of the various attributes are constantly made, it will be difficult for the child to perceive himself as a unique individual, but rather he will view himself as something that has to conform to external standards set by external forces.

Another aspect of significant others' behaviour that Felsenthal (1972) identifies as affecting the self-concept of the child is the type of interaction that occurs between adult and child. Lindesmith and Strauss (1968) have stated:

Very little interaction occurs, even between total strangers, without some element of code, norm, or rule entering into the interaction. This is true even where conflict exists between the interactants where the interaction actually takes place around a conflict as in a boxing match or in warfare [p.296].

That these rules are present in the majority of interactions between adults is obvious from personal experience; that they are very often absent from many adult-child interactions is also patently obvious from personal experience. The types of situations where respectful interactions between adults and students are often absent, often involve the authority structure of the home or school. That these types of interactions can have deleterious effects on the self-concept of the child is emphasised by Felsenthal (1972) when he says:

Rules are followed and orders obeyed, not because they are inherently sound or correct but because they are transmitted from a superior (parent) to an inferior (child). The child's independence and spontaneity tend to be smothered, resulting in weakness, helplessness, and absence of dignity. This weakness and worthlessness lead to debilitating effects on the self-concept [p.195].

Thus if the significant other relies on his position of authority to

enforce discipline he is less likely to accept the child as a worthwhile individual, and thus he is likely to adversely affect the self-concept of the child.

Another aspect of the significant others' behaviour that has been shown to affect the self-concept of the child are the expectations that person places on the potential achievements of the child. Brookover et al. (1965), in their attempts to improve scholastic achievement by enhancing the self-concept of students, found that of the three approaches tried, by far the most successful was when the parents enhanced their expectations of their child's abilities. The evidence from this research must be balanced with other evidence, which points to the fact that if the expectations of parents are unrealistically high then detrimental effects may well occur. Thus Holt (1967) states:

When a child is unable to meet parental expectations he may in fact, take a course of action in direct opposition to the parents' goals. This selected behaviour may be detrimental to the child; it often manifests itself in the decision to fail . . . [p.198].

These two sources of evidence would suggest then, that in setting expectations for children, significant others must truly view the child as a unique individual, and while showing confidence in their expectations for performance, must also exercise restraint in setting expectations which are beyond the capabilities of the child.

At birth the child is almost completely dependant upon the mother (or mother substitute) for survival. It is for this reason that the mother is so central, in the early years, to the development of the self-concept of the child. One function of the developmental process is the ability of the child to move from this completely dependent state to a state of independence. Thus the opportunity to make decisions can be seen to be vital in the developmental process if the final state of

the person is to be one of independence. In fact Felsenthal (1972) states: "The opportunity for children to make decisions and live with the consequences of these decisions is important in building self-esteem [p.200]." As many significant others are in positions of authority with relation to the child, one of the functions of their behaviour patterns will be to allow the child to make decisions to a greater or lesser extent. At certain stages in the developmental process the child has certain capabilities for decision making. As the child becomes more mature, so his capabilities for decision making are increased. In keeping with the circular nature of the development of the self-concept of the child, if the child is denied areas where he can accept responsibility his underlying doubts of unworthiness and incompetence are reinforced. If he is allowed areas of responsibility then he is able to know and accept himself more readily. Within this same framework, it must be stressed that the child still has needs for certain controls, so that whereas total control is not conducive to the development of a positive self-concept, neither is total freedom. Thus the marrying of these two extreme standpoints by the significant others in the child's life is of critical importance in the development of the self-concept.

Summary

A review of several theories of self has been made, including certain aspects of the theories of James, Mead, Freud, Adler, Lewin, Rogers and Snygg and Coombs. A definition of the self-concept was then derived, with the definition of La Benne and Greene (1969) being accepted for use throughout this study.

. . . self-concept is the persons total appraisal of his

appearance, background, and origins, abilities and resources, attitudes and feelings which culminate as a directing force in behaviour. We here hold that a persons conscious awareness, what he thinks and feels, is what primarily guides, controls and regulates his performance and action [p.47].

The mechanics of how the self-concept of a child develops was then studied. The social interaction process was relied upon to explain the development of the self-concept. The work of Mead (1934) and Sullivan (1947, 1953) was referred to, and the model devised by Brookover (1964) was used as an overall explanation.

The effects of significant others on the development of the self-concept were then studied. The following list is a summary of the factors identified in this section. No rank order of importance is implied by the order of reporting.

1. Consistent acceptance with respect and concern (Felsenthal 1972).
2. Freedom and independence within carefully defined limits (Felsenthal 1972).
3. Viewing each child as a unique entity. (Yamomotto 1972).
4. Respectful and positive interaction between child and adult (Lindesmith and Strauss 1968).
5. High, but realistic expectations of potential achievements of the child (Brookover et al. 1965).
6. Possibility for making decisions appropriate to the child's level of maturity.

It is fully realised that this list is not exhaustive or definitive, it does however, draw on many of the theoretical formulations completed to date with regard to the development of the self-concept.

CHAPTER III

TEACHER BEHAVIOURS IN ELEMENTARY SCHOOL PHYSICAL EDUCATION

Institutes which have the responsibility of the professional preparation of teachers have included courses dealing with "teaching method" for many years. Within these courses certain aspects of teacher behaviour have normally been discussed. The content of these courses with relation to teacher behaviour has relied heavily upon the intuitive and practical knowledge of the instructor. Until recently very little research had been completed to identify specific teacher behaviours within the classroom situation. This was partly a function of the lack of available methodologies and instruments open to researchers. With the advent of the work in interaction analysis in the classroom by Flanders a new avenue of research was made available. It is the purpose of this chapter to identify specific teacher behaviours occurring in elementary school physical education lessons by reference to the work completed in interaction analysis.

Interaction Analysis in the Classroom

As is the case in most new areas of research many different and seemingly divergent attempts have been made to observe and classify teacher behaviour. Thus Anderson (1971) based their analysis on dominative or integrative styles of teaching; Lippitt and White (1943) based theirs on the authoritarian, democratic and laissez-faire style of teaching; and Cogan (1958) based his analysis on the preclusive and inclusive method of teaching. More recently more consistency can be

seen in the development of different interaction-analysis instruments with Withall (1963), Perkins (1951), Flanders (1951, 1965), and Bellack (1966), all using the teacher-centred vs student-centred dichotomy of teaching styles.

Flanders (1965) developed his instrument after observations of many teacher-pupil interactions, thus it is based upon non-evaluative descriptions of teacher behaviour as found in many classrooms. He classified teacher behaviour into two basic categories; those actions which have indirect influence on the pupil, and those actions which have direct influence on the pupil. Under the indirect category he places behaviours as follows: (1) accepts feelings, (2) praises or encourages (3) accepts or uses idea of students and (4) asks questions. Under the direct category he places behaviours as follows: (1) lectures, (2) giving directions, and (3) criticising or justifying authority. In reporting his research in various places Flanders (1951, 1960, 1966, 1970) has identified the types of teacher behaviours occurring in the ordinary classroom fairly specifically. He has never reported any application of his methods to the investigation of the type of teacher behaviours that occur in elementary school physical education lessons.

Following similar lines of research, Bellack et al. (1966) observed many teacher-pupil verbal interactions in the classroom and has identified four basic pedagogical moves; these being (1) the structuring move (2) the soliciting move (3) the responding move, and (4) the reacting move. In reporting his research he deals with the soliciting move and the responding move together because one is a logical reaction to the other (teacher gives a soliciting move followed by a responding move by the pupil or visa-versa). In describing these two moves, he states that of all soliciting moves made in the classroom

approximately 94% are made by the teacher, and of all responding moves made in the classroom approximately 88% are made by the pupils. Great detail of the specific moves are given in relation to the general classroom situation. No mention has been found of relating Bellacks' method of analysis to the elementary school physical education situation.

Interaction Analysis Related to Physical Education

Very little research could be found on the application of interaction analysis in the physical education field in general, and only one source was found in relating this method to elementary school physical education. Dougherty (1971) reported the fact that Flander's system, with the addition of one category, could be used in studying interaction in the physical education lesson. He failed, however, to report any research on the actual use of the system. Barrett (1971) uses the theoretical constructs of both Flander's and Bellack's methods of interaction analysis in writing on elementary school physical education.

Robbins (1973) has surveyed the literature pertaining to interaction analysis and developed an instrument for analysing teacher-pupil interaction in elementary school physical education. In developing this instrument many elementary school physical education lessons were observed, and hence teacher behaviours that actually occur during the teaching of elementary school physical education were identified. This source will therefore be used for purposes of this study.

The instrument is divided into four basic sections: (I) teacher structuring, (II) teacher solicitation, (III) pupils' response and, (IV) teacher reacting (see figure 1). As this study is concerned with teacher behaviour, description of section III will be omitted. Section I is sub-divided into two categories.

Figure 1

Categories for Observing Teacher Behaviour
in Elementary School Physical Education

TEACHER STRUCTURING I	1. Physical education centered structuring type behaviour. 2. Non-physical education behaviour.
TEACHER SOLICITATION II	3. Command, authoritarian directive. 4. Limiting, restricting directive. 5. Open, free directive. 6. Teacher questioning.
PUPILS' RESPONSE III	7. Pupils' verbal response. 8. Pupils' activity response. 9. Pupils' initiating action.
TEACHER REACTING IV	10. Confirming performance reactions. 11. Confirming behaviour reactions. 12. Correcting (rejecting) performance reactions. 13. Correcting behaviour reactions. 14. Extending reactions. 15. Focussing reactions. 16. Demonstration.
OTHER V	17. Silence or Confusion.

The first category describes teacher behaviour that is directly related to the physical education lesson but not intended to solicit an overt response from the pupils, nor intended to be a reaction to a pupils' response. This category included teacher behaviour which introduces, describes, explains, or summarises the lesson content. Any

behaviour that is intended for organisational or planning purposes is also included in this category. Examples of this category are exemplified by such statements as "Today we are going to work on different ways of travelling" or "We are going to divide into groups of three and each group is going to work with a different piece of apparatus."

The second category describes any teacher behaviour that is not related to the physical education lesson. As it probably would not solicit a response from the pupils it is regarded as structuring behaviour. An example of this category is "The principal has asked me to announce that those in the school play will have a practice tonight."

The second section is divided into four categories and is largely concerned with describing types of teacher behaviours that intend to elicit responses from the pupils. The directives are categorised by the degree of teacher control, or by the amount of freedom given to the pupils.

Category 3 is a command given in an authoritative manner where only one response is possible. Examples of this category are "Stand-up! or, "Run to that wall!"

Category 4 consists of limiting or restricting directives. Some amount of control is exercised by the teacher while giving students a certain amount of freedom within the given task. Hence more than one response by the pupils is possible, and at least two aspects of the movement are uncontrolled. Examples of this category are "show a balance on your hands or feet" or "Support your weight on different parts of your body."

Category 6 consists of any questions that the teacher asks during the lesson. In reporting the interaction the observers subscript

the response with the category to which the question is related. Thus this category effectively helps to describe the method by which another category is made. Examples of this category are "Can you show four balances?" This would be reported as 6_4 , showing that a limited directive has been given in the form of a question, or "What did we do during the last lesson?" This would be reported as 6_1 , showing that a structuring behaviour has been made in the form of a question.

The fourth section is divided into seven categories and is concerned with describing teacher behaviours which are reactions to responses (either verbal, behavioural or, performance) given by the pupils. The reaction behaviours are divided into: confirming reactions; correcting reactions; extending and focussing reactions; and demonstration.

Categories 10 and 11 are both confirming reactions of the teacher. Behaviours which accept, praise, reinforce or confirms are included in these two categories. Category 10 describes such behaviours that relate to the performance, in physical education terms, of the pupil. Examples of this category are: If the pupil performs a hand-spring and the teacher says "Well done John!" or if a pupil makes a good pass during a game the teacher says "Atta boy Jim." Category 11 describes such behaviours that relate to the general behaviour, deportment, propriety, manner, and the way the pupils treat each other. Robbins (1973) mentions that although this category is not observed very often in elementary school physical education lessons it is worth including for theoretical purposes. An example of this category is a boy who has been talking and making a noise during a structuring move by the teacher, he corrects his behaviour, and the teacher then says "That's

much better Stuart!"

Categories 12 and 13 are both correcting reactions. Behaviours of the teacher which indicate to the pupil that his response or non-response is unacceptable are described under these categories. Category 12 describes such behaviours that relate to the performance (in physical education terms) of the pupil. Behaviours that imply criticism or rejection of pupils' responses are included in this category. An example of this category is "Children! that's not right! I told you to balance on two parts of your body and most of you are balancing on three parts!" Category 13 describes such behaviours that relate to general behaviour, deportment, propriety and the way the pupils treat each other. Examples of this category are "Class! you are making too much noise!" or "Al! don't kick Mary's ball!"

Categories 14 and 15 are concerned with behaviours of teachers which are reactions to pupils' responses and have the intention of helping the pupils to improve, clarify, modify or add to their responses. The behaviours described in these two categories are always concerned with reactions to physical education responses. These behaviours are always positive in nature, any behaviours with the same intentions, but given in a negative fashion, would be included in category 12. Category 14 describes such behaviours that are intended to extend the performance of the pupils in relationship to the variety of responses made. This type of reaction can be made sometimes to groups or individuals and sometimes to the class as a whole; sometimes it is interjected while the pupils are working and sometimes after the pupils have finished working. Examples of this category are "You have been travelling on your feet. Now sometimes use one foot and sometimes two feet." or "Jimmy, can you now try and use a wide shape when you roll?" Category 15 describes such

behaviours that are intended to improve the quality of the performance of the pupils. In improving the quality of performance one particular aspect of the response is normally focussed on. This type of reaction can be made sometimes to groups or individuals and sometimes to the class as a whole; sometimes it is interjected while the pupils are working and sometimes after the pupils have finished working. Examples of this category are: "Mary, concentrate on stretching those legs" or "Stretch as high as you possibly can."

Category 16 is concerned with both pupil and teacher behaviour related to demonstration. The demonstration can have the purpose of illustration, clarification, extending or focussing on particular aspects of the solicitation or the response.

Category 17 contains all other teacher, or pupil behaviours which cannot be classified in any other category. Silence, or confusion are included in this category.

The work of Robbins (1973), which is based on the work of Bellack and Flanders, gives a good base for understanding and observing the behaviour of teachers as it occurs in elementary school physical education lessons. The instrument can be seen to be based upon a teacher-centred vs pupil-centred dichotomy (or more truly a continuum). It can also be seen to be based upon the four pedagogical moves of Bellack.

Summary

In order to arrive at non-evaluative descriptions of teacher behaviours occurring in elementary school physical education pertinent literature relating to pupil-teacher interaction was surveyed. A brief description of Flander's (1965) work was completed. His indirect -

direct classification of teachers behaviours was identified. Bellack's (1966) four pedagogical moves were then identified as: (1) the structuring move (2) the soliciting move (3) the responding move (4) the reacting move.

The work completed in interaction analysis specifically related to elementary school physical education was then studied. The only work of substance found was that of Robbins (1973). In developing an instrument to observe teacher behaviours in elementary school physical education, Robbins identified various teacher behaviours that actually occur in teaching elementary school physical education. The three general categories of teacher behaviours were (1) teacher structuring (2) teacher solicitation (3) teacher reacting. The specific behaviours occurring in these categories were then described in detail.

The following chapter will relate teacher behaviours occurring in elementary physical education to the development of the self-concept of the pupils.

CHAPTER IV

LINKING TEACHER BEHAVIOUR AND SELF-CONCEPT

It is the purpose of this chapter to arrive at a theoretical framework linking observed teacher behaviours in elementary school physical education with the development of the self-concept of the pupils. This was achieved by comparing the list of the effects of significant others on the development of the self-concept of the pupils, as developed in earlier chapters, with the types of teacher behaviours occurring in elementary school physical education as identified by reference to Robbins' (1973) instrument for observing teacher-pupil interaction in elementary school physical education.

Teacher Behaviour and Self-Concept

In comparing the types of behaviours exhibited by teachers with the possible effects that these behaviours could have on the development of the self-concept of the pupils it was suggested that the behaviours could have positive effects, negative effects, or neutral effects. It was therefore decided to attempt to formulate the theoretical framework under this trichotomy.

Positive Teacher Effects

The following teacher behaviours were identified as possibly affecting the development of the self-concept of the pupils in a positive manner: Robbins' Category:

- 4 Limiting, restrictive, directive.
- 10 Confirming performance reactions.
- 11 Confirming behaviour reactions.

14 Extending reactions.

15 Focussing reactions.

As stated earlier, category 4 in Robbin's instrument is concerned with the type of directive which allows the student a certain amount of freedom, it also contains elements of control exercised by the teacher. This fits in well with the second aspect of significant others' behaviour as identified in an earlier chapter which states the need for freedom and independence within carefully defined limits. In that this type of directive is fairly free in nature, it also allows the possibility for making decisions appropriate to the child's level of maturity; which was also identified as one of the actions of significant others necessary for good development of the self-concept.

Categories 10 and 11 have previously been identified as teacher behaviours which accept, praise, reinforce, or confirm performance or behaviour reactions of the pupils. These teacher behaviours can be aligned with the stated need for the significant others to show consistent acceptance with respect and concern. Even though the child's performance level, or behaviour standard, may be relatively low, very often praise or confirmation is given in relationship to the standards of that particular child. In this manner the teacher often shows acceptance of, and respect for the child as a unique individual, which has also been identified as a necessary behaviour of significant others in the positive development of the self-concept of the pupils. Confirming reactions by the teacher are also conducive to creating a positive type of interaction between the pupil and the teacher.

In reacting to the performance (in physical education terms) of the pupils, teachers often use focussing and extending reactions to aid with the learning process. These types of reactions have been identified

by Robbins as categories 14 and 15. In both of these reactions the teacher tries to improve, clarify, modify or add to the pupils' responses. The teacher behaviours included in these categories are positive in nature; they are also related to the skill level, and performance reactions of individual pupils. These reactions then, can be seen to be largely dependent upon the philosophy that each child is a unique entity. This last point has been identified earlier as a necessary correlate in the development of a positive self-concept in children. These focussing and extending reactions can also aid in the development of high, but realistic expectations of the performance level of the pupil. In that the reactions are based on actual performance levels of the individual child, it is doubtful that the teacher will try to extend the child beyond his potential capabilities.

Negative Teacher Effects

The following teacher behaviours were identified as possibly affecting the development of the self-concept of the pupils in a negative manner. Robbins' Category:

- 12 Correcting (rejecting) performance reactions.
- 13 Correcting (rejecting) behaviour reactions.
- 17 Silence or confusion.

Categories 12 and 13 are both rejecting types of reactions by the teacher and both imply criticism of the performance, (in physical education terms), and behaviour of the pupils. These reactions tend to point to the worthlessness of the individual rather than the respect needed for the development of a positive self-concept in the pupil. In giving these reactions the teacher often addresses the criticisms of performance or behaviour to the whole class. This would tend to go

against the need for the teacher to treat each individual as a unique entity. Whereas these teacher behaviours are sometimes necessary, an excessive use of these behaviours would probably tend to hinder the development of a positive self-concept in the pupils. Thus it is contended here that if these types of teacher behaviours occur fairly often, then the self-concept of the pupils will probably grow negatively, or at least less positively. Category 17 shows that silence or confusion is occurring in the class. Although this is not a specific teacher behaviour it can be regarded as the outcome of certain teacher behaviours. It is possible that this action occurs because too much freedom is allowed. Thus the previously identified need for significant others to allow freedom and independence within carefully defined limits is not being fulfilled. A further possible cause of this type of action is that the student is being asked to make decisions which are too difficult for his level of maturity; this again would tend to encourage the self-concept to grow negatively.

Neutral Teacher Effects

The remainder of the categories found in Robbins' instrument for observing teacher behaviour in elementary school physical education were identified as having neither positive or negative effects on the growth of the self-concept of the pupils. It is fully realised that the manner in which some of these teacher behaviours occur may well have a positive or negative effect on the development of the self-concept of the pupils; these effects however, could not be attributable to the behaviours per se.

Positive/Negative Ratio

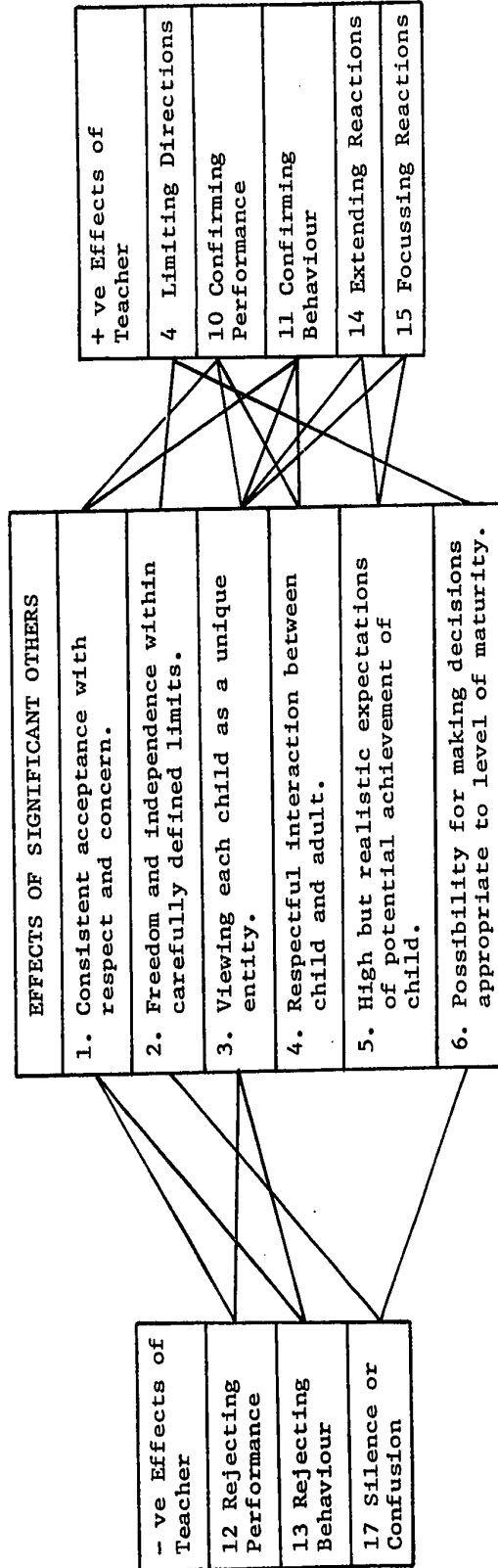
In other studies comparing teacher behaviours with certain

student behavioural outcomes, ratios of different teacher behaviours have been used (Soar 1968, Flanders 1965, LaShier 1966). Most of these have been concerned with direct and indirect teacher influence. In this study certain behaviours that could possibly affect the growth of the self-concept of pupils in positive and negative ways have been identified. In order to identify teachers who are likely positively to affect the growth of the self-concept it is suggested here that a ratio between the positive and negative teacher behaviours will be useful. In order to arrive at this positive/negative ratio (P/N ratio) the percentage of tallies falling in the positive categories of Robbins' instrument (4, 10, 11, 14, 15) are divided by the percentage of tallies falling in the negative categories of Robbins' instrument (12, 13, 17). Hence the ratio found is the number of positive teacher behaviours occurring to every negative teacher behaviour occurring. This ratio will possibly give some indication as to whether a particular teacher is likely to affect the growth of the self-concept of the child in a positive or negative manner.

Summary

This section has attempted to link the types of teacher behaviours that occur in teaching elementary school physical education with the effects that significant others have on the development of the self-concept of children. A summary of the work completed in this chapter will best be achieved by listing teacher behaviours identified, listing the effects of significant others, and showing the inferred linkages (see figure 2).

Figure 2
 Links Between Teacher Behaviour and
 The Self-Concept



CHAPTER V

DESIGN OF STUDY

The previous chapter suggested that teachers who exhibit a relatively high P/N ratio in their teaching behaviours are more likely to positively affect the self-concepts of their pupils than are teachers exhibiting a relatively low P/N ratio. It is the purpose of this section of the study to perform an exploratory study to determine if this line of research is worth further investigation. The study is only preliminary and exploratory in nature, and hence it will not be possible to conclude cause and effect, or even contiguity. It will, however, be possible to identify trends for future research.

The general steps in the study were as follows:

1. Identification of two teachers with a relatively high P/N ratio and identification of two teachers with a relatively low P/N ratio.
2. Testing the self-concept of some of the pupils from these four classrooms with the Thomas self-concept values test (1971).
3. Calculation of the means and standard deviations of the self-concept scores of the two groups (the pupils of the teachers with a high P/N ratio were counted as one group and the pupils of the teachers with a low P/N ratio were counted as one group).
4. A test of statistical significance was carried out on the means of the results of the self-concept test and their sub-scales.
5. Individual profile sheets was prepared for each student tested.
6. Students showing exceptionally high or exceptionally low scores on the self-concept test were identified, and interviewed in order to

determine the particular factors causing the high or low scores in the self-concept test.

The Sample

Teachers. Ten teachers were observed when validating the instrument for observing teachers' behaviour in elementary school physical education developed by Robbins (1973). Each teacher was observed three times by two observers each time. All of these observations were made in December of 1972. The total percentage of tallies made in each category were then computed (see Appendix A). The P/N ratio was then calculated for each teacher. (Table 1).

Table 1
P/N Ratios of Teachers

TEACHER NO.	P/N RATIO	RANK ORDER
1	2.99:1	8
2	5.71:1	2
3	2.45:1	9
4	2.04:1	10
5	3.57:1	5
6	5.23:1	3
7	4.56:1	4
8	3.46:1	6
9	3.21:1	7
10	22.25:1	1

From these P/N ratios teachers 10 and 2 were identified as the teachers most likely to affect the self-concept of their pupils in a positive manner; teachers 3 and 4 were identified as the teachers most likely to affect the self-concept of their pupils in a negative manner.

In analysing the results of the observations of the ten teachers it was noticed that one teacher showed a much higher degree of demonstration and personal involvement than the other nine teachers. For this reason it was decided to investigate the self-concepts of this teacher's pupils.

The Pupils. The self-concept of fifteen of the pupils from each of the classes identified was tested using the Thomas self-concept values test (1971). After analysis of these results certain pupils were interviewed in order to attempt to identify the discrepancies in their self-concept scores.

Instrumentation

The Thomas Self-Concept Values Test. The Thomas self-concept values test consists of a battery of fourteen bi-polar adjectival items which constitute the self value dimensions to be assessed. The child is asked to assume the perspective of each of three significant others, plus himself. Thus the child is asked to respond to the fourteen bi-polar adjectives from the standpoint of (1) himself (2) his mother (3) his teacher and (4) his peers. (For a full description of the testing procedure see Appendix C).

Thomas (1971) reported test re-test reliability coefficients ranging from 0.6096 to 0.8248 for the individual referent scales. The internal consistency was given as having a coefficient of correlation of 0.7306 for inter sub-scales.

Detailed theoretical arguments were given to prove construct validity of the test. Concurrent validity was arrived at by testing groups of highly privileged children and groups of under privileged children with the test. The differences obtained were significant at

the .05 level, and hence concurrent validity was accepted.

The Thomas self-concept values test was chosen for use in this study for various reasons. First, it was the only self-concept test which included a separate scale using the teacher as a significant other. Secondly it was designed specifically for younger children (3-9 years), and although we are using some children slightly older than this study, the majority are in the correct age range. Thirdly the validity and reliability coefficients were acceptable.

Robbins' Instrument for Observing Teacher Behaviour in Elementary School Physical Education. The content of this instrument has been provided in detail earlier in the study. The validity of the instrument was established by receiving comments from a panel of experts in elementary physical education across Canada. The scores for inter-judge objectivity were found to be 0.82 for live observations and .90 for video-tape observations. The intra-judge reliability scores were found to be 0.92. (Scotts' coefficient was used in establishing all of these reliability scores).

Pupil Interviews. A framework was established for these interviews (see Appendix D). Various factors which were thought to affect the development of the self-concept of the pupils were included. The remainder of the interview was based upon the profile sheets of the individual concerned. Thus if one of two factors were noticeable in causing the high or low scores on the self-concept test, these were investigated.

Analysis of Results

The means of the self-concept scores for each group were

calculated. This included the means of the four referent group scores as well as the total self-concept scores. The standard deviations of these scores were also calculated. A test of significance, using one way analysis of variance, was completed on all of these scores between the two groups. The pupils to be interviewed were identified by reference to the standard deviation of the scores. Any pupil showing a score greater than one standard deviation away from the mean of the scores on the teacher sub-scale or the total scale were interviewed. Pupils showing either exceptionally high, or exceptionally low scores in any of the fourteen sub-scales were also interviewed. The interviews were analysed in order to identify reasons which may have been related to the scores shown on the self-concept test.

CHAPTER VI

RESULTS AND DISCUSSION

A null hypothesis was developed to help to examine the research problem of this study. This null hypothesis was tested for significance using a one way analysis of variance. Students with self-concept scores greater than one standard deviation away from the mean of the teacher referent scale or the total scale were chosen for interview.

The teaching styles of the teachers showing a high P/N ratio and of teachers showing a low P/N ratio were profiled. General trends in teaching styles were noted and discussed.

Test of Significance

The null hypothesis stated: There is no significant difference between the mean self-concept scores of pupils taught physical education by teachers showing a high P/N ratio and the mean self-concept scores of pupils taught physical education by teachers showing a low P/N ratio.

The null hypothesis was rejected for all scales of the self-concept test. For the self and mother sub-scales the null hypothesis was rejected at .05 level of confidence. For the teacher and peer sub-scales, and the total scale the null hypothesis was rejected at the .01 level of confidence.

The results of this one way analysis of variance suggested that this line of research is worth further investigation. It was also noted that the standard deviations of the self-concept scores of the pupils of high P/N ratio teachers were less than the standard deviations of the self-concept scores of the pupils of low P/N ratio teachers in

all sub-scales. This suggested that the pupils of the high P/N ratio teachers perceived the behaviours of their teachers more consistently than did the pupils of the low P/N ratio teachers. In studying the profile sheets of the individual pupils it was noticed that the students of high P/N ratio teachers perceived the teachers as believing that they were more capable than their counterparts in the low P/N ratio teachers' classes. This would underline the fact identified earlier, that significant others need to show consistent acceptance of the child in order to help produce a positive self-concept.

Table 2

Level of Significance of Self-Concept Scores

		SELF-CONCEPT SCORES				
		SELF	MOTHER	TEACHER	PEERS	TOTAL
High P/N Teachers	Mean	46.08	48.43	45.53	45.56	45.23
	S.D.	4.58	4.79	6.38	6.16	5.85
Low P/N Teachers	Mean	43.66	44.30	39.50	40.80	38.87
	S.D.	6.79	7.51	8.09	8.13	7.02
f value		5.1*	5.8*	9.7**	9.4**	9.6**

d.f. = 1 and 58

* = significant at the .05 level of confidence

** = significant at the .01 level of confidence

No other common trends were identified in the profile sheets that could suggest differences between the perceptions of pupils of high P/N ratio teachers and low P/N ratio teachers.

It should be noted here that the individual value which was scored consistently low was the material aspect of the test. Practically

all of the students tested (92%) scored low on this point, emphasising the very materialistic philosophy of our present social system.

Choosing Pupils for the Interview

Pupils were chosen for interview if their self-concept scores on the teacher referent sub-scale or the total scale were greater than one standard deviation away from the mean. The results of the self-concept test can be found in Appendix B. The pupils thus chosen for interview are shown in table 3.

Table 3

Self-Concept Results of Pupils Chosen for Interview

	PUPIL NO.	TEACHER SUB-SCALE	TOTAL SCALE
High P/N Ratio Group	5	39	39
	6	39	42
	7	60	55
	10	53	53
	22	56	57
	26	36	33
	29	26	31
	30	53	43
Low P/N Ratio Group	32	26	29
	34	46	52
	35	50	54
	37	26	29
	42	50	52
	45	31	30
	46	48	49
	48	50	44
	52	46	44
	54	31	47
	56	31	37
	58	28	35
59	23	33	

After studying the individual profile sheets of the students

chosen for interview several aspects of their self-concept tests were identified for further investigation in the interviews. These areas for further investigation were classified into four classes, these being: (1) High scoring pupils of high P/N ratio teachers, (2) Low scoring pupils of high P/N ratio teachers, (3) High scoring pupils of low P/N ratio teachers, and (4) Low scoring pupils of low P/N ratio teachers.

Foci for the Interviews

High Scoring Pupils of High P/N Ratio Teachers. In this category it was noticed that the pupils scored highly on the following values in the teacher referent scale and in the self-referent scale: (1) Ability, (2) Sharing, (3) Fear of things, and (4) Fear of people. These high scores were interpreted as showing that these pupils were well adjusted in their interactions with other people. They would probably react to people in an open fashion showing no fear and very few aggressive tendencies. This group of pupils showed no consistent low scores in the self-concept test. The interview was modeled around the above values.

Low Scoring Pupils of High P/N Ratio Teachers. In this category it was noticed that the pupils had low scores in the self-concept test on the following values in the teacher referent scale and the self-referent scale: (1) Size, (2) Male acceptance, (3) Attractiveness, and (4) Fear of things. Two of these values are physical attributes, and the interview was designed to discover if the pupils in fact saw themselves as small or big, good looking or not good looking, and accepted or resented the fact. The other two values mentioned above were also investigated in the interview.

High Scoring Pupils of Low P/N Ratio Teachers. In this category it was noticed that there was less consistency in the responses of high scoring pupils. Only two values could be identified in which the majority of pupils in this category scored highly. These were (1) Sociability, and (2) Sharing. This was interpreted as showing that the pupils who scored highly in this category were probably well adjusted in their interactions with other people. It was also noted that these pupils also scored highly on the peer referent sub-scale, which would tend to suggest that a lot greater weight was placed on the value of peer group opinion than was evident in other groups. The interview was modeled around these two values, plus the values scored highly by the individuals.

Low Scoring Pupils of Low P/N Ratio Teachers. No consistent responses of pupils on the self-concept test could be identified in this group. This suggested that the behaviours of the teachers were viewed and interpreted differently by each individual pupil. The interview was modeled around each pupils' profile sheet.

Results of the Interviews

Several factors were noticed when analysing the results of the interviews which were thought to be of interest. Although these interpretations were subjective in nature it was felt that certain aspects of the scores on the self-concept test were clarified.

Only four students out of a total of twenty-one interviewed stated that they did not enjoy physical education, all of these were from the group whose teachers were designated as exhibiting a low P/N

ratio. This was interpreted as pointing towards the fact that significant others' behaviours could affect the attitudes and preferences of the students. While it was realised that this could have occurred by chance, it was noted that some of the reason for the students disliking physical education could be attributed to the behaviours of the teacher.

When asked if the teacher often told them that they had done something well, all of the students who had high scores on the teacher referent scale of the self-concept test had very little hesitation in stating that the teacher did praise them a lot. This was in direct contrast to the students who had low scores on the teacher referent scale of the self-concept test, who all hesitated before they answered, and then said such things as, "well, sometimes," or "not really, but I think he likes some of the things I do." The above statements were true whether the pupils were from the group with teachers designated as high P/N ratio teachers or from the group with teachers designated as low P/N ratio teachers. It should, however, be remembered that whereas seven low scorers from the low P/N ratio group were interviewed, only four low scorers were interviewed from the high P/N ratio group. The conclusion drawn from this data was that, irrespective of the actual behaviour of the teacher, different pupils perceived the teachers' behaviour in different ways. Thus, whereas one pupil from a class said, without hesitation, that the teacher often told the class that they had done well, another pupil from the same class would say that the teacher did not tell the class that they had done well. This difference in perception was a lot more obvious in the group of students of the low P/N ratio teachers than in the group of

students of the high P/N ratio teachers. This was in concurrence with the conclusion concerning the consistency of the pupils' perceptions of teachers' behaviours made earlier.

The pupils who had high or low scores on the ability scale were asked if they were near the top, or near the bottom of the class. The students of the teachers showing a low P/N ratio reported their abilities in relation to the other members of the class, thus if they were near the top of their class they said that they were smart and if they were near the bottom of the class they said that they were not very smart. The students of the teachers showing a high P/N ratio, on the other hand, used some other criteria for saying that they were smart; thus some of the students who said that they were smart reported that they were in the middle or near the bottom of the class. This suggested that the high P/N ratio teachers exhibited behaviours which were perceived by their students as saying that they were smart. The students of the low P/N ratio teachers, however, relied almost entirely upon their rank order in class to decide whether they were smart or not.

When the students who had high scores on the sociability and sharing sub-scales were asked for reasons for these high scores, all of the students from the low P/N ratio group referred in some way to their friends or siblings. The students from the high P/N ratio group referred about equally to their parents, teachers, friends, and siblings. This suggested that the pupils from the low P/N ratio group relied more heavily on their friends as significant others than did the pupils from the high P/N ratio group.

No other general trends were identified in analysing the results of the interviews. Although it could be said that these results were not statistically significant, it is felt that they have

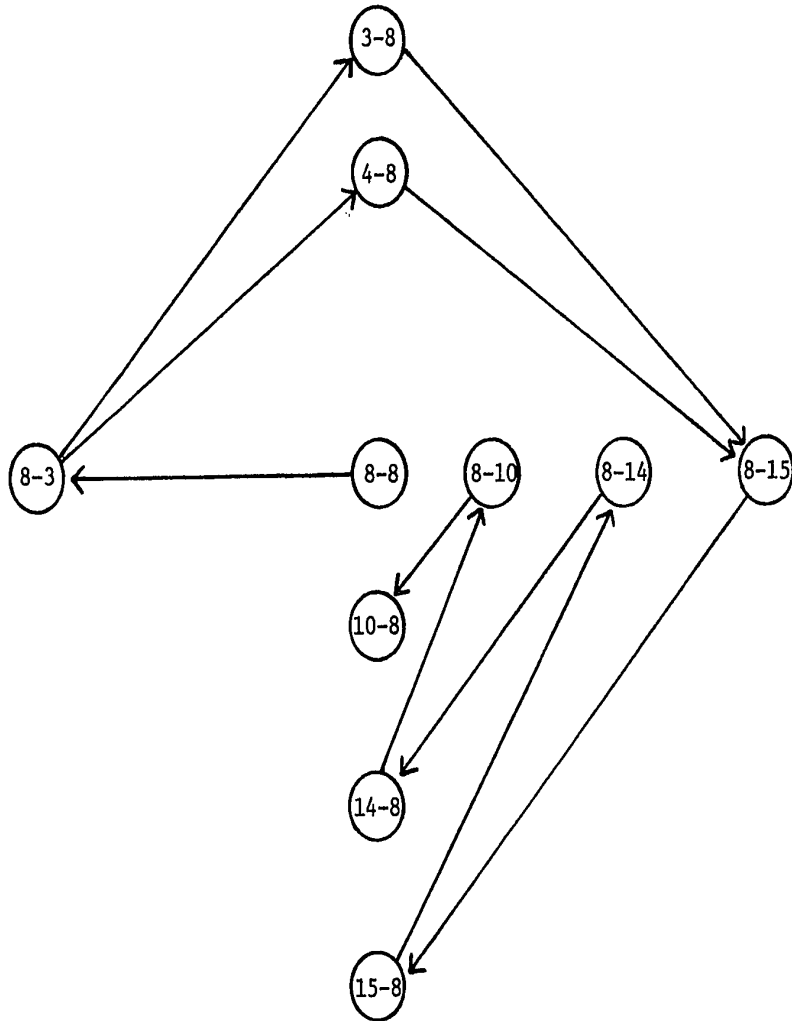
clarified certain responses given in the self-concept tests. It should also be noted that the low scores in the high P/N ratio group were about equal to the medium scores in the low P/N ratio group; and that the high scores in the low P/N ratio group were about equal to the medium scores in the high P/N ratio group. Therefore the discussion must be interpreted with the relative nature of the data in mind.

Teacher Styles

In order to look at the teacher styles of high P/N ratio teachers and of low P/N ratio teachers two imaginary teachers were created. This was achieved by combining the reported scores of the two high P/N teachers and of the two low P/N teachers on the instrument for observing behaviour in elementary school physical education. The resultant teacher styles are shown in diagrams 2 and 3. It can be seen from these diagrams that there was an apparent difference in the styles of these two imaginary teachers. The teacher with a high P/N ratio showed a logically flowing style of teaching whereas the low P/N teachers showed a more fragmented and less logically style of teaching. The typical high P/N teacher moved easily from a command response pattern (3-8, 4-8) into a reaction response pattern (14-8, 15-8). Within this reaction response phase the teacher moved from extending reactions (14-8) to focussing reactions (15-8) regularly, and thus concentrated about equally on extending the variety of performance response and focussing on the quality of performance response. This is in contrast with the low P/N teachers who concentrated on focussing reactions (15-8) with extending reactions not being apparent enough to appear on the diagram. It was also noted that the low P/N teachers showed styles which included rejection of both performance and behaviour reactions (13-8, 8-12) of

Figure 3

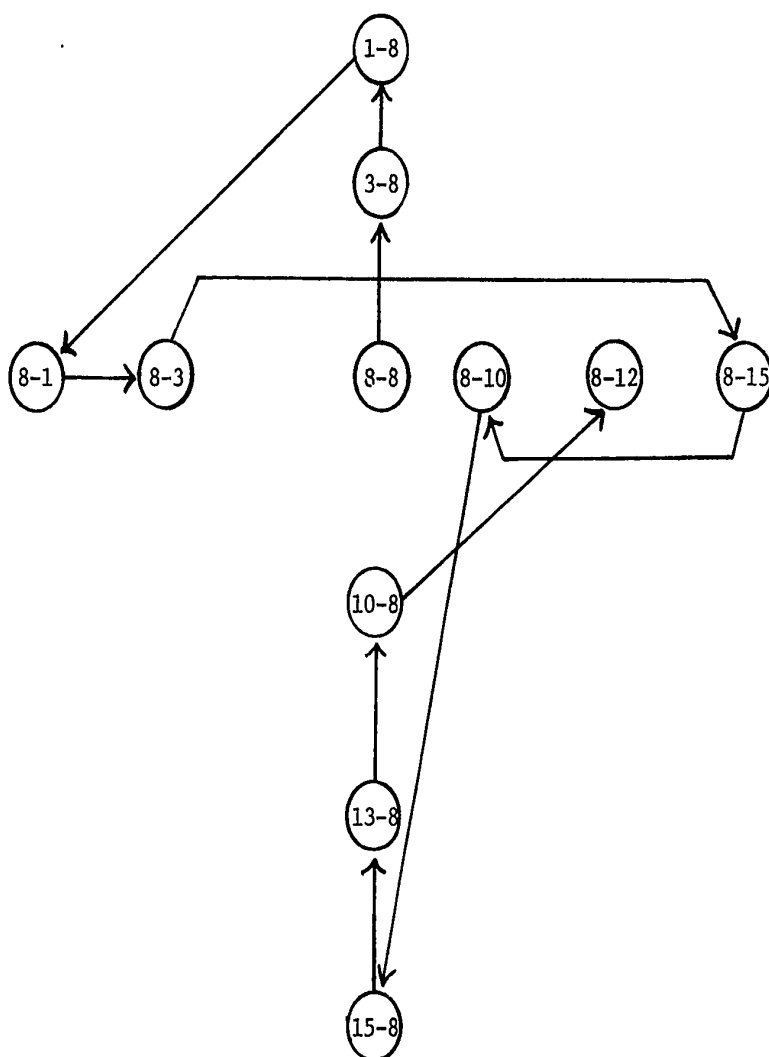
Teaching Style of High P/N Ratio Teachers



(The numbers refer to the categories occurring in Robbins' instrument for observing teacher behaviours in elementary school physical education)

Figure 4

Teaching Style of Low P/N Ratio Teachers



(The numbers refer to the categories occurring in Robbins' instrument for observing teacher behaviours in elementary school physical education)

the pupils whereas these two aspects were not evident in the styles of the high P/N ratio teachers.

The general impression gained from study of the styles of these two imaginary teachers was that not only are the words and actions of the teacher important in the way he teaches, but also that the temporal combination of these actions into a smooth flowing "style" of teaching is important. In showing a consistent logical style of teaching it could be argued that the pupils will be much more likely to interpret the actions in a consistent fashion.

Teacher with High Demonstration

In analysing the results of the teacher observations it was noticed that one teacher showed a high degree of demonstration and involvement. It was suggested that if a teacher shows greater demonstration and involvement, the pupils could more easily identify with him, and thus he would have a greater effect as a significant other. It was also suggested that if the demonstration involved was by the pupils they would perceive being asked to demonstrate as being a tacit acceptance of their performance reactions. For these reasons it was decided to test the self-concept of fifteen of the pupils from this class, and study the results.

The results were tabulated and a comparison between the means and standard deviations of the self-concept scores in all of the subscales of the three groups made (see Table 4).

In comparing the means of this group with the means of the other groups it could be seen that the results on all of the subscales fell between the scores of the pupils of the high P/N ratio teachers and the scores of the low P/N ratio teachers. It could also be seen that the standard deviations of the self-concept scores of

this group were comparable to the standard deviations of the self-concept scores of the pupils of the high P/N ratio teachers. This suggested that the pupils in this class probably perceived the actions of the teachers consistently.

Table 4

Means and Standard Deviations of the Self-Concept
of the Three Groups

	SELF-CONCEPT SCORES					
		SELF	MOTHER	TEACHER	PEERS	TOTAL
High P/N Teachers	Mean	46.08	48.43	45.53	45.56	45.23
	S.D.	4.58	4.79	6.38	6.16	5.85
High Demonstration Teachers	Mean	46.05	48.0	44.0	45.04	44.05
	S.D.	4.62	4.73	6.42	4.75	6.13
Low P/N Teachers	Mean	43.66	44.30	39.50	40.80	39.87
	S.D.	6.79	7.51	8.09	8.13	7.20

Although this study was only preliminary in nature it was possible to suggest that the greater evidence of demonstration and involvement of this teacher could have been the factor that tended to compensate for the smaller amount of praise than that shown by the high P/N ratio teachers.

Summary

It was found that the self-concept scores of pupils of high P/N ratio teachers were significantly higher than the self-concept scores of pupils of low P/N ratio teachers. It was also noted that the variance in self-concept scores of pupils of high P/N ratio teachers

was considerably less than the variance in self-concept scores of pupils of low P/N ratio teachers. It was suggested that this fact could be interpreted to show that the pupils of high P/N ratio teachers viewed the behaviours of teachers more consistently than did the pupils of low P/N ratio teachers. Several value factors which attributed to exceptionally high or low self-concept scores of pupils in both groups were identified. These were: 1. High scoring pupils of high P/N ratio teachers: (a) ability (b) sharing (c) fear of things (d) fear of people (these pupils had high scores in these aspects). 2. Low scoring pupils of high P/N ratio teachers: (a) size (b) male acceptance (c) attractiveness (d) fear of things (these pupils had low scores in these aspects). 3. High scoring pupils of low P/N ratio teachers: (a) sociability (b) sharing (these pupils had high scores in these aspects). 4. Low scoring pupils of low P/N ratio teachers: no consistent reasons for the low scores could be identified.

The interviews helped to clarify the reasons for these exceptionally high or low scores.

The teacher styles of high P/N ratio teachers were investigated by creating two imaginary teachers. This was done by combining the reported scores of the two high P/N ratio teachers and of the two low P/N ratio teachers on Robbins' instrument for observing teacher behaviour in elementary school physical education. The results pointed to the fact that there is a difference in the teaching styles of the two types of teachers identified.

The self-concept scores of pupils of a teacher showing a high degree of demonstration and personal involvement were investigated. It was found that the means of these scores fell between the means of

the scores of the self-concept scores of the other two groups. It was also found that the variance in self-concept scores of the pupils in this group were comparable to the variance in self-concept scores of the pupils in the high P/N ratio group.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Summary

A theoretical framework linking teacher behaviours that occur in teaching elementary school physical education with the development of the self-concept of the pupils was established. A list of the effects that significant others have on the development of the self-concept was arrived at by referring to the literature pertaining to the self-concept. Teacher behaviours occurring in teaching elementary school physical education were identified by reference to the instrument developed by Robbins (1973) for observing teacher pupil interaction in elementary school physical education. These two sources were then combined and linkages between the two were inferred.

An ex post facto exploratory study was then carried out to determine the feasibility of further research in this area. Two teachers were identified who showed a high P/N ratio in their interactions with the pupils and two teachers were identified who showed a relatively low P/N ratio in their interactions with the pupils. The self-concepts of fifteen of the pupils of each of the teachers were measured using the "Thomas self-concept values test." The following null hypothesis was tested using a one way analysis of variance: There is no significant difference between the mean self-concept scores of pupils taught physical education by teachers showing a high P/N ratio and the mean self-concept scores of pupils taught physical education by teachers showing a low P/N ratio.

Pupils showing exceptionally high or low self-concept scores were identified. These pupils were interviewed in order to determine the reasons for their high or low scores.

The teaching styles of both high P/N ratio teachers and low P/N ratio teachers were investigated.

Finally the self-concept scores of a teacher showing exceptionally high demonstration and personal involvement were investigated.

Conclusions

Within the limitations of this study it should be stressed that these conclusions can only be tentative in nature, and point towards trends and the possibilities of certain relationships occurring. No definitive conclusions can be drawn from such a study, nor was it intended to draw such conclusions.

A theoretical framework was successfully completed which linked teacher behaviours occurring in elementary school physical education with the development of the self-concept. From this framework it was concluded that there are certain teacher behaviours that could either positively or negatively affect the development of the self-concept of the pupil. This conclusion was further substantiated by the results of the exploratory study. Thus the tentative conclusions drawn were that if the behaviours of the teachers were mainly positive then the self-concept scores of their pupils would be higher, and if the behaviours of the teachers were mainly negative then the self-concept scores of their pupils would be lower.

A further conclusion was drawn from the comparison of the teaching styles of the two types of teachers. It was suggested that the easy flowing and logical style of teaching exhibited by the high P/N

ratio teachers could positively affect the self-concept of the pupils because the pupils could more accurately perceive the true meaning of the teachers' behaviours.

It was further suggested that the somewhat erratic style exhibited by the low P/N ratio teachers could negatively affect the self-concept of the pupils because the pupils could not accurately perceive the true meaning of the teachers' behaviours.

The results of the self-concept scores of the pupils of the teacher showing greater demonstration and personal involvement suggested the possibility that this factor could affect the development of the self-concepts of the pupils. The conclusion was made that the pupils could possibly identify more closely with a teacher exhibiting this type of behaviour, and therefore he could exert more influence on the development of the self-concept of the pupil than could a teacher who was less involved.

The general conclusions were that this area of research is worth pursuing. Further research is necessary to verify the suggestions made in this study.

Recommendations for Future Research

The state of research in this field of study is at a very early stage. There is, no doubt, a need for much research in this area. The following areas of study are recommended for further research.

1. A study similar to the one just reported including controls for such things as: the effects of other significant others, the socio-economic background, the effect of the school climate, the effect of the home climate.

2. A study similar to the one just reported, but investigating the

effects of teacher behaviours other than their P/N ratios. It is suggested that the effects of more specific teacher behaviours on the development of the self-concept of the pupils be investigated.

3. An investigation into the effects that the teaching style of a teacher has on the development of the self-concept of the pupils would be useful.

4. A longitudinal study involving all or some of the above mentioned points would be useful.

5. An investigation could be completed at the university level involving student teachers. Using such techniques as micro-teaching, video-taping, and interaction analysis in conjunction with objective feedback from experts, the feasibility of training teachers who could positively affect the self-concept of pupils could be investigated.

6. Any future studies should be completed with larger random samples so that cause and effect, or contiguity could be concluded.

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APPENDIX A

PERCENT OF TALLIES PER CATEGORY PER TEACHER

Table 5
Percent of Tallies per Category per Teacher

ROBBINS CATEGORY	TEACHER NUMBER									
	1	2	3	4	5	6	7	8	9	10
1	6.53	6.78	8.39	11.45	8.11	10.2	14.2	8.12	6.46	4.17
2	0.42	0.79	1.95	0	1.23	1.16	.82	1.64	1.17	1.03
3	18.22	11.69	10.67	12.55	16.34	11.16	13.53	10.29	9.33	10.79
4	1.49	5.02	4.26	.63	.23	1.62	.4	.64	1.18	1.53
5	0	0	0	0	0	0	0	0	0	.16
6	5.28	5.47	8.46	8.36	8.07	5.59	5.73	6.42	12.81	1.65
7	2.83	2.63	3.83	8.08	5.83	3.71	2.62	3.69	7.7	.37
8	34.48	37.5	32.05	31.13	27.00	36.48	25.46	41.29	24.48	40.70
9	1.36	1.78	2.87	.98	1.61	1.17	1.05	3.33	2.28	3.08
10	8.41	6.09	4.35	3.67	6.02	5.48	5.16	1.25	6.55	8.49
11	0	0	0	.08	0	0	0	0	.14	0
12	3.16	1.69	2.25	1.77	2.3	1.20	2.46	1.09	1.32	1.0
13	2.46	1.16	3.21	2.30	2.28	1.57	1.57	3.4	3.46	.47
14	2.74	3.16	3.86	1.51	1.07	2.85	.72	4.94	4.24	6.76
15	6.42	9.37	8.19	10.85	13.38	10.51	15.84	9.08	14.79	15.93
16	3.77	2.85	3.67	2.63	5.29	5.47	9.65	4.97	1.07	5.04
17	1.13	1.29	1.98	3.96	1.21	.35	.82	.14	3.46	0

APPENDIX B

SCORES OF THE SELF-CONCEPT TESTS

Table 6

Self-Concept Results of High P/N Ratio Group

PUPIL NO	SELF-CONCEPT SCORES				
	SELF	MOTHER	TEACHER	PEER	TOTAL
1	53	56	50	46	52
2	50	50	50	51	51
3	49	52	40	46	45
4	45	50	49	43	44
5	40	46	39	40	39
6	47	48	39	43	42
7	57	49	60	51	55
8	49	48	50	55	51
9	51	47	40	51	46
10	49	56	53	50	53
11	49	48	48	40	44
12	45	52	47	53	48
13	49	54	47	50	49
14	47	46	50	49	45
15	36	38	48	49	41
16	47	48	33	43	41
17	50	50	50	51	51
18	49	50	40	46	44
19	49	50	40	49	45
20	45	43	46	49	43
21	40	46	46	38	40
22	53	54	56	55	57
23	43	46	40	43	41
24	47	50	49	39	44
25	47	46	40	43	42
26	38	36	36	35	33
27	43	52	48	46	45
28	51	56	53	46	52
29	43	40	26	27	31
30	43	46	53	40	43

Table 7

Self-Concept Results of Low P/N Ratio Group

PUPIL NO	SELF-CONCEPT SCORES				
	SELF	MOTHER	TEACHER	PEER	TOTAL
31	33	40	39	35	33
32	30	36	26	37	29
33	45	46	36	33	36
34	53	50	46	55	52
35	53	54	50	51	54
36	33	40	46	35	35
37	43	30	26	30	29
38	40	36	36	30	32
39	38	40	39	40	37
40	47	46	36	35	35
41	47	50	46	43	44
42	49	54	50	51	52
43	38	50	40	39	42
44	38	46	36	39	36
45	38	43	31	23	30
46	50	52	48	49	49
47	49	40	39	40	41
48	48	46	50	43	44
49	45	48	40	46	43
50	50	52	46	43	46
51	33	30	39	39	32
52	50	54	46	35	44
53	47	54	56	43	49
54	53	54	31	52	47
55	51	46	39	50	45
56	36	43	31	50	37
57	36	46	46	49	42
58	49	33	28	43	35
59	45	30	23	43	33
60	43	40	40	23	33

Table 8

Self-Concept Results of Pupils of Teacher Showing
High Degree of Involvement

PUPIL NO	SELF-CONCEPT SCORES				
	SELF	MOTHER	TEACHER	PEER	TOTAL
61	50	52	40	50	47
62	49	48	43	50	45
63	47	46	48	55	48
64	45	46	40	46	42
65	51	54	46	51	51
66	50	59	53	50	54
67	47	50	46	37	43
68	49	43	43	46	43
69	51	56	48	40	49
70	49	52	46	50	48
71	47	50	48	39	43
72	49	48	48	49	46
73	38	38	33	30	31
74	43	28	31	43	33
75	47	48	44	45	45

APPENDIX C

THE THOMAS SELF-CONCEPT VALUES TEST

Thomas Self-Concept Values Test

The Thomas self-concept values test consists of fourteen bipolar adjectival items (see figure 5). S's are asked to report their perceptions of themselves and their perceptions of their mothers', teachers', and peers' perceptions of them on each of the fourteen items. All items are presented in an either - or format, the more socially keyed choice being scored +1 while the less socially keyed choice is scored -1. The responses are scored on a special answer sheet (see figure 6) as the pupil responds.

The horizontal rows are totaled to give the self-value scores and the vertical columns are totaled to give the self-concept scores. These raw scores are then converted into standard scores by reference to the standard scales. The standard scores are then transferred to an individual profile sheet to facilitate easy comparison (see figure 7).

Figure 5

Keyed Weights for Self-Concept Value Scores

ITEMS	KEYING WEIGHTS
1. Happy - Sad	+1, -1
2. Big - Little*	+1, -1
3. Like to play with other kids - Not like to play ...	+1, -1
4. Smart - Not very smart	+1, -1
5. Like other kids to play with his things - Not like other kids to play ...	+1, -1
6. Like to be with men - Not like to be with men	+1, -1
7. Scared of a lot of things - Not scared ...	-1, +1
8. Scared of a lot of people - Not scared ...	-1, +1
9. Strong - Weak*	+1, -1
10. Clean - Dirty	+1, -1
11. Well - Sick	+1, -1
12. Goodlooking - Not goodlooking	+1, -1
13. Want a lot of things - Not want a lot of things	-1, +1
14. Like to do what others say - Not like to do ...	+1, -1

*Reversed for girls

Figure 6

Individual Record Sheet

Name: Gary Date: March 1st
 Age: 9y 1m

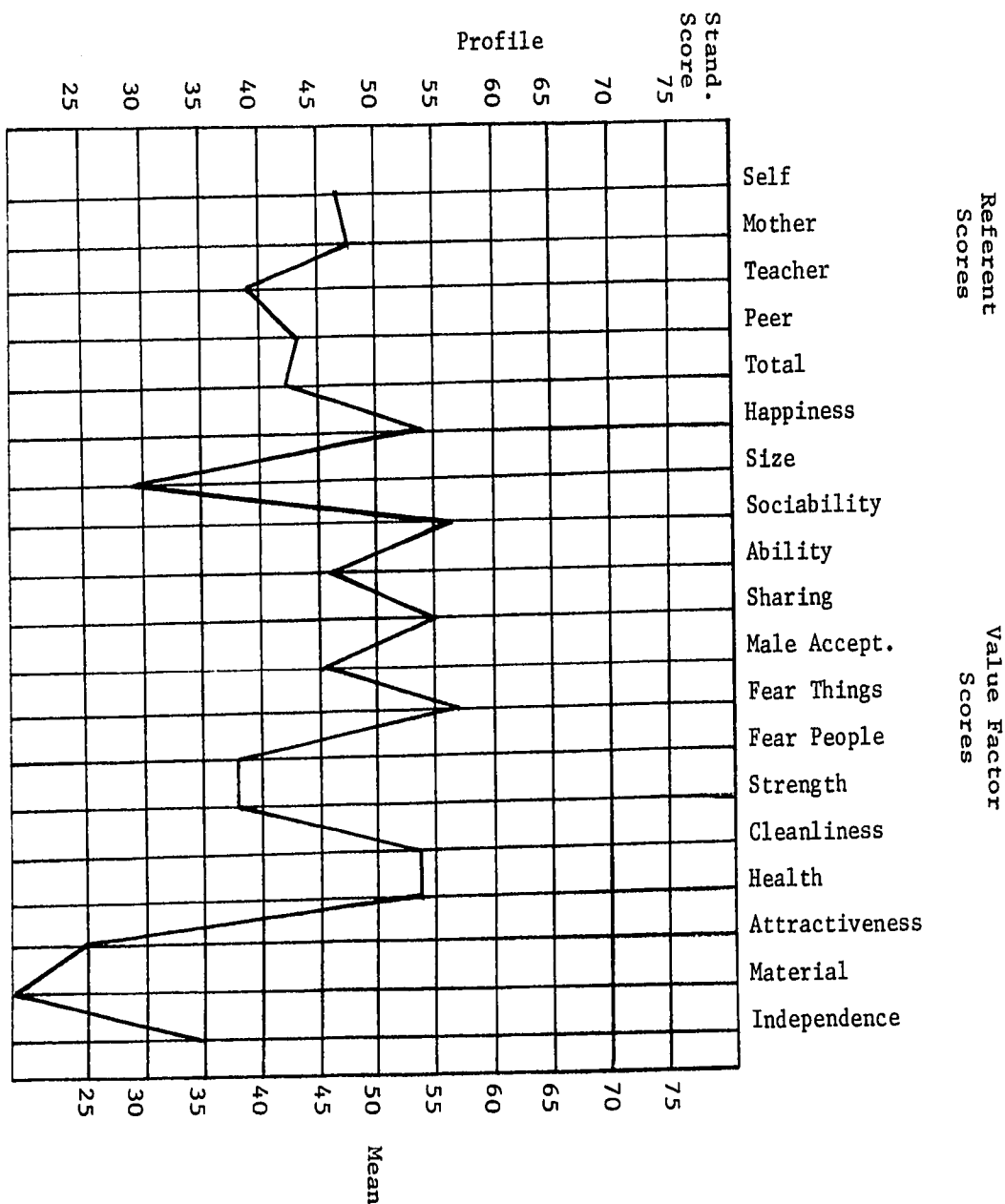
SELF-CONCEPT VALUE SCORES	SELF AS SUBJECT	MOTHER	TEACHER	PEER	VALUE SCORES	
					RAW	STAND.
1. Happiness	+1	+1	+1	+1	+4	54
2. Size	+1	-1	-1	-1	-2	29
3. Sociability	+1	+1	+1	+1	+4	56
4. Ability	-1	+1	-1	+1	0	46
5. Sharing	+1	+1	+1	+1	+4	55
6. Male Accep- tance	+1	+1	0	0	+2	45
7. Fear Things	+1	+1	+1	+1	+4	57
8. Fear People	+1	+1	-1	+1	+2	48
9. Strength	-1	+1	+1	+1	+2	48
10. Cleanli- ness	+1	+1	+1	+1	+4	54
11. Health	+1	+1	+1	+1	+4	54
12. Attractive- ness	-1	0	0	0	-1	25
13. Material	-1	-1	0	-1	-3	19
14. Independ- ence	+1	-1	+1	-1	0	3
Raw Score	6	7	5	6	24	
Standard Scores	47	48	39	43	42	

Figure 7

Individual Profile Sheet

Name: Gary

		Self	Mother	Teacher	Peer		
Referent Scores	Raw	6	7	5	6	Total Self- Concept Score	24
	Stand.	47	48	39	43		42



APPENDIX D

THE PUPIL INTERVIEW

The Pupil Interview

1. Do you like physical education?
 - (a) What parts do you like?
 - (b) What parts don't you like?
2. Are you a member of any community league programme?
 - (a) Do you play in a competitive team?
 - (b) Do you play just for fun?
3. (a) What do you feel like when the teacher asks you to demonstrate something and you can't do it?
 - (b) What do you feel like when the teacher asks you to demonstrate something and you do it well?
4. Does your teacher often tell you that you have done something well?
5. When you are taking part in physical education do you try and do better than your class mates?
6. Does your teacher ever make faces when you do something badly?
7. Are your mother and father interested in sport?
8. Do you ever tell your mother and father what you did in physical education?
9. What sorts of things do they say when you tell them?

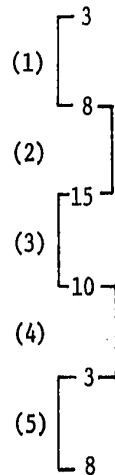
The interview will then be directed by the pupil's responses to the standardised test previously administered.

APPENDIX E

TEACHER STYLES

Teacher Styles

In order to arrive at a typical style of teaching for a particular teacher the temporal patterning of the behaviours exhibited by that teacher must be considered. In order to do this the teacher behaviours as exhibited by Robbins instrument for observing teacher behaviours in elementary school physical education are consecutively paired and plotted on the matrix. Thus if a response pattern were as follows the behaviours would be paired as shown:



These pairs would be entered into the appropriate cells on the matrix, these cells being: (1) 3-8 (2) 8-15 (3) 15-10 (4) 10-3 (5) 3-8.

The matrix is read from the vertical scale first and the horizontal scale secondly.

In order to arrive at a typical teacher style the cell with the greater number of tallies is considered as the behaviour most likely to occur first. The cell with the next highest number of tallies is considered as the behaviour most likely to occur secondly. This is continued for all significant teacher behaviours. For ease of reading these

teacher behaviours are transferred to a separate diagram (see figures 3 and 4) and arrows drawn from the most often occurring teacher behaviour to the second most often occurring teacher behaviour and so on until the least occurring teacher behaviour is reached. The diagram so arrived at represents the most likely temporal patterning of particular teacher behaviours in a particular teaching cycle.

Table 9 represents the matrix obtained by combining the teacher behaviour of the two high P/N ratio teachers as identified by the Robbins instrument. Table 10 represents the matrix obtained by combining the teacher behaviours of the two low P/N ratio teachers as identified by the Robbins instrument.

