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WITH LEARNING DISABILITIES: A COMPARATIVE
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WITH LEARNING DISABILITIES:

A COMPARATIVE STUDY

A DISSERTATION

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Norman, Oklahoma

1971

THE SELF-OTHER ORIENTATIONS OF CHILDREN
WITH LEARNING DISABILITIES:
A COMPARATIVE STUDY

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THE SELF-OTHER ORIENTATIONS OF CHILDREN

WITH LEARNING DISABILITIES:

A COMPARATIVE STUDY

CHAPTER I

INTRODUCTION AND PROBLEM

Since the 1940's there has been a steady increase in the attention given to a certain group of children who exhibit characteristic behavior and require special educational techniques. The characteristics of these children do not match the characteristics of children who in the past have received special education: those children who are mentally retarded or physically handicapped. This new pattern of behavior has been assigned a succession of labels and is currently designated as learning disabilities which are associated with neurological dysfunction. The characteristics which are used as a basis for differential diagnosis of a child as having a neurological dysfunction and learning disabilities vary with the specific clinical setting. However, there appear to be certain patterns of functioning which occur with sufficient frequency to be recognized

as diagnostic criteria. Birch states that in a child of school age the referral for clinical attention may be based upon all or any patterning of the following:

Disordered behavior. The child will often be described as overactive. But on closer questioning the amount of motor behavior may be found to be no greater than that found in a normal child of the same age. It is troublesome to parent or teacher because it is activity without clear direction, focus, or object. Its direction shifts from instant to instant and the actions may best be described as irrelevant and repeatedly tangential.

Short attention span. As in gross motor behavior, so too in perception and thinking the child's engagement is often fleeting and his concern shifts apparently at random from one aspect of the environment to another. . . . Yet on other occasions the same child may be perseverative. . . . Attention may best be characterized as capricious - now will-o'-wisp and again fixed with glue-like intensity upon socially irrelevant and educationally impertinent aspects of the environment.

Emotional lability. Conduct is "dramatically unpredictable" and is characterized by rapid shiftings of mood and affective expression. Tantrum behavior characteristic of much younger age levels is not uncommon, and relatively minor changes in routine or moderate demands can provoke marked outbursts of rage, grief, and aggressiveness.

Social incompetence. Frequently the child is described as functioning at a social level which is significantly below his age and often far lower than his estimated intelligence. In play with other children his level of fine motor coordination is below that of his age mates and in ordinary children's games he is awkward, clumsy, and inept. Social failure may produce aggressive behavior, tears, withdrawal, or all of these either in sequence or pattern. Other children call the child "queer" and actively avoid his company.

Defective work habits. Effort is often described as markedly varying in its quality. Some tasks are pursued

ad nauseum while others receive only intermittent and unevenly energized notice. Direction of effort appears unrelated to what the teacher seeks to stimulate and often seems to be determined by egocentric caprice or by negativistic reaction to instruction.

Impulsiveness and meddlesomeness. The child is apparently unable to refrain from touching, moving, and handling objects, especially in a new environment. Meddling may extend to rougher handling and, when over-stimulated, the child may be destructive. Lack of inhibition may extend to all aspects of social functioning and be reflected in unacceptable sexual displays, unprovoked aggressions, and verbal outbursts.

Specific learning disorders. Reading at a competence that is below age level, marked discrepancy between skill in oral reading and the comprehension of what is being read, difficulty in grouping concepts and in mastering arithmetic, general incapacity in dealing with abstractions, or poor transfer of learning from one context to another may each constitute the basis for referral (Birch, 1964, pp. 10 & 11).

The topic of learning disabilities has been studied by disciplines as diverse as neurology, psychology, physiology, education, pediatrics, and psychiatry.

School systems throughout the country are now becoming aware of the needs of this group of children and the topic of learning disabilities has become a major field within special education. The emphasis in developing and evaluating such programs has centered on the academic status of the incoming child and the effect of the program on his academic progress. It should be recognized that progress

or achievement is certainly not determined by any one variable. While most special programs are evaluated by intelligence and achievement tests, few attempts are made to provide assessment of self or social development. This is paralleled in the learning disabilities research literature by a paucity of investigation aimed at investigating relevant personality variables of the students involved in the programs and the effect of such learning experiences on the student's self-structure.

The lack of attention to personality variables may be a function either of the lack of reputable diagnostic instruments appropriate to the population or of the lack of information on the part of the administrators and teachers as to the possible importance of self variables to academic adjustment and progress.

Research tends to support the position that self concept plays a significant role in determining behavior. Woolner (1966) points out that at an early age a positive self concept tends to produce positive behavior such as accepting one's self, making appropriate adjustments, and achieving in school, while a negative self concept produces unacceptable behavior such as uncooperativeness, under

achievement, and maladjustment. Such findings have been repeated in research with subjects of various ages (Reeder, 1965; Fink, 1962; Brookover, 1965; Williams & Cole, 1968; and Mehta, 1968).

It would seem imperative that the personality dimension of students in the special programs be given at least equal attention to that given to their academic status and progress, especially since Brookover (1969) and others have demonstrated that at least some aspects of the two are closely related.

The present investigation applies a non-verbal method to the study of the self concept of children with learning disabilities. It is a comparative study of three groups of subjects: children with learning disabilities who are in special classes, children with learning disabilities who have been identified and not placed in special classes and children who are average achievers in regular classrooms.

The research instrument used in this study was developed by Ziller (1967; 1971) and has been frequently reported in the literature of the last five years. Reasoning from G. H. Mead's (1934) symbolic-interactionist theory of self, Ziller developed a theory of personality in which the self,

considered as a perceptual agent, is defined in terms of interpersonal orientations. Based on this theory Ziller (1967; 1971) proposed nine components of self-other orientation and developed the Social Orientation Tasks to measure these components. The scales of this instrument, which are primarily non-verbal in character, were used to ascertain the self-social constructs of students who hold membership in one of the three groups investigated.

Review of the Literature

The review of background literature for this study will consist of two parts: first the conceptual framework from which this study arises will be discussed, and secondly the rationale for the instrument used will be developed.

The self concept serves a variety of functions depending upon the theoretical orientation of the various psychologists studying it. Rogers states that the ". . . self concept or self-structure may be thought of as an organized configuration of the perceptions of the self which are admissible to an awareness. It is composed of such elements as the perception of one's characteristics and abilities, the percepts and concepts of the self in relation to others and to the environment" (Rogers, 1951, p.102). English

and English define the self concept as the ". . . 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 object of his own self-knowledge, but his feeling about what he conceives himself to be is usually included" (English & English, 1958, p. 486).

Dinkmeyer holds that ". . . the self is one's inner world. It results from evaluational interaction with others, becoming the consistent personal perception of 'I' and 'me'. The child's perception of the reflected attitudes and judgments of those who compromise his world serves as the foundation for the formulation of self" (Dinkmeyer, 1965, p. 43).

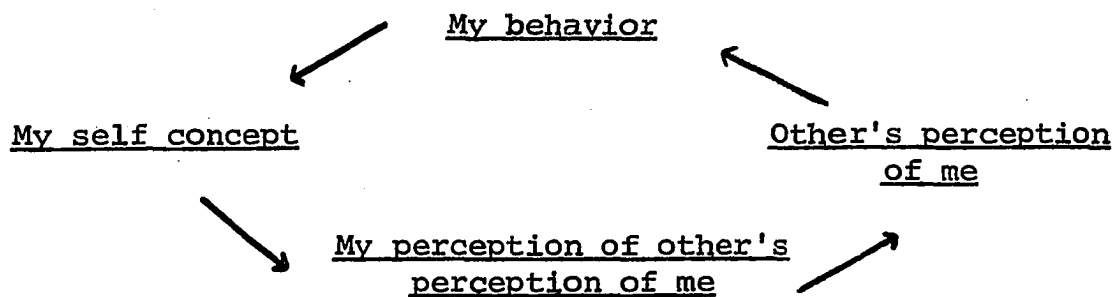
These definitions suggest that an individual forms impressions of himself as the result of perceptual feedback from others. This suggests that such feedback is accompanied by evaluative information about self, as in the concepts of Charles Horton Cooley which have been refined by other social psychologists. For instance, Margaret Mead (1955) considers the self as a social structure deriving from a social experience. For her, the individual child experiences himself from the reflected views of the group. Ausubel (1957) indicates that development of the

ego comes from the continual interaction of social experience and the already existent personality structure, mediated by perceptual responses.

Sullivan (1947) stressed the role of significant others in the formation of self concept. He begins by placing emphasis on the child's mother, but the theory is broad enough to expand to significant people with whom the child comes in contact. The self concept could therefore be seen as being partially determined by the way in which the child perceives certain crucial social experiences. The earliest experiences are with mother, family, and school (both teacher and peers); eventually they are expanded to others.

G. H. Mead (1956) discussed the process by which self concepts develop. He is an interactionist; his theory holds that self-awareness develops out of social interaction, "The self is something which has a development; it is not initially there, at birth, but arises in the process of social experience and activity, that is, develops in the given individual as a result of his relations to that process as a whole and to other individuals within that process" (G.H. Mead, 1934, p. 135). G. H. Mead also states that the individual experiences himself only indirectly,

from the particular standpoint of other individuals of the same social-group or from the generalized viewpoint of society to which he belongs. In other words, the individual becomes an "object" to himself by taking on the attitudes of others toward him. This theory could be represented by the following model (Brookover, 1964):



This cause-effect model moves clockwise. It begins with "other's perception of me" and can be considered a continuous process. This is Cooley's version of self as that which is seen in the "looking glass" of other's perceptions.

Brookover (1969) suggests that an individual possesses a "self concept structure" which is made up of all the attributes by which we characterize ourselves. These develop out of interaction with significant others and can vary with situations. An individual is seen by Brookover as having self concepts and no single summarizing statement about an individual's concept of self can therefore be appropriate.

G. H. Mead sees self concepts arising both as a function of relations with both other individuals and the organized community to which he belongs. This community he calls "the generalized other". The generalized other provides the individual with a set of social values against which he compares his own characteristics.

Among these "others" there is a hierarchy of influence. Highest in influence would be Sullivan's "significant others," whose appraisals are reflected in the child's development of self concept. The individual is influenced significantly by those who hold importance for him.

Rappaport (1969) employs an interactionistic framework to discuss the development of self in a normal child and contrasts it to that of a child with brain dysfunction.¹ He points out that in the normal development of self, given a reasonably wholesome environment, the child is able to

¹The terms brain dysfunction, brain injured, and perceptually disturbed are used interchangeably in this paper. This reflects the literature in the area of learning disabilities. Although, as McCarthy and McCarthy (1969) point out, there is no clear professional consensus on terms, the term learning disabilities began appearing with regularity in the early 1960's largely as a substitute for brain-injured.

experience developmental success which provides for somewhat positive feelings toward self and give's rise to a concept of "I am one who can". As mastery over his body occurs in the form of walking, talking, feeding himself, etc. child is provided with many opportunities to be pleased with himself and to be a source of satisfaction to his mother. As a result of both the child's inner feelings about his accomplishments and ability to cope and the environmental approval of him, the child's feelings of self-worth are nurtured. From this base he can develop healthy identification patterns with significant others. Through successful interpersonal experiences he can establish higher ego functions such as frustration tolerance and respect for others. By the time he reaches school he has the developmental skills, both social and maturational, to succeed which further increases self-esteem.

Rappaport contrasts such development with that of a child with brain dysfunction:

Because the brain - via the functions of the ego - is the primary organ of adaptation, when its functions are disrupted, the child's total development is disrupted. The electrochemical and biochemical bases for brain functions do not support normal development. They do not provide the hardware that enables the child to explore, interpret, and achieve a sense of mastery

in relation to his environment. In turn, the primary tools needed by the ego to function appropriately do not develop properly. Then the higher ego functions, which develop from the child's interactions with his environment, but are rooted in the primary tools of ego function, do not develop properly. Therefore, brain dysfunction itself robs the child of the inherent opportunity to develop effective ego functions in the usual course of growing up. His attempts at mastery result not in success, but in frustration; not in self-esteem, but in self derision; not in a sense of "I am one who can", but in a sense of "I am one who can not" (Rappaport, 1969, pp. 39 & 40).

Such development deprives the child of the ability to stimulate maternal responses or positive responses from his significant others. Instead of pride and love he evokes frustration and anxiety which begins early and follows through his developmental stages. Rappaport argues that these feelings of frustration and inadequacy within combined with the feelings of tension and rejection from his environment form a non-verbal matrix which will mold his basic concept of himself and the outside world.

Unlike the retarded child, the child with brain dysfunction usually has the intelligence to know what he wants to do in response to his environment; he cannot do it and the frustration and feelings of ineptitude mount. By school age the experiences that have comprised this child's microcosm have been very different from those of average

children. And therefore, Rappaport argues that they have fashioned an ego or self-structure very different from the average child.

Strauss and Lehtinen were among the first clinicians to emphasize a possible disturbance of social perception which is experienced by the child with brain dysfunction.

They stated that:

The perceptually disturbed child may not receive the same image as a normal child does from the same set of stimuli . . . Such a disability results in an endless sequence of perceptual errors or misconceptions of reality . . . This deficiency applies to social perceptions as well as to sensory stimuli (Strauss & Lehtinen, 1947, p. 85).

Lewis, Strauss, and Lehtinen continue:

The brain is the architect of the human personality. If it is damaged, it functions irregularly. In consequence, the performance, the personality and the behavior become irregular. The brain-injured child's physiologically based behavioral anomalies may result in emotional disturbance inasmuch as they increase his environmental difficulties and influence the attitude of others toward him. Since his behavior is more difficult than that of other children in the family, he is corrected more often and more vehemently; it is not surprising if he begins to feel unfairly treated and resentful because of these feelings (Lewis, Strauss, & Lehtinen, 1960, p. 32).

Eisenberg's (1964) writing follows an explicit interactionistic theory of development. He discusses the environmental contributions to self development in the child with

brain dysfunction. He makes the point that, for an adequately endowed child, a wide variety of environments suffice to allow adequate - if not optimal - development. For the disabled child with a reduced adaptive capacity both the number and the types of environments conducive to his development become more constricted. Relevant to the present discussion are Eisenberg's comments on the development of the self structure in children with learning disabilities.

How the child thinks about himself has a major influence on his behavior. The child's image of himself has two main sources: the way he sees others viewing him and what he sees himself as able to do - and hence to be. Other's views are first his parents' views. If they cannot provide the warm acceptance that underlines the sense of personal worth for the normal child, the inner core of his self-concept will be one of worthlessness. His extra-familial experiences with peers and teachers often further self-depreciation as others display impatience with his limitations and shun his company. Even with the good fortune of having sympathetic parents and companions, he must daily face the painful realization of his incompetence at play and at work. No "reassurance" will satisfy him that he is capable as a person when he sees that he is not. . . . Thus, much of the difficult behavior that is seen in association with the brain-damage syndromes stems not from the anatomical deficits but from their social consequences for personality development; . . . (Eisenberg, 1964, p. 70).

Kurlander and Colodny address themselves to the same problem, proposing that the child with perceptual disturbance is:

. . . the child who, instead of, or in addition to academic troubles, has chronic trouble in knowing how to live and talk with other people. . . . We once called the incapacity "a lesion of intuition", thinking that the other needs of these children took precedence over the smooth learning of social techniques. But tests of children and recent research in cognition more convincingly suggest that real immaturity of conceptual and language skills have made it hard for some children to learn patterns and meanings of human interaction exactly as it made it hard to learn arithmetical meaning or to understand proverbs. This child has a defect of social perception like his impairment of visual perception, and equally he has a hard time learning more complex skills which depend on the simpler ones. He lacks self-awareness in the social sense, as he lacks a stable body image. (Kurlander and Colodny, 1969, p. 141).

A conclusion may be made that differences exist in the self structure of children with learning disabilities as compared to normal children. This conclusion appears to be theoretically sound and follows what is known about the psychological development of a child, yet there appears to be no experimental demonstration of the existence of such differences in the literature.

Recognizing that the study of the nature of ego functions in children with perceptual disturbances has been neglected, Rappaport suggested that ". . . to approach the brain-damaged child from the standpoint of ego functioning permits us to study the interaction of neurologic and psychologic factors and provides the opportunity for treating

him more efficaciously as a whole person" (Rappaport, 1961, p. 425).

The type of investigation suggested by Rappaport might give experimental treatment to such questions as "How does the child identified as having minimal cerebral dysfunction and a learning disability differ in his self concept structure from a child considered to be an average achiever?"

"On what dimensions of the self-social structure do differences occur?" "How do the concepts of a child with learning disabilities who has never been in a special class differ from the child who has experienced one or two years in such a class?" "On what dimensions, if any, do such differences occur?" These questions formed the basis for the present study.

Two recent studies bear relevance to this investigation. McCarthy and Paraskevopoulos (1969) investigated the behavior patterns of learning disabled children in comparison to emotionally disturbed and average children. Teacher ratings of each subject's behavior on the Behavior Problem Checklist (Quay & Peterson, 1967) was obtained. This checklist is comprised of fifty-eight items representing most of the common problem behaviors of children referred to child

guidance clinics. The main finding was that teachers perceive and rate the behavior of these three groups of children as different. The study suggests that the typical child with learning disabilities exhibits behavior of a type and level of severity which reliably differentiates him from the other two groups of children. The children with learning disabilities had in common with the emotionally disturbed children certain problem behaviors characterized by restlessness, disruptiveness, fighting, distractibility, etc. They differed in the severity of the problems from the emotionally disturbed subjects who had more severe and more numerous kinds of problem behaviors.

Relevant to the present study is Connolly's (1969) investigation of the psychosocial status of children with a specific learning disability (dyslexia) to determine whether a common personality pattern characterizes these children. Connolly employed projective testing to establish the emotional status of the subjects with learning disabilities and those in a normal group. The findings suggested little difference between the personality organization of the two groups. Such results suggest that, even though reading disability and emotional problems are often found

together, there is no discernable pathological behavior syndrome associated with the diagnosis of dyslexia.

Connolly did find some traits which were associated with the dyslexic group. They tended to respond more impulsively to emotionally laden situations; they were unable to give consideration to the stimuli before acting on it. The projective data also indicated the dyslexic group was less autocritical and frequently did not accept responsibility for their actions.

The next section of this review of the literature develops the rationale for selection of the instrument used in this study. Two assessment devices were used in this investigation. The Social Orientation Tasks (SOT) instrument is used to gain knowledge about the subject's interpersonal orientations on nine different but related dimensions (Ziller, 1967; 1971). A secondary instrument employed to assess social traits as rated by the individual subject's teacher is a rating device developed by Amble (1967). It was also used by him to investigate teacher evaluation as a predictor of school dropouts. The instrument yields a teacher rating of one to five on seven self-social traits.

Historically, self theorists approached self concept as a uni-dimensional construct or attribute of man. Lowe (1961) did a somewhat chronological treatment of the concept of self and identified at least six different schools which have employed a unidimensional self concept to explain human action. Lowe suggests that notions about the self are like other human notions and are inventions not discoveries. The task is not that of discovering the "true self" but instead in constructing those notions which increase understanding of man's behavior. "Just as the number of inventions is potentially unlimited", Lowe argues, "so there need be no limit on the number of constructions put upon the self" (Lowe, 1961, p. 333).

The past two decades have been a time of rebirth of interest in "self" theory as evidenced by the amount of research directed toward this area. Wylie states that:

On the whole, we have found that there are enough positive trends to be tantalizing. On the other hand, there is a good deal of ambiguity in the results, considerable apparent contradiction among the findings of various studies, and a tendency for different methods to produce different results. In short, the total accumulation of substantive findings is disappointing, especially in proportion to the great amount of effort which obviously has been expended (Wylie, 1961, p. 317).

Progress with self research might result from reformulating the construct system. Wylie points out that such characteristics as self-consistency and/or self-actualization have become so overgeneralized they have lost much of their analytic and predictive usefulness. An alternative approach could employ constructs such as self-acceptance or self-esteem or self concept with reference to specific attributes. Such has been the approach taken by a number of recent theorists who have adopted a multi-dimensional view of self concept.

In an attempt to refine and systematize self concept research, Super, (1963) proposed thirteen operationally defined self concept dimensions. These dimensions are of a higher order than dimensions of a trait approach to self-description and hence are called meta-dimensions. Seven meta-dimensions describe characteristics of individual self concepts; the remaining six relate to characteristics of the self concept system, the aggregate of a person's several self concepts.

Kubiniiec (1970) used a multi-dimensional approach to self concept in a study aimed at predicting academic achievement. She attempted to extend the self concept to include

one's perception of components of his environment and suggested a perceptual theory of personality which maintains that an individual's self-system and resulting behavior is a function of his perceptions of himself and of his environment. The self concept would hypothetically vary with the environmental setting. Assessing concepts of self and of the particular environment (for example an academic environment) would enable prediction of an individual's behavior in that environment.

A similar orientation can be seen in the approach of Brookover (1969), who has worked extensively with the self-concept-of-ability dimension. Brookover holds that the individual possesses a self-system which is made up of a number of concepts about self which are relevant to and developed from social situations.

A multi-dimensional approach to the study of self concept was taken by Ziller (1967; 1971) in developing the Social Orientation Tasks. Ziller (1967) suggests that progress with the study of self concept might be made by limiting the scope to self-other orientations which serve to define the self rather than by attempting to isolate and study some underlying mental structure such as a

phenomenological self. The basic tenet of Ziller's self-social theory is that social experiences serve to define the self. Ziller contends that the self is necessarily defined in relation to concrete referents in the immediate social environment. He has proposed nine components of the self-other orientation process of self definition: (a) majority identification, (b) power, (c) self-esteem, (d) identification, (e) social inclusion, (f) self-centeredness, (g) openness, (h) marginality, and (i) social interest. Only the first six dimensions have extensive research history. These six are of major interest in this study; the last three dimensions are included for exploratory purposes.

The self is ordinarily experienced as an integrated whole but for purposes of analysis can be separated into various components. There will naturally be overlap among any such set of components, and so any attempt to mechanically separate various facets of the self will inevitably lead to misconceptions. Although a holistic orientation to self concept is in order, components of self-other orientations are proposed for the purpose of analysis.

Many investigators of the self concept of children have been hampered by the utilization of verbal techniques

of assessment. Not only are such instruments as rating scales and Q-sorts often transparent to the child, but they also seem particularly inappropriate for populations varying widely in age, intelligence, and reading achievement, as in this study. In addition, Kelly has suggested "A person [and especially a child] is not necessarily articulate about the constructions he places upon his world. Some of his constructions are not symbolized by words; he can express them only in pantomime. Thus, . . . we must take into account his subverbal patterns of representation and construction." (Kelly, 1955, p. 16). The SOT has the advantage of being primarily non-verbal in character.

The assumptions underlying the use of the SOT are summarized as follows:

1. Although the self ordinarily functions and is experienced as a whole, it is possible to separate various components of self-other comparisons for the purpose of analysis.

2. The self is defined in relation to concrete referents in the immediate social environment.

3. A child does not verbally symbolize all his interpersonal constructs but expresses some of them in non-verbal form.

4. The SOT is capable of assessing some components which make up the child's self concept through primarily non-verbal tasks.

5. Tasks which require the subject to relate himself to the social environment reflect on his perception of self. The underlying theoretical basis, the non-verbal character, and the multi-dimensional social description of the person are the major rationales for the selection of the SOT.

For the purpose of elaborating hypotheses as well as for a more specific definition of the SOT and the related literature, an abbreviation of Ziller's (1967) discussion of the theoretical formulation of each component of the SOT is presented below:

Self-Social Power Relations Comparison among self and others has been assumed to be the basis of self definition. If the search for self definition is sufficiently intense and extensive, a comparison is required of self and others in terms of some ordering with regard to a given dimension having an evaluative component. One of the significant dimensions of such comparison is power (Adler, 1927; Horney, 1937). It follows that perception will involve a power component as well as an equality component. Figure 1

represents the resulting relationship. The relative emphasis by an individual on either component is presumed to describe his generalized power orientation.

Social Self-Esteem This aspect of self has undergone a large amount of research (Wylie, 1961). Self-esteem is usually defined as the individual's perception of his worth. The self-structure is a result of interaction with significant others in an individual's social world thus self-evaluation emerges largely within a social frame of reference. It would follow then that a change in the individual's social environment would result in a corresponding change in self-evaluation. Ziller proposes that a persons's reaction to the social environment is a function of his self-esteem.

The self concept is seen as a mediating agent between the self-system and social stimuli involving evaluations of the self by others. High self-esteem provides a lag in the response of the self-system so that evaluative stimuli, either positive or negative, do not evoke immediate action by the receiver. The new information is examined and may produce a gradual process of change in the self framework.

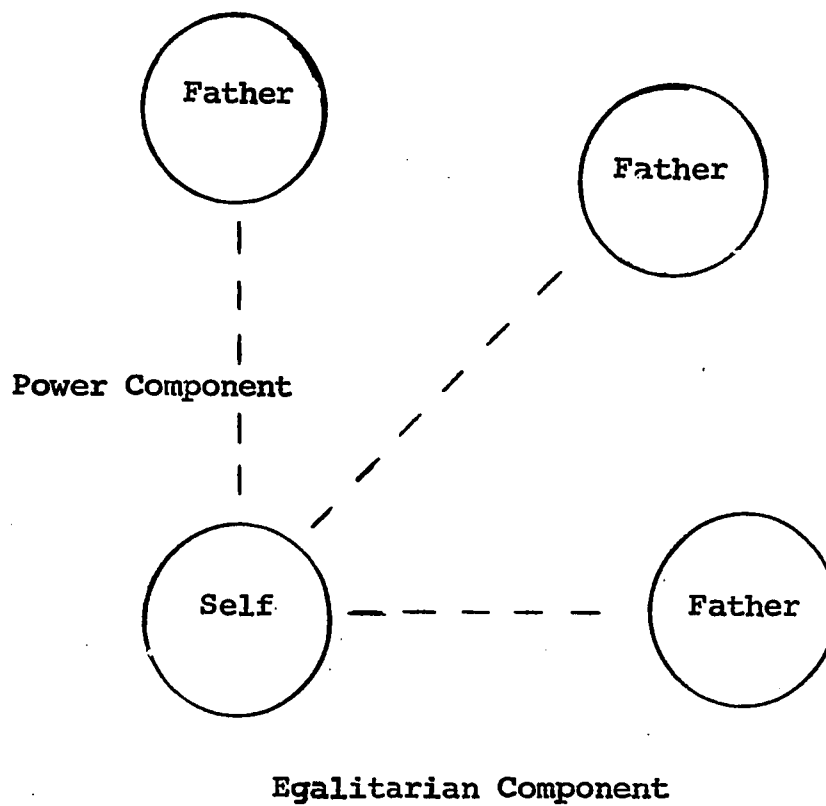


Fig. 1. Hypothesized resolution of conflict between perception of father-self in relation to power and egalitarian forces.

See Task 2 in the Appendix A

Low self-esteem provides no such buffer to evaluative stimuli. The receiver responds in direct correspondence with the stimulus information (Witkin, Dyk, Faterson, Goodenough, & Karp, 1962). Such a self-system tends towards oscillation or inconsistency.

Identification Psychoanalytically orientated theories of personality propose that introjection of the generalized other is the basis of social development as well as the development of a functional self concept. George Mead (1934) extended this viewpoint to suggest the greater probability of stability and adjustment under conditions of multiple identification. Of particular concern is identification with parents. The parents serve as the first model of human behavior for the child. Two major considerations are given to the individual's identification patterns; first, with whom the self is identified and second, the number of identifications. Both are of significance in the description and understanding of personality.

Majority Identification The association of the self with a general majority, or the perception of similarity between self and the majority is presumed by Ziller to be

a significant aspect of self-other orientation. Majority identification is, in a sense, an imperfect indicator of belongingness. Identification with the majority is associated with a sense of control in that one is part of the strength of the greatest number. The social environment is less arbitrary and more predictable and becomes a projection of oneself when the individual identifies with the majority.

Social Inclusion Most personality theorists propose, in one form or another, that most children experience a period of dependent identification with their parents. This is followed by a stage of independence or "negative independence" (Harvey, Hunt, & Schroder, 1961). As the individual's social world enlarges he finds the absolutistic rules established with a single individual prove too rigid to operate effectively under a wide variety of situations. At this developmental stage the individual begins to distinguish himself from other group members, is recognized by other members, and enables other members to locate him among their members. Such development culminates in a stage of retaining self identity and independence while at the same time occupying a position among a group.

Centrality of the Self The inner as opposed to outer orientation of the self has long been a source of controversy. The question of inward-outward directionality of self may be discussed in terms of whether the individual defines the self in terms of others or defines others in terms of the self. Both the self or significant others may be perceived as either the figure or ground. The centrality of the self, or the self as a point of reference in the social field, is presumed by Ziller to be the basis for self-consistency. At the same time when the self is the point of reference, rigidity of the self-system is difficult to avoid. The self oriented person is likely to attend to a fairly narrow band of stimuli. The other oriented person, however, is likely to attend to a wider range of stimuli emanating from a wider spectrum and more heterogeneous group of others.

The SOT, in various forms, has been used as a research tool with a wide variety of populations. Henderson, Long, & Ziller (1965) used a self-social construct approach in studying achieving versus non-achieving readers and found a difference in their self-other orientations. Ziller, Alexander, & Long (1967) used the Self Social Symbol Tasks

to investigate the personality structure of socially desirable (popular) and less socially desirable sixth grade students. The more socially desirable child was found to display higher self-esteem, greater complexity of the self concept, a more equalitarian orientation with at least one significant high status other (teacher) and greater identification with parents. He was less self-centered with regard to friends but more self-centered with regard to a high status other (teacher).

Long, Henderson, & Ziller (1967) studied the self-social correlates of originality in children by means of a number of scales from the SOT. They found evidence that the children high in originality are characterized by particular self and social attitudes. The highly original child identified less with the same sex parent and had a more authoritarian relationship with father and teacher.

Mossman and Ziller (1968) employed only the self-esteem scale of the SOT to study the self-esteem and consistency of social behavior in hospitalized male adults. Presuming that self-esteem is that component of the self-system which is associated with the person's consistency of social response, the authors investigated self-esteem

in relation to the consistency of participation of the subject in a group setting. It was found that subjects with high self-esteem were more consistent with regard to frequency of participation across group therapy sessions.

In a study concerning the social self-esteem component of Ziller's instrument, Carlson made the following general comment:

The theoretical importance of the research problem, the attractiveness of a brief, non-verbal measure of self-esteem, and the unusual richness of supporting construct validation - extending beyond usual college-student samples to include Asian and Western Ss, politicians and psychotics, children and adults - commend this work to the attention of personologists and social psychologist (Carlson, 1970, p.264).

In summary of the background of the problem, the following conclusions can be made:

1. The concepts of self arise out of interaction with significant others as well as generalized others in the individual's interpersonal world.
2. Various theorists have proposed that the child with cerebral dysfunction does not develop the same self-other orientations as the normal child.
3. There is a paucity of research concerning the self-social structure of children identified as having

minimal cerebral dysfunction and learning disabilities.

4. The SOT appears to be a method whereby self-social orientations can be obtained.

5. A number of theorists agree and have demonstrated that a child's self-structure is a major influence on his behavior.

The Present Study

The present study attempts to establish and compare the social orientations of three groups of subjects: children with learning disabilities who are in special classes, children with identified learning disabilities who have not been placed in special classes and children who are average achievers in regular classrooms. Employing the data obtained by means of the SOT and a teacher evaluation form, it is possible to investigate associated hypotheses and research questions.

The following presents a discussion of relevant research results and theory from which the hypotheses of this study have evolved.

The child with learning disabilities usually has a history of "being different" in some area or areas of his development. The typical history is one of academic

failure, behavioral difficulties, and social rejection in varying degrees. It was found that poor academic achievement alone is associated with a concept of self as being unlike the majority (Ziller, 1967). In the child with learning disabilities this is compounded by his entire history of being different, as well as by his being physically removed from his close friends and often his home school in order to be placed in a special class. If the child has not developed a concept of self as being unlike the majority by the time he enters a learning disabilities (LD) class, it would seem that such a view of himself might occur as a result of placement in such a class. Majority identification is presumed by Ziller to be associated with a sense of control over one's environment. It would seem that identification with the majority reflects a degree of dependence and an identification with the strength of the majority. It may be hypothesized that the children in the learning disabilities category will more often see themselves as different from the majority than will children in group of average achievers.

It was found (Ziller, 1967) that less intelligent subjects show lesser degrees of identification with family

on the SOT. They locate themselves in positions more distant from "father" or "mother". This suggests that since the less intelligent child may reflect in a relatively negative fashion on the parents he may be less accepted by them. He then may be less able to identify with his parents.

It would seem that such identification patterns would also exist in children with learning disabilities. From infancy these children present lags in development which can generate frustration and concern in the parents. The child is the source of a great deal of concern, effort, and expense when the parents begin to look for assistance in understanding and dealing with the problems which the child presents. The parents may have experienced disappointment and embarrassment when their child has been unable to learn to read or when they have been repeatedly contacted by the school because of their child's behavioral difficulties. Often the parents have been led to believe the child's performance or behavior is due to some failure on their part. Such experiences do not tend to be a very positive reflection on the parents' image and may have an effect on the

parent-child relations. It is proposed in this study that the learning disabilities group will identify less with parents than will the average achieving group.

Feelings of self-esteem evolve from interpersonal relations and what Sullivan (1953) calls "reflected appraisals". Experiences of mastery and success and approval go into the making of feelings of high self-esteem. Not only has there been the experience of praise and acceptance for a good job but more importantly there has been the experience of being the source of the success; the feeling of being "one who can" as Rappaport describes it. Such feelings are not present to any large degree in the self-structure of the child with learning disabilities. There have been significant tasks he could not do and praise and encouragement can not replace those missed experiences or accomplishments. It would follow that the child with learning disabilities would have a lower self esteem than the child who is an average achiever.

Hypotheses

The following hypotheses were tested:

Hypothesis 1. The groups of children with learning disabilities will identify less with significant others

(parents and teacher) than will the group of average achieving children.

H₀ 1. No significant difference exists among the three samples with respect to their identification with significant others (parents and teacher) on the SOT.

Hypothesis 2. The two groups of children with learning disabilities will identify less with the majority than will the group of average achieving children.

H₀ 2. No significant difference exists among the three sample groups with regard to identification with the majority on the SOT.

Hypothesis 3. The group of average achieving children will score higher on the Self-Esteem Scale than will the two groups of children with learning disabilities.

H₀ 3. No significant difference exists among the three sample groups on the measure of self-esteem on the SOT.

The following research questions were investigated in this study:

1. Do children in the learning disabilities classes differ from children with learning disabilities who have not been placed in special classes on the SOT?

2. Do the children with learning disabilities who are not in special classes perform more like the children in the

special classes or more like the group of average achieving children on the SOT?

3. Are the three groups perceived and rated as different by their teachers?

These hypotheses and research questions, along with some descriptive data concerning the three groups under investigation, will be treated further in Chapters III and IV. Chapter II concerns the methodology of the study in terms of sampling and instrumentation.

CHAPTER II

METHOD

The Sample

Three sample groups of Caucasian prepubescent (age seven through eleven) males were the subjects of this study. All were students in the Oklahoma City Public Schools. The samples met the following specific criteria for inclusion in the study.

Sample I. Children with learning disabilities in special classes (LDP). Subjects for Sample I consisted of 30 boys who: (1) had been identified as having learning disabilities which are associated with neurological dysfunction; (2) had been placed by the Oklahoma City School system in special classes for remediation and training; and (3) had been in the class for not less than one academic year or more than two academic years.

The criteria of identification as a child with learning

disabilities was met by including only those males who met the requirements for placement in learning disabilities classes as set forth by the Oklahoma State Department of Education, which is as follows:

A child shall be eligible for placement only when, on the basis of individual evaluation by a qualified psychological examiner or a medical doctor, he meets the following criteria:

1. Normal or potentially normal intelligence (I. Q. 90 or above). In view of the current concept of the structure of the intellect, care should be exercised in testing so as to sample as many of the factors as possible. If a child cannot score in the normal range on any of the tests used, but the examiner feels the potential is present he may make a special recommendation stating his reasons for suggesting such placement. Final determination of eligibility of special cases shall be at the discretion of the representation of the State Board of Education.

2. There must be some evidence of specific learning disabilities whose etiology can be inferred from psychological or neurological tests; this evidence should be available to support the inference of the presence of some neurological dysfunction.

3. Children whose major problem is emotional in nature are not eligible for placement in a class for children with learning disabilities (Special Education Section and the Oklahoma Curriculum Improvement Commission, 1951) .

The subjects for this sample were drawn from fifteen classes located in seven schools throughout Oklahoma City. A random sample was drawn from those students who met the

criteria of this investigation and whose parents consented to their participation (See Appendix B for parental permission form).

Sample II. Children with learning disabilities who are not in special classes (LDU). Subjects in Sample II, consisted of 30 children who: (1) have been identified as having learning disabilities and (2) are not presently nor have not been in a special class. These children were diagnosed by a number of sources but all met the State of Oklahoma requirements for eligibility. The subjects for this sample constituted the entire number of children on the waiting list for placement in learning disabilities classes in Oklahoma City Schools who met the criteria of this study and whose parents gave consent for their participation. These males were currently enrolled in regular classes located in nineteen schools throughout Oklahoma City.

Sample III. Children with average achievement (AA). Sample III consisted of 30 boys who: (1) have responded to the educational techniques of a regular class and are considered by their teachers to be students of average achievement; (2) are performing on grade level in all

academic subjects; and (3) have never repeated a grade. The subjects for this sample were drawn randomly from those children in two representative schools in Oklahoma City who met the criteria for this study and whose parents gave consent for their participation.

Descriptive characteristics of the subjects. Data regarding the means and ranges were computed for the three samples in relation to the age and number of siblings of each subject (See Appendixes C and D). The results indicated that the groups differ little in their ages or number of siblings.

The pattern of performance on the Wechsler Intelligence Scale for Children (WISC) was tabulated for each subject in the two learning disabilities groups. Clements and Peters (1962) have isolated three principal patterns on the WISC which are most frequently associated with learning disabilities. The WISC results for each subject were fitted to this schema.

The most common pattern (Pattern I), according to Clements and Peters, is scatter in the Verbal and Performance Scales with the final Verbal and Performance I. Q. scores being equal (i.e. falling within the same

range). The second most frequent pattern (Pattern II) is that in which the Verbal I.Q. is higher than the Performance I.Q. The child with this pattern has difficulty with most of the Performance Scale items which often results in the Performance I.Q. falling into the mentally deficient range while the Verbal I.Q. is in the normal range or above. The third or least frequent pattern (Pattern III), according to Clements and Peters, is the reverse of Pattern II with the Performance I.Q. higher than the Verbal I.Q. A child with such a scatter is quite proficient at the performance sub-tests. On the other hand, he has difficulty in expressing himself verbally and usually has specific language disabilities. Tabulations of the patterns for the sixty children with learning disabilities involved in this study yielded totals in the three patterns of 24, 17, and 19, respectively. This would indicate that this sample corresponds to that of Clements and Peters in that Pattern I is most frequent in occurrence but unlike their sample, Pattern II and III occur with about equal frequency. This gives evidence to the fact that the subjects in this study were fairly equally representative of the three major WISC patterns.

The Social Orientation Tasks. A measure of the self-other orientations as perceived by the individual was analyzed from the subjects responses on the Social Orientation Tasks (SOT), (Ziller, 1967; 1971). The SOT possesses construct validity and internal consistency reliability in the projective assessment of perceived relations of self to significant others in the individual's social world. On the children's form of the SOT, which was used in this investigation, the manual (Ziller, 1971) reports reliability coefficients based upon internal analysis, employing the split-half method, for each scale. The coefficients range from .65 on the Self-Centrality Scale to .86 on the Majority Identification Scale and .92 on the Social Interest Scale. Ziller presents an intercorrelation matrix of the self-other orientation measure, excluding openness and marginality. The results indicate that the measures were relatively independent with one exception. He states that, "It must be noted that the highest correlations are found with regard to social interest and power, the key concepts of Adler's framework and Horney's framework" (Ziller, 1971, p. 4).

The research supporting construct validity was mentioned previously in Carlson's (1970) statements about the Self-esteem Scale of the SOT. Construct validation of the SOT includes demonstrations that the various scales of the SOT are related to specific variables as shown in Appendix E.

Administration of the SOT. (See Appendix A for examples of the SOT items).

1. Self-esteem. The subject is presented with a vertical line of six circles. The task is to assign self to one of the circles. The self-esteem score is the weighted position of circles. In accordance with the prevailing cultural norms, positions toward the top are assigned highest scores. There are four self-esteem tasks.

2. Power. The four tasks assessing power require the subject to locate a power figure (teacher or father) in one of five positions relative to self; a) directly above, b) diagonally above, c) horizontal to self, d) diagonally below or e) directly below. Scores of 1 to 5 (5 being the highest position) are assigned to the five positions.

3. Identification. The subject is presented with a row of nine circles with a significant other placed once

in the circle farthest left and once in the circle farthest right. He is then asked on each one to place self in one of the eight other circles. This is repeated for four significant others. The score is the weighted position of self relative to the significant other.

4. Majority Identification. The task designed to assess majority identification requires the subject to mark a circle representing himself within a social field. The subject is given the choice of a self referrent object which is similar to or unlike the majority of the social field. The percentage of the majority ranges from 70 percent of the social field to 100 per cent of the social field.

5. Social Interest. The five tasks on this dimension presents the subject with a rectangular area containing three circles (representing parents, teachers, and friends) arranged as the apexes of an equilateral triangle. He is asked to draw a circle representing self anywhere within the rectangle - only not on top of any of the other circles.

6. Marginality. On the four tasks assessing this dimension, the subject is presented with a piece of paper

on which there is a large enclosed area. Within this area there are two groups of circles marked off to represent two groups of people. The subject is told to draw a circle to represent self anywhere within the larger field. The task is scored on the basis of the placement of self within one of the designated groups or without such groups.

7. Centrality of Self. The six centrality tasks require the subject to draw circles representing both himself and a particular other person within a large circular area. The center of the large circular area is assumed to act as the point of reference for the entire field. The location of the self rather than the other in a more central position is presumed to depict symbolically a focal position for the self.

8. Openness. There are three tasks related to openness. The task requires the subject to view a paper on which there is a circle marked to represent the subject and a varying number of circles drawn to represent "others". He is asked to draw as many or as few lines as he wishes from the circle representing him to the circles representing other people.

9. Social Inclusion. The eight tasks on this dimension present the subject with a paper on which there is a large area marked off by either a circle or a triangle. There are varying numbers of small circles located within and without the large area. The subject is required to select one of the smaller circles to represent self.

Collection of the Data

The subjects were administered the SOT individually in their own school. Due to the young age of some of the subjects and the depressed reading level of others, all instructions were read aloud by the examiner. At the time of testing the examiner obtained information from the subject concerning the number of siblings in his family, his ordinal position within the family and the occupation of the head of his household. The subject's teacher was asked to fill out the Teacher Evaluation Form (TEF) on each child (See Appendix F). Additional data were available on each subject in the form of psychological, neurological and/or group achievement and intelligence test results. A team of five trained examiners was used

to collect the data. It is recognized by the researcher that individual testing of either a research or diagnostic nature has as an inherent problem of the tester or experimenter effect (Rosenthal, 1966). This problem can be minimized but never eliminated. To insure minimum examiner effect in this investigation the following efforts were made:

1. All examiners were of the same sex and race and were within the same age range.
2. All instructions were standardized and read to the subject.
3. All examiners were given a five hour training session by the researcher which included step-by-step introduction to the administration and scoring of the SOT, observations of each team member administering the SOT to a child with learning disabilities and drill on scoring the observed tests.
4. During the training period the examiners used in this investigation demonstrated both verbally and in performance a general consensus of approach in relating to children.

5. Each examiner tested subjects from all three sample groups.

Upon completion of the testing each examiner scored the tests she had given and entered the information from both instruments on the individual Scoring Form (See Appendix G). To insure consistency, at least one item from every scale on each subject's test was checked for scoring by the researcher.

The analysis and results of the data obtained by the methods discussed in the present chapter will be presented in Chapter III.

CHAPTER III

RESULTS

Preparation of Data for Analysis

The data from the SOT and TEF were coded and each subject was given a three digit number which designated his group and which served as his subject number for the remainder of the experiment. Descriptive data obtained on each subject were coded and were recorded. (See Appendix H).

Investigation of Sample Characteristics

Information concerning the birth order of each subject in all three groups was tabulated (See Appendixes I and J) and differences were found. The LDP and LDU groups were combined to represent a single sample of children with learning disabilities and were compared with the AA group in terms of the number of subjects falling into each of four ordinal positions: only, oldest, youngest, or middle child. It was found that the two groups differ significantly ($\chi^2 = 4.24$, $df = 1$; $p < .05$) on the positions of youngest and oldest in that 41 per cent of the children with learning disabilities were last born of two or more siblings (youngest) as compared to 20 per cent of

the children with average achievement. The majority of children who were average achievers were fairly evenly distributed between the position of middle child or first born (oldest). This finding will be discussed further in this chapter in relation to self-esteem.

Information on file with the schools concerning the occupation of the parent or parents of children involved in this study was not considered of sufficient definitiveness to allow valid classification and statistical treatment. At the time of testing the individual subject was asked the occupation of his parent; these were recorded by sample groups (See Appendix K) and upon inspection appear to be equally representative.

Analysis of Data Concerning the Research Hypotheses

Hypothesis I. This hypothesis stated that no significant difference exists among the three subject samples with respect to their identification with significant others (parents and teachers). The items involved were those of three of the identification scales:

1) Identification-with-Mother, 2) Identification-with-Father, and 3) Identification-with-Teacher. In the administration of the SOT, two items are presented for each identification scale which yield a score on each presentation of from two to sixteen with two being minimum identification and sixteen being maximum identification (See SOT scoring in Appendix L). For purposes of analysis the two scores on each scale were combined and the mean for each scale was calculated. The result was a combined score for each subject on each of the three identification scales under investigation. These were totaled and the mean for each of the samples was used in the final analysis.

In order to test the proposition of no existing differences among samples, a 1 X 3 Analysis of Variance was computed for each identification scale. The .05 level of significance was designated. The results of the analysis indicated that the three groups did not differ significantly from each other in their identification scores with regard to significant others. Although the mean scores of the three sample groups did not differ significantly on the Identification-with-Mother Scale, there was

a difference among the groups in their pattern of identification with mother. This had to do with an inconsistency of response on the part of the learning disabled group between the placement of self in relation to mother on the first item versus the placement of self on the second item. A consistent response pattern is the placement of self in approximately the same location with regard to mother on both items. A response pattern was considered inconsistent if: 1) it fell below the mean position on one item and above the mean on the other item, and 2) if the scores were at least two points apart. Inconsistency of response to this item was present in 40 per cent of the LDU subjects as compared with 30 per cent of the LDP subjects and 17 per cent of the AA subjects. The differences between the LDU and AA groups was significant ($\chi^2 = 4.02$, $df = 1$; $p < .05$). This is to say, the LDU group demonstrated significantly more inconsistency in their identification-with-Mother response on the SOT than did the AA group. This was not true of the LDP group whose performance was not significantly different from the AA group.

All four identification scales, the three under discussion plus the Identification-with-Friend Scale, for each of the three groups were placed into a 3 X 4 matrix and an Analysis of Variance performed (See Table 1). The significant F value on the scales on (T) effect was followed by multiple comparisons of the total scores within that variable. Inspection of the data indicated the differences resulted from a low Identification-with-Teacher score relative to the other identification scores for all three groups. This result led to a contrast (Winer, 1962) between the total for the teacher identification scale versus the averaged totals of the other three scales. The contrast resulted in $F_c = 25$, $df = 1/348$; $p < .01$. The significant finding from the results presented in Table I was that all three groups had significantly lower scores on the Identification-with-Teacher Scale than on the other three identification scales.

TABLE 1

Analysis of Variance of Identification Scores with Mother, Father, Friend, and Teacher for the Three Sample Groups

Source	df	MS	F	p
Group (S)	2	.85	.058	NS
Scales (T)	3	126.37	8.69	<.05
S X T	6	9.81		
Error	348	14.54		

In other words, identification with teacher was significantly lower for all three groups. This will be discussed further in Chapter IV in relation to the teacher rating of all three groups.

Hypothesis II. The second hypothesis stated that no difference exists among the three sample groups with regard to identification with the majority on the SOT. The items involved in this analysis were those on the two majority identification scales. Each scale consists of four items with a field containing ten circles. A given percentage of the circles on any one item was designed to represent a majority. The percentage ranges from 70 per cent to 90 per cent. The first set of items (Majority

Identification A) contained four items with the following percentage of majority: 90 per cent, 70 per cent, 70 per cent, and 90 per cent. The second set of items (Majority Identification B) contained four items with the following percentage of majority: 80 per cent, 70 per cent, 70 per cent, and 80 per cent. Each item is scored zero or one with one indicating the choice of a circle similar to the majority. The scores for each set of items were totaled with the final result being two majority identification scores ranging from zero to four for each subject. The two sets of scores were kept separate for purposes of analysis.

A 1 x 3 Analysis of Variance was performed on both of the majority identification scales with the results reported in Table 2 and Table 3.

TABLE 2

Analysis of Variance of Majority Identification Scale A

	df	MS	F	p
Between groups	2	0.266	.118	NS
Within groups	87	97.333		
Total	89	97.599		

TABLE 3

Analysis of Variance of Majority Identification Scale B

	df	MS	F	p
Between groups	2	1.488	1.145	N.S
Within groups	87	56.332		
Total	89	57.821		

As a result of this analysis, the hypothesis of no difference between the three groups on identification with the majority was not rejected. The majority identification scales did not differentiate among the three groups.

Hypothesis III. The third hypothesis stated that no difference exists among the three sample groups on the measure of self-esteem. The data used to test this hypothesis came from the set of four items on the SOT which assess self-esteem. Each item was scored from one to six. The scores on the four items were totaled to give each subject a single self-esteem score ranging from four to twenty-four. The self-esteem scores were analyzed by a 1 X 3 Analysis of Variance (See Table 4). The

TABLE 4

Analysis of Variance of Self-Esteem Scale

	df	MS	F	p
Between groups	2	34.1340	0.258	NS
Within groups	87	21.3256		
Total	89			

differences between the mean scores for the three groups were not statistically significant, and thus Hypothesis III cannot be rejected.

The pattern of responses to the four items on self-esteem was investigated. The items in this scale are identical and are interspersed throughout the SOT test booklet. A consistency of response from item to item would be expected. The pattern for each subject in all three groups was tabulated as being either consistent, with no more than three points discrepancy between the highest self-rating and the lowest rating, or inconsistent. The percentage of subjects within each group which had inconsistent patterns of response to the self-esteem items was as follows: Group I (LDP) 30 per cent, Group II (LDU) 56 per cent, and Group III (AA) 27 per cent. A chi

square was computed and the results are presented in Table 5. The differences in the groups in terms of their pattern of responses were statistically significant. The AA and LDP groups were more consistent in their responses to the self-esteem items than was the LDU group.

TABLE 5

Chi Square Value for Differences on Response Patterns to the Self-Esteem Scale

Scale	χ^2	df	p
Self-esteem	6.63	2	<.05

Further analyses of the Self-Esteem Scale were performed. The first involved the relationship between the subject's self-esteem and his identification with father. A bivariate frequency distribution indicated a positive trend between the two sets of scores. The correlation coefficient between the subject's self-esteem score and his Identification-with-Father score was calculated for each group and the results are shown in Table 6.

TABLE 6

Correlation Coefficients Between Self-Esteem Scores and
Identification-with-Father Scores

Group	r	df	p
LDP Group	.32	28	NS
LDU Group	-.05	28	NS
AA Group	.34	28	NS

The correlation coefficients for the LDP and AA groups were not significant however they approached significance ($p. < .10$). The LDU group demonstrated a low negative correlation between the two sets of scores.

The final treatment of the self-esteem scale involved an intra-group analysis of the subjects within each group divided into the following ordinal categories: youngest, middle, and oldest child among two or more siblings. The mean self-esteem score was computed for each of the three ordinal categories within each of the three groups. Table 7 demonstrates the results of such tabulation.

TABLE 7

Self-Esteem Scores by Ordinal Position
for the Three Sample Groups

Position	N	\bar{X}
LDP Group		
Youngest	16	18.0
Middle	5	11.8
Oldest	8	15.7
LDU Group		
Youngest	9	15.7
Middle	12	15.4
Oldest	7	17.4
AA Group		
Youngest	6	17.8
Middle	11	16.9
Oldest	12	14.3

Each group appears to have a different pattern of scores. Within the LDP group the subjects in the middle child category have the lowest self-esteem score (11.8) with the youngest child category having the highest score (18.0).

The mean scores of the three categories in the LDU group are essentially the same while the AA group have a pattern of lowest self-esteem among the oldest or first born with the youngest and middle child categories having about

equal means. No statistical analysis of these data was performed and implications for future research of this variable will be discussed in Chapter IV.

Analysis of Data Concerning the Research Questions

Research Question I. Do children in the learning disabilities classes differ from children with learning disabilities who have not been placed in special classes on the SOT? The first research question was concerned with a comparison between subjects in the LDP and LDU groups. The data for the analysis of this question consisted of the scores of the LDP and LDU groups on those SOT scales not involved in the analyses of the research hypotheses. Two sets of analyses were performed. The first consisted of tests computed between the means of the two groups on the Power and Openness Scales. As indicated in Table 8 there was no significant difference between the means of the LDP group and the LDU group on the Power Scale.

TABLE 8

t-Value of Difference Between the LDP Group and the LDU Group on the Power Scale of the SOT

Group	\bar{X}	s^2	t	df	p
I	12.5	9.3	.038	58	NS
II	12.2				

TABLE 9

t-Value of Difference Between the LDP Group and the LDU Group on the Openness Scale of the SOT

Group	\bar{X}	s^2	t	df	p
I	20.3	18.58	3.08	58	<.01
II	16.8				

Table 9 presents the results of the LDP and LDU groups on the Openness Scale. The differences between the two groups was significant ($p < .01$). As indicated, the LDP group

scored significantly higher than the LDU group on the Openness Scale.

The second set of analyses consisted of chi squares computed between the LDP and the LDU groups on the following scales: Centrality, Social Inclusion, Social Interest, and Marginality. The results are shown in Table 10. The two groups differed significantly only on the Social Inclusion Scale. The majority of subjects in the LDU group scored above the mean on social inclusion. They located themselves within as opposed to without the social field significantly more often than did the LDP group.

TABLE 10

Chi Square Values for Differences Between Group I and II
on Four SOT Scales

Scale	χ^2	df	p
Centrality	.958	1	NS
Social Inclusion	10.000	1	<.01
Social Interest	2.41	1	NS
Marginality	1.98	1	NS

A summary of the analysis involving Research Question I is that the subjects in the LDP and LDU groups differ significantly on the Social Inclusion and Openness Scales of the SOT. No significant differences were found between the two groups on the measures of Marginality, Social Interest, Centrality, or Power.

Research Question II. Do the children with learning disabilities who are not in special classes perform more like the children in the special classes or more like the children who are average achievers on the SOT? The treatment of this question will be a summary of the previously expanded analyses of the data as they relate to the group under consideration; the LDU subjects.

With regard to the Identification scales it was demonstrated that there was a difference among the groups with regard to their response patterns on the scale assessing identification with mother (See Table 11). The LDU group was unlike the AA group in that a significantly greater percentage of LDU subjects exhibited inconsistency in identifying with mother than did the AA group. The LDU group also exhibited greater inconsistency than the LDP group although the difference was not significant.

On the measure of self-esteem the LDU group was significantly different from the LDP and AA groups (See Table 5) on their pattern of response to this scale with the LDP and AA subjects demonstrating greater consistency in rating self.

The analyses with regard to the other SOT scales did not result in differences which would relate to this question.

TABLE 11

Chi Square Values for Differences Between Groups on the
Identification-with-Mother Scales

Groups	χ^2	df	p
LDU versus AA	4.02	1	< .05
LDU versus LDP	.14	1	NS

Research Question III. Are the three groups perceived and rated as different by their teachers on the Teacher Evaluation Form? The data involved in the treatment of this question was obtained from the Teacher Evaluation Form which was completed by the teacher of each subject in all three sample groups (See Appendix F). The form involved the rating of the subject on six observable traits which were broadly classified as: Cooperation, Emotions, Initiative, Judgment, Personality, and Reliability. Each of these traits was defined and rated on a five point scale with five being the most positive rating. The scores on each of the six traits were totaled to give each subject a combined teacher rating score. This score was then converted to a standard score and a 1 X 3 Analysis of Variance performed. If the F value was significant, the Newman Keuls procedure was applied. Table 12 and 13 demonstrates the results of the analysis of the total score on the TEF for the three groups.

TABLE 12

Analysis of Variance of the TEF Total Scores
for the Sample Groups

	df	MS	F	p
Between	2	2476.72	15.21	< .01
Within	87	162.74		
Total	89			

TABLE 13

Newman Keuls Method for Determining Significant
Differences among Groups

	LDU Group	AA Group
LDP Group	**	*
LDU Group		*

*Significant at $p < .01$

**Significant at $p < .05$

As shown by the data the three groups differed significantly on the TEF ratings. The LDP and LDU groups were rated significantly lower ($p. < .01$) than the AA group. The LDU group was rated significantly lower ($p. < .05$) than the LDP group. The following graphs (Fig. 2 through 7) present the raw scores for all three groups on the TEF. It appears that the greatest difference exists among the three groups on the rating of emotions and cooperation while the groups differ the least on the rating of personality.

A reasonable conclusion with reference to Research Question III is that subjects in the LDU group were rated significantly lower by their teachers on the total score of the TEF than subjects in the LDP and AA groups.

The present chapter has presented the results of the analyses of data collected by means of the SOT and the TEF. A discussion of these results will follow in Chapter IV.

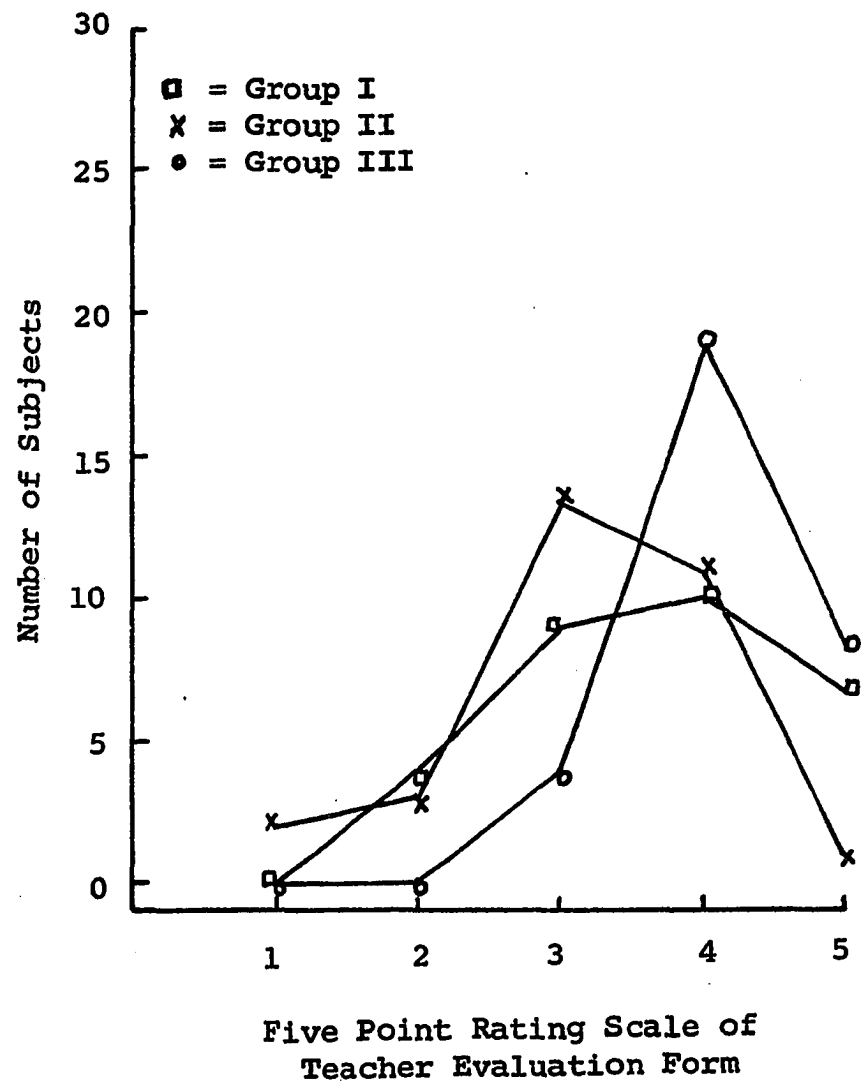


Fig. 2 Teacher Evaluation of Cooperation

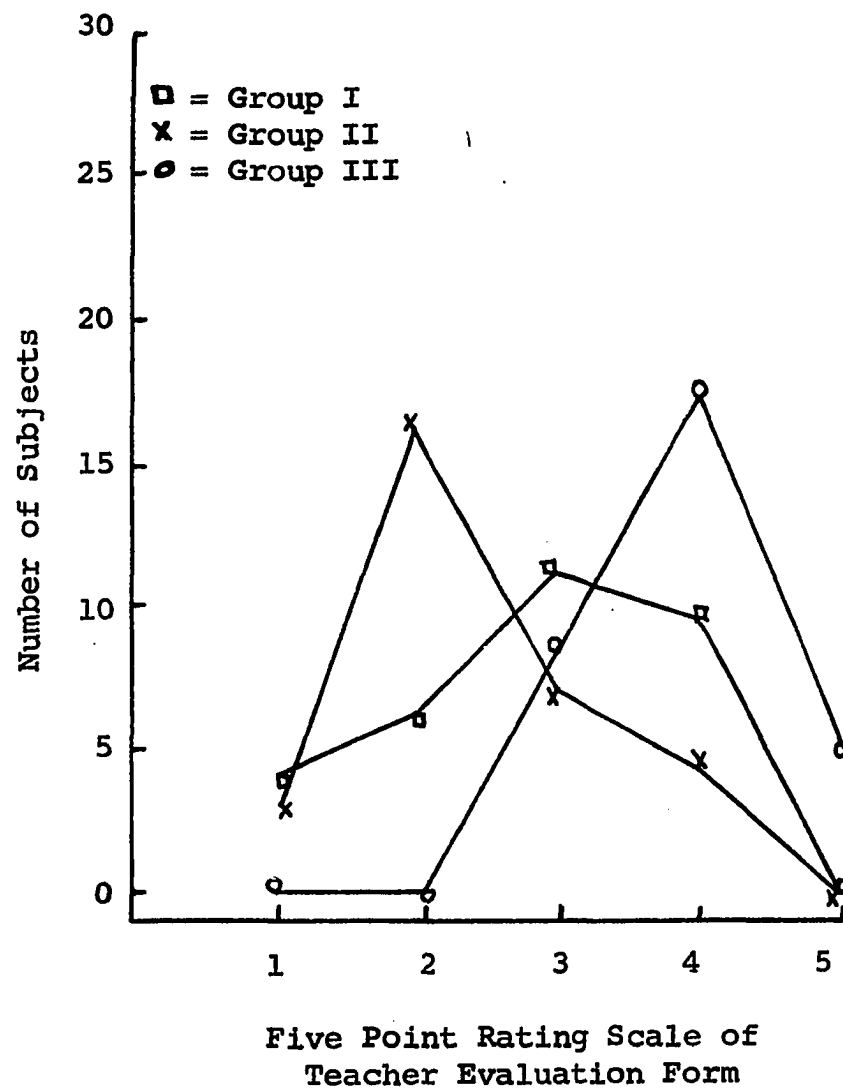


Fig. 3 Teacher Evaluation of Emotions

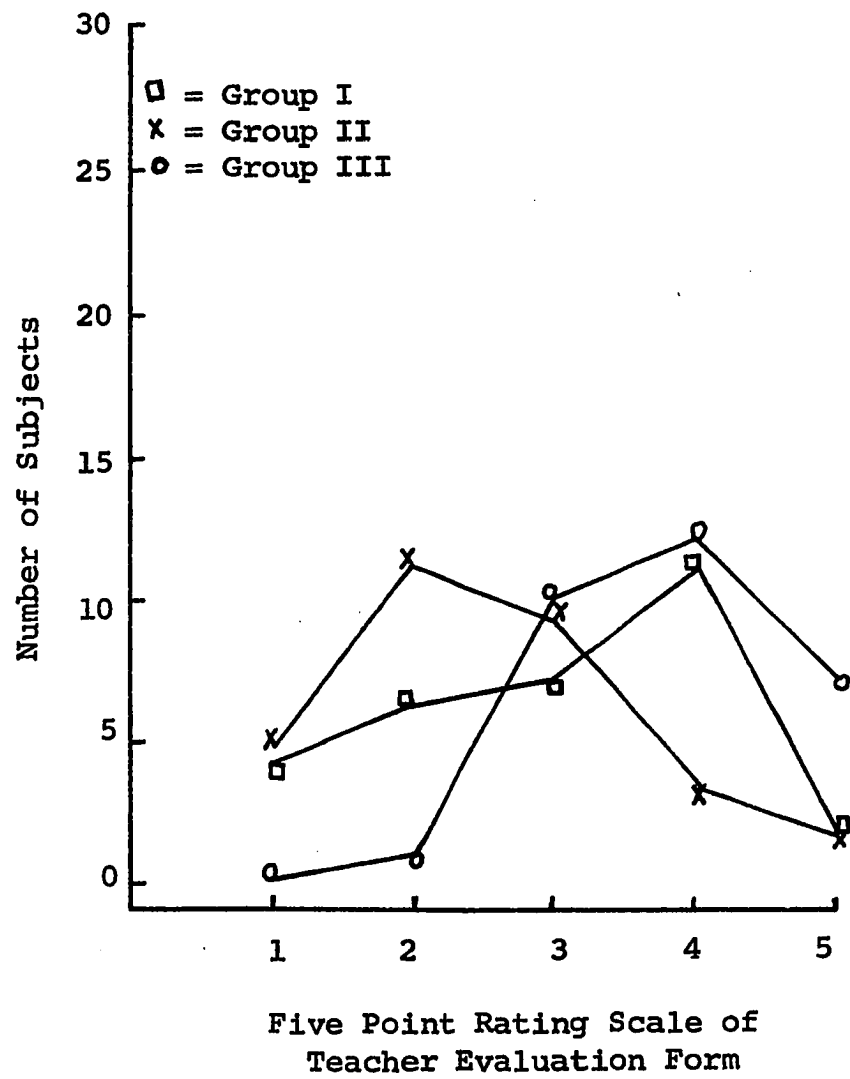


Fig. 4 Teacher Evaluation of Initiative

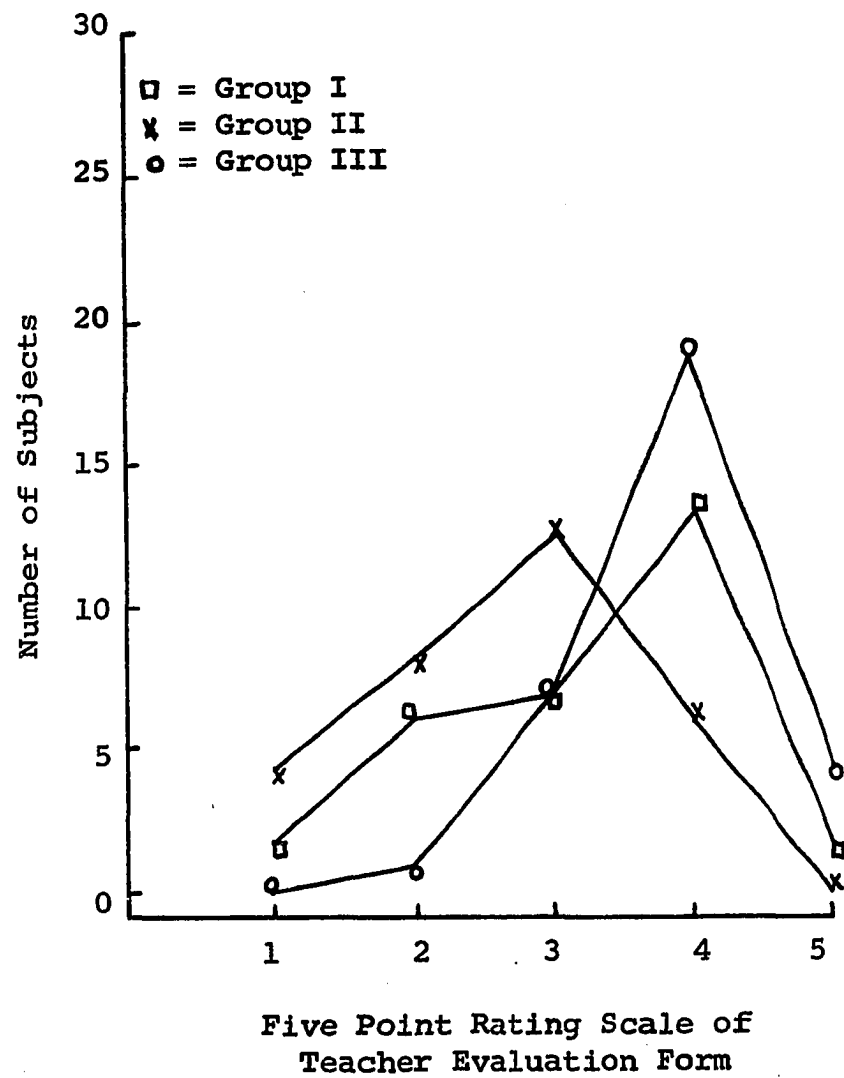


Fig. 5 Teacher Evaluation of Judgment

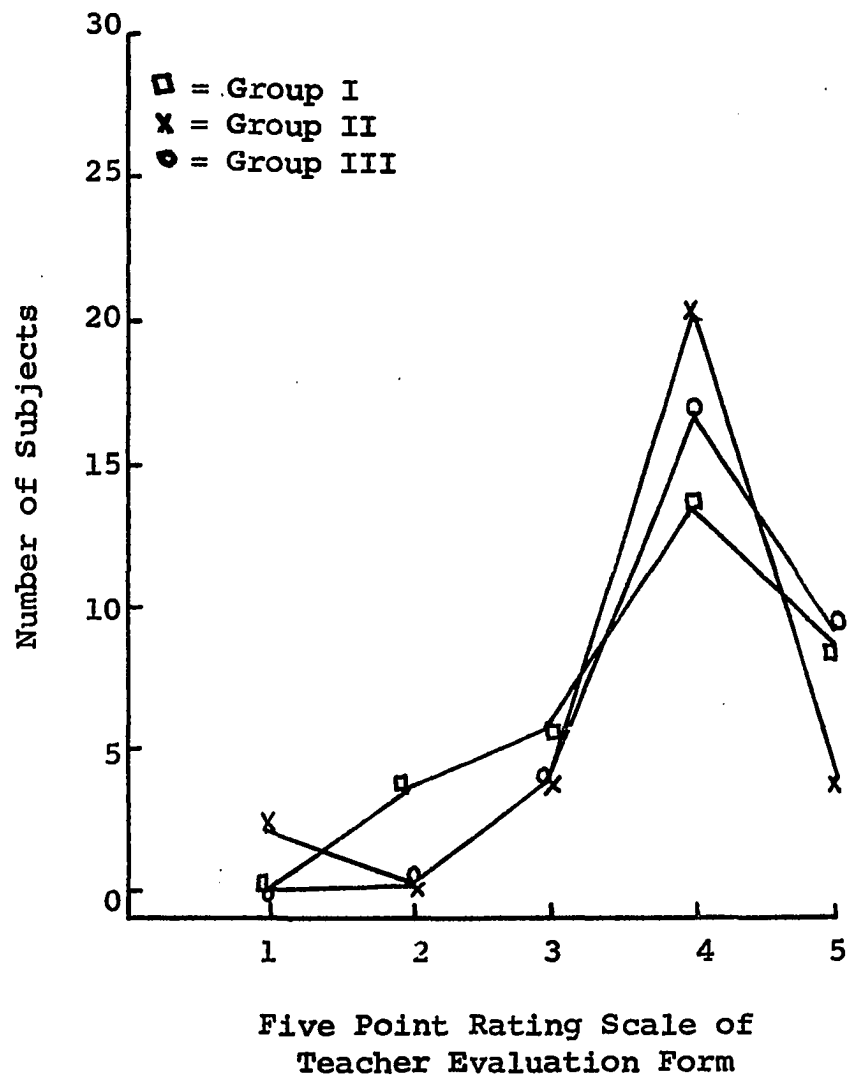


Fig. 6 Teacher Evaluation of Personality

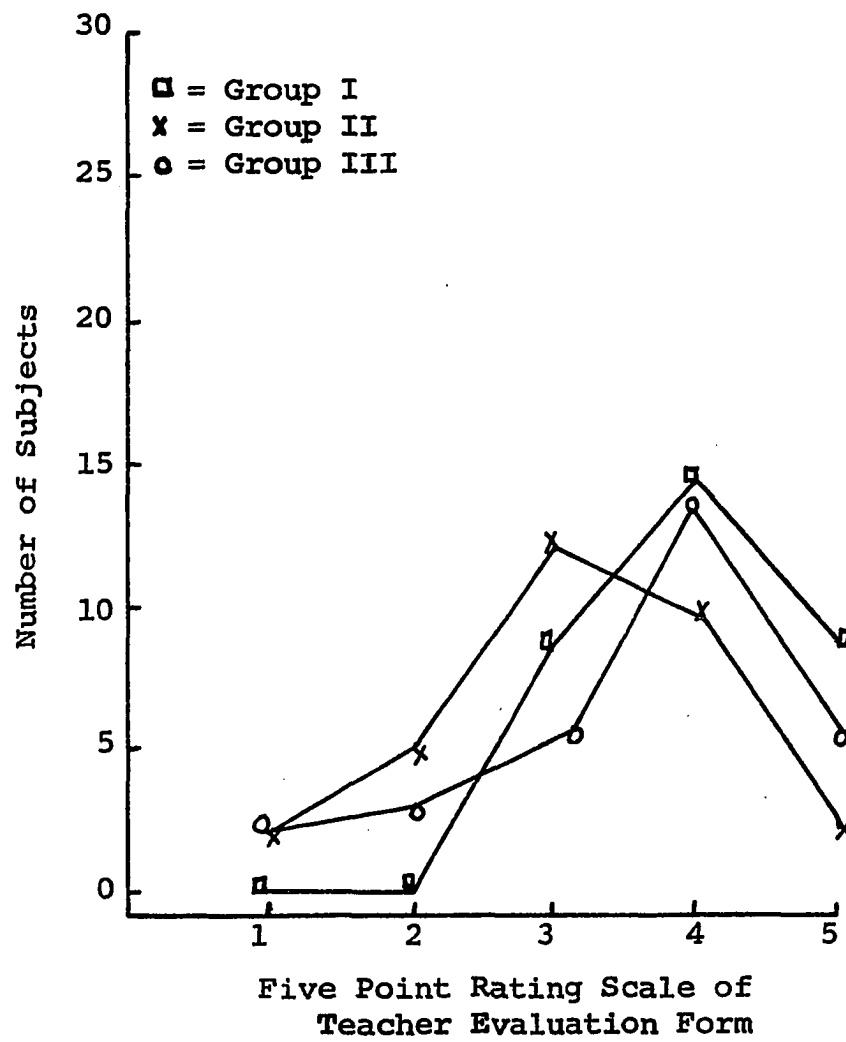


Fig. 7 Teacher Evaluation of Reliability

CHAPTER IV

DISCUSSION

The purpose of the present study was to compare the social orientations and observable behavioral traits of three sample groups: 1) children with learning disabilities in special classes (LDP), 2) children with learning disabilities who are not in special classes (LDU), and 3) children with average achievement (AA). Social orientations were measured by means of the Social Orientation Tasks (Ziller, 1967; 1971), a non-verbal, projective research instrument containing scales which assess nine related self-other orientations. Teachers' ratings of six behavioral traits were obtained on each child by use of a teacher rating scale designed by Amble (1967). Three research hypotheses and three research questions were subjected to analysis in this study.

Differences on The Social Orientations Tasks

Identification Scales. The identification scales of the SOT provided assessment of the subject's identification with four significant others: mother, father, friend, and teacher. The hypothesis of no differences among the three groups on identification with significant others was not rejected. It was found, though, that there was a significant difference between the three groups in terms of the response pattern of identification with mother. The children with learning disabilities who have had no experience in a special class exhibited an inconsistent pattern of identification with mother.

This may be interpreted as partial support for the hypothesis that the child with learning disabilities has more difficulty in his identification process due to the negative impact he may have had on his parents. Rappaport (1969) suggests that the developmental difficulties which these children present from an early age are often a source of frustration and anxiety which may interfere with the identification process. The difficulties are often compounded when the child reaches school age. The children with learning

disabilities who are in special classes (LDP) appeared more like the average achieving group (AA) with respect to this identification scale. This would be expected as a result of the fact these children (LDP) are no longer the source of concern and frustration to the school and in turn the parents because they are in situations which alleviate some of their difficulties and provide more positive feedback to parents.

Further investigation of the identification scales revealed that all three experimental groups identified significantly less with teacher than with parents or friends. This finding should be compared to the finding that the teachers rated these three groups as significantly different. There was little or no relationship between the teacher's evaluation of the subject and the subject's identification with teacher. This has some implication in considering which "significant other" might have most influence on the subject. It could be proposed, judging from these results, that the teacher would have less effect on the individual subject than would parents and peers. Brookover (1965), in a long range study of children slightly older than those

involved in the present study, found this to be the case. He found that parental evaluations were more highly correlated with student's self-concept-of-ability than was teacher's evaluation. A post hoc analysis of the data from the present investigation reveals no relationship between teacher evaluation of the subject and the subject's self-esteem score. This leads to a discussion concerning one of the hypotheses dealing with the Self-esteem Scale of the SOT.

Self-esteem Scale. The self-esteem measure on the SOT did not differentiate among the three groups in terms of group means. The hypothesis of no difference with respect to self-esteem was not rejected. Yet, the three groups did differ significantly on their pattern of responses to the items on this scale. The LDU group exhibited significantly more inconsistency in responding than did the LDP or AA groups. This could be interpreted as a less firmly established concept of self.

The failure of the self-esteem measure to differentiate between these three groups gives rise to a question of what are the significant correlates of self-esteem? What accounts for the intra-group differences found on this

variable? While, this question indicates a need for further research, it can be partially treated in terms of some findings of the present investigation. First, it would be expected that a possible correlate of self-esteem would be the teacher's perception or evaluation of the child. As reported previously, no correlation existed between these two variables. A second consideration would be the parental attitudes or evaluative perceptions of the subject. While no such measure was involved in this investigation, the identification scales were of interest when compared to the subject's self-esteem. As reported in Table 6 the relationship between self-esteem and identification with father was not significant. It should be noted that the correlation between the two variables for the LDP and AA groups approached significance at the $p. < .10$ level. This may be considered as suggestive of the need for a study of parental attitudes toward the child with learning disabilities and the relationship of such attitudes to the social orientation and/or self concept of the child.

A third finding with regard to the self-esteem scale which merits further consideration was the tabulation of the mean self-esteem scores for subjects within birth

ordinal categories (See Table 7). While caution must be taken in interpreting the findings due to the small number in some of the categories it would appear that ordinal position of birth may be a correlate of self-esteem. It may also be that the birth ordinal position of "youngest" is represented more frequently in the learning disabilities population than in the general population. This appeared to be the case among the sixty learning disabled subjects involved in this study.

Differences on the Teacher Evaluation

The present study used the Teacher Evaluation Form (Amble, 1967) to obtain teachers' ratings of behavioral traits. The proposed research question dealt with the perceptions and ratings of each of the three sample groups by their respective teachers. The question was more one of how the children are perceived by the teacher on each trait rather than how the subjects actually perform or behave on each trait. The total rating scores for each group revealed that the three groups are perceived as different with the average achieving students rated most positively. The children with learning disabilities who

were awaiting special placement were rated significantly lower than the other two groups. They were perceived as less well developed on the over-all rating of the six traits. Both of the groups of children with learning disabilities were rated significantly lower than the children with average achievement on the teacher rating. The significantly lower rating of the LDU group as compared to the LDP group could be interpreted as: 1) an actual difference between the two groups in terms of the behavior they exhibit on the six behavior traits, 2) a perceived difference between the two sets of subjects which reflects attitudes resulting from the special training of the LDP teachers to view and manage children with learning disabilities from a different perspective, or 3) a perceived difference stemming from a teacher expectancy effect or "self-fulfilling prophecy." The basic justification for the special class and special teacher is that the child will improve as a result of exposure to them.

The students in the two groups may actually differ on the behavioral traits since the LDP group is now in a situation offering special resources and management. The basis of the perceived differences as rated by the teachers

cannot be, nor was intended to be, determined in this investigation. The relevance of the finding lies in the impact such perceptions may have on the teacher-student interaction. The significantly more positive rating given the LDP group as compared to that given to the other group of children with learning disabilities might be interpreted as support for the placement and management which has been given this particular group of children with learning disabilities.

Conclusions

The present study gave limited support to the view that children with learning disabilities, as a group, develop different concepts of self than do normal children, due to their poorly developed social perceptions and difficulty in relating socially. This finding is consistent with the findings of Connolly's (1969) study of the dyslexic children. His conclusion was that there was little in his projective test findings to suggest differences in the personality organization between his experimental group and a non-dyslexic control group. However, the findings of the present study did suggest that there

are some social orientations which are common to the child with learning disabilities, especially those in this study who had received no special placement or management. Such orientations have to do with identification with mother, consistency of self-esteem, openness, and social inclusion.

One of the main findings of this study was that teachers perceive and rate the behavior of a child with learning disabilities who is in a regular classroom as different from and qualitatively poorer than that of a child with learning disabilities who is in a special class or an academically achieving student. Teachers of the child with learning disabilities in regular classes perceive the children as less well developed in their over-all rating on the TEF.

Implications for Research

The present investigation, partially as a function of its exploratory nature, has resulted in the creation of more questions than it has answered. The following section will be a discussion of several research questions which can be derived from the findings of the present study.

1. A further investigation is needed of the parent-child attitudes of the learning disabilities children as they relate to the self concepts of the child. What is the relationship between parental attitudes or the perceived parental attitudes toward the child with learning disabilities and the child's self concepts?

2. There is a current interest in the behavioral correlates of birth order or ordinal position in the family (Warren, 1966; MacDonald, 1969; Sarason, 1969). Although the sample size in this investigation was small and regional, there were indications of a disproportionate frequency of subjects within the "youngest" position among the learning disabilities samples. Such a finding merits further investigation.

3. The teachers' perceptions of children with learning disabilities deserves further investigation in light of the current popularity of studies on the effect of teacher expectancy on academic achievement (Rosenthal & Jacobson, 1968).

4. Another study would be an experimental treatment of the variables considered in this investigation with the possible inclusion of one or more of the above mentioned

variables in dealing with the question: what is the effect of special class placement on the social orientations or self concept structure and on the teacher perceptions of children with learning disabilities? This would involve a longitudinal study with assessment of both the student samples and teachers at various intervals of time.

5. The findings of this study on the identification scales of the SOT merit further investigation. The significantly lower identification with teacher as compared to parents and friends which was found among all three groups bear implications for any academic program and especially the special education programs based upon small teacher-pupil ratios.

Summary remarks will be presented in the following chapter.

CHAPTER V

SUMMARY

During the last two decades there has been a steady increase in attention directed toward children with learning disabilities which are associated with neurological dysfunction. There has been, however, no research directed at the investigation of the self-social perceptions of these children, although writers in the area suggest that defects in social perception like impairment in visual perception characterizes this group of children.

The purpose of the present study was to compare the social orientations and observable behavioral traits of three sample groups: 1) children with learning disabilities in special classes (LDP), 2) children with learning disabilities who are not in special classes (LDU), and 3) children with average achievement (AA). Social orientation was measured by means of the Social Orientation Tasks (Ziller, 1967; 1971), a non-verbal, projective research instrument containing scales which assess nine related self-

other orientations. Teachers' ratings of six behavioral traits were obtained on each child by use of a teacher rating scale designed by Amble (1967).

It was hypothesized that the children with learning disabilities would: 1) identify less with significant others (parents and teacher) on the SOT, 2) identify less with the majority on the SOT, and 3) score lower on the self-esteem scale of the SOT than would the children considered to be average achievers. Three research questions were asked: 1) do the two groups of children with learning disabilities differ on the SOT, 2) does the LDU group perform more like the LDP or AA group on the SOT, and 3) are the three groups perceived and rated as different on the TEF?

The results did not support any of the three hypotheses. It was found that there was a significantly lower identification with teacher as compared to identification with parents and friends among all three groups. The two learning disabilities groups were significantly different on their response patterns with regard to the Identification-with-Mother Scale and the Self-Esteem Scale. The LDU group showed inconsistency of response to both scales. The

results gave limited support to the suggestion that children with learning disabilities, as a group, differ in self-social perception.

The results of the teacher rating indicated that the three groups are perceived as different on the TEF. The LDU group was given an over-all rating on the TEF which was significantly lower than the ratings given the LDP and AA groups by their respective teachers.

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APPENDIXES

APPENDIX A

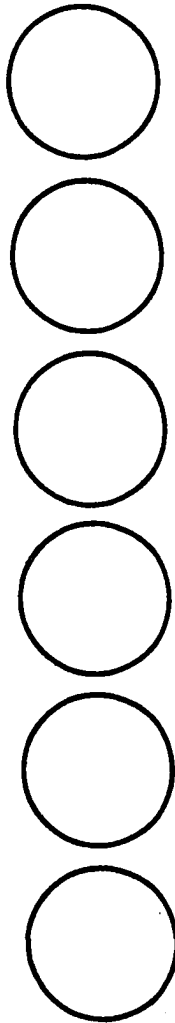
SOCIAL ORIENTATION TASKS

Today, we would like you to pretend that you and other people are circles. Then we're going to ask you to draw these circles on paper in different ways. Let's turn to the first page. You'll see many circles in a row. Pretend the circle with an "M" in it is your mother. Choose one of the circles to stand for yourself and place a "Y" in it.

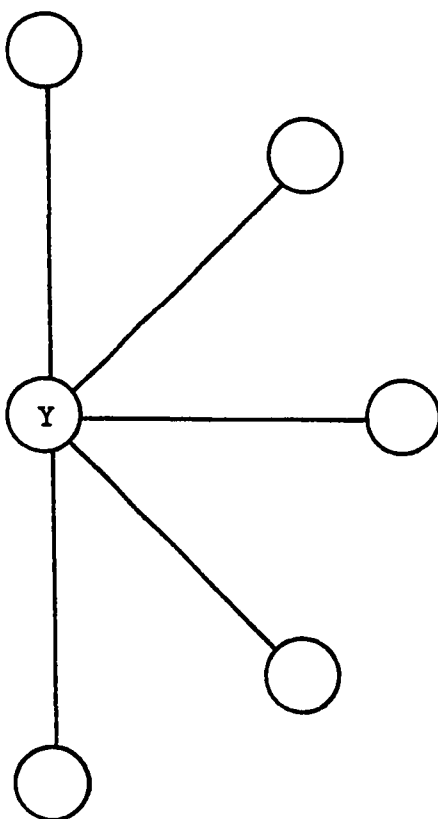
Examples of the SOT Items

- I. A sample item from the Self-Esteem Scale.
 - II. A sample item from the Power Scale.
 - III. A sample item from the Identification Scale.
 - IV. A sample item from the Majority Identification Scale.
 - V. A sample item from the Social Interest Scale.
 - VI. A sample item from the Marginality Scale.
 - VII. A sample item from the Centrality of Self Scale.
 - VIII. A sample item from the Openness Scale.
 - IX. A sample item from the Social Inclusion Scale.
-

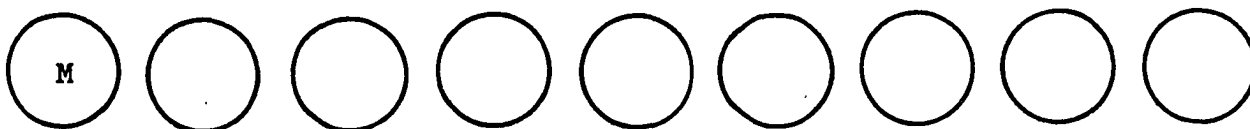
The circles below stand for people. Put a "Y" to stand for Yourself.



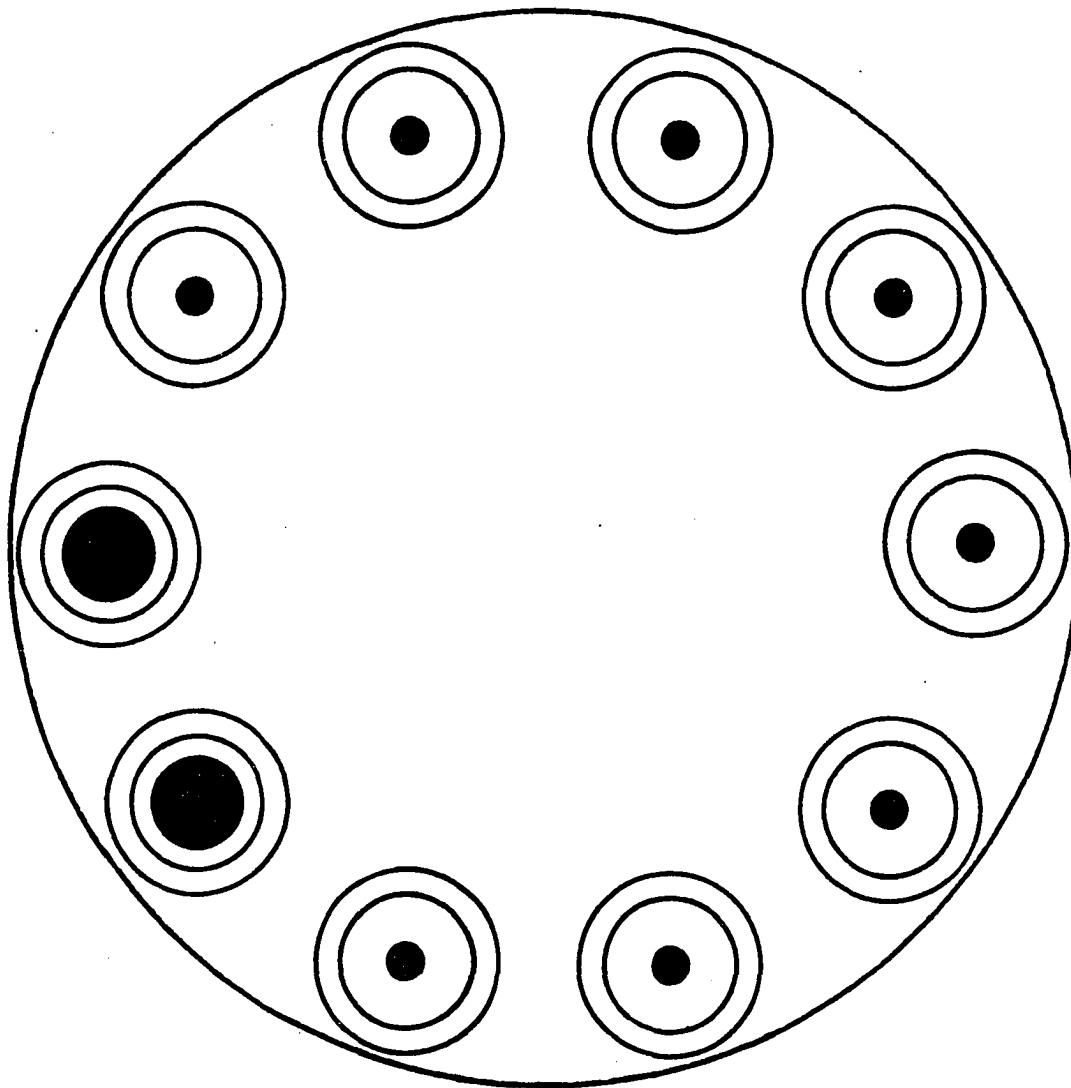
The circle below marked "Y" stands for Yourself. Choose one of the circles to stand for your Doctor and put a "D" in it.



The "M" below stands for your Mother. Choose one of the circles to stand for Yourself, and place a "Y" in it.

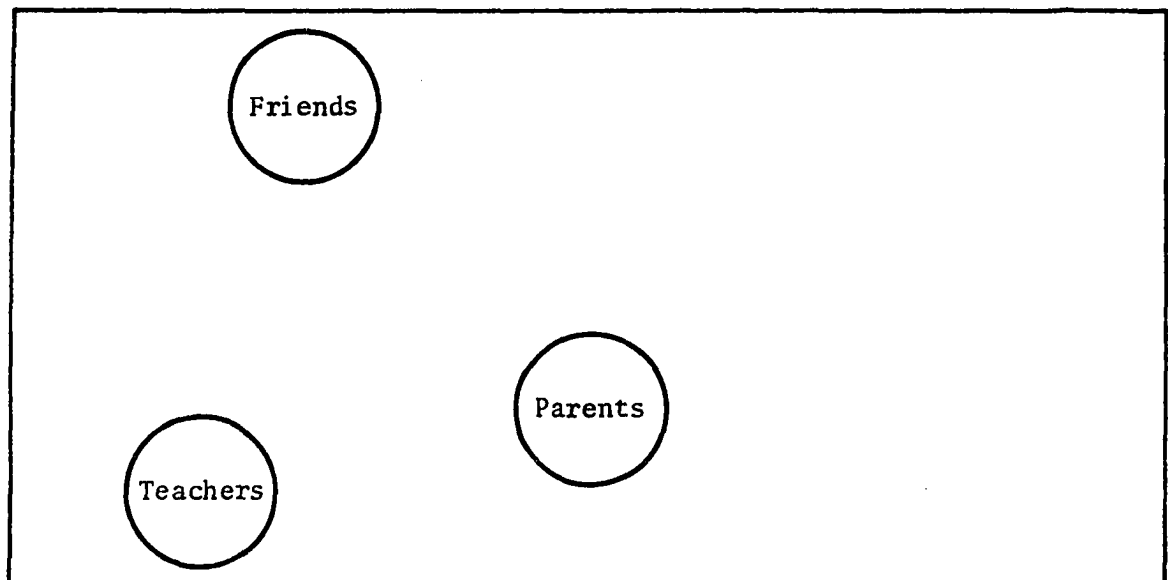


The ten circles within the large circle stand for other people.
Choose any one of the ten circles to stand for yourself, and
place an "X" over it.



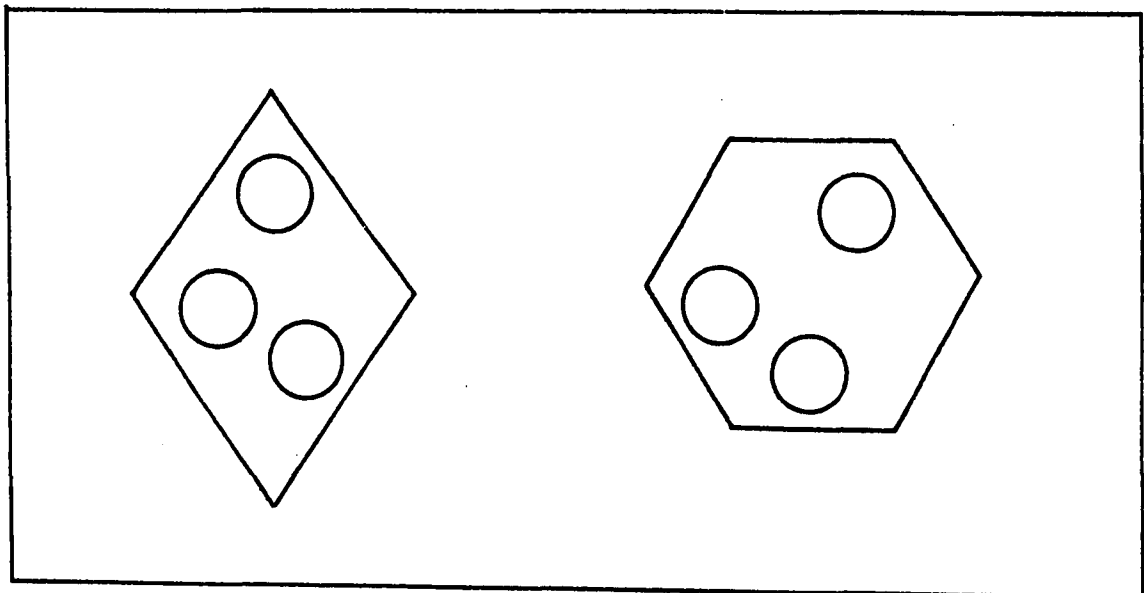
The circles below stand for your Parents, Teachers, and Friends.

Draw a circle to stand for yourself anywhere in the space below.

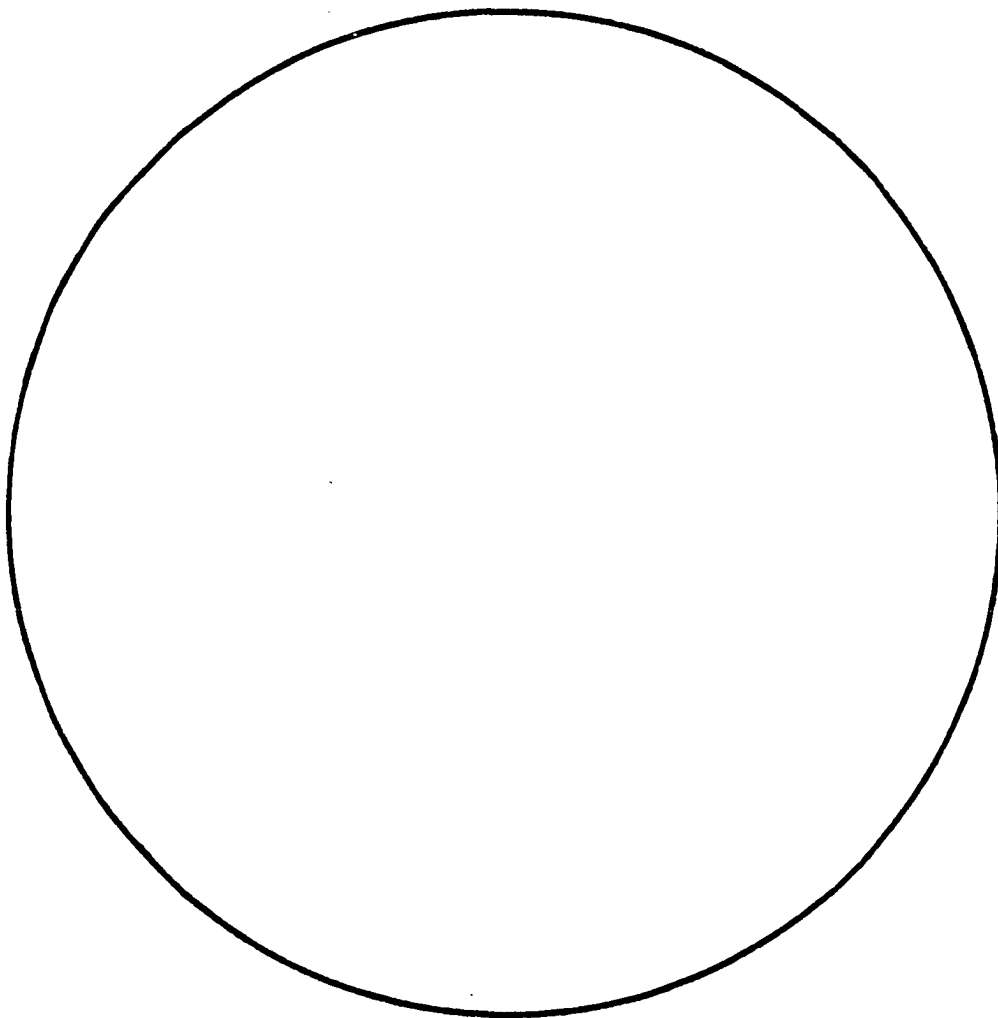


The two figures below stand for two groups of people you know.

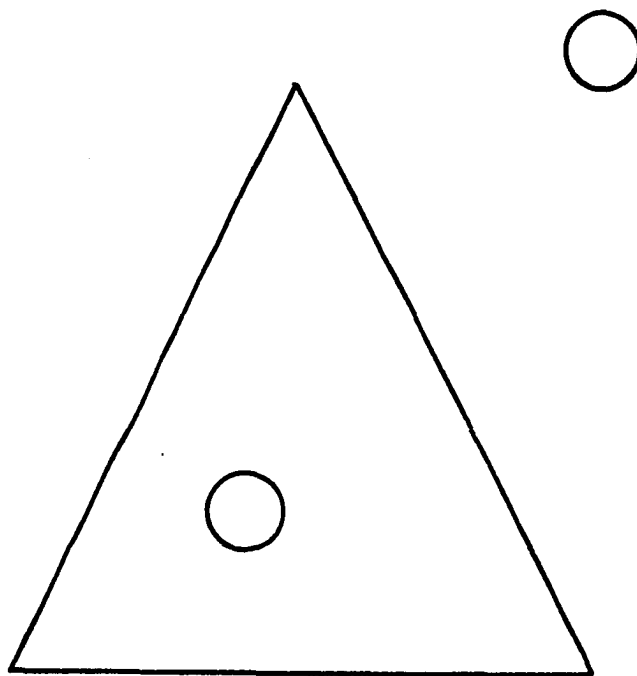
The small circles stand for other people. Draw a circle to stand for Yourself anywhere in the space below.



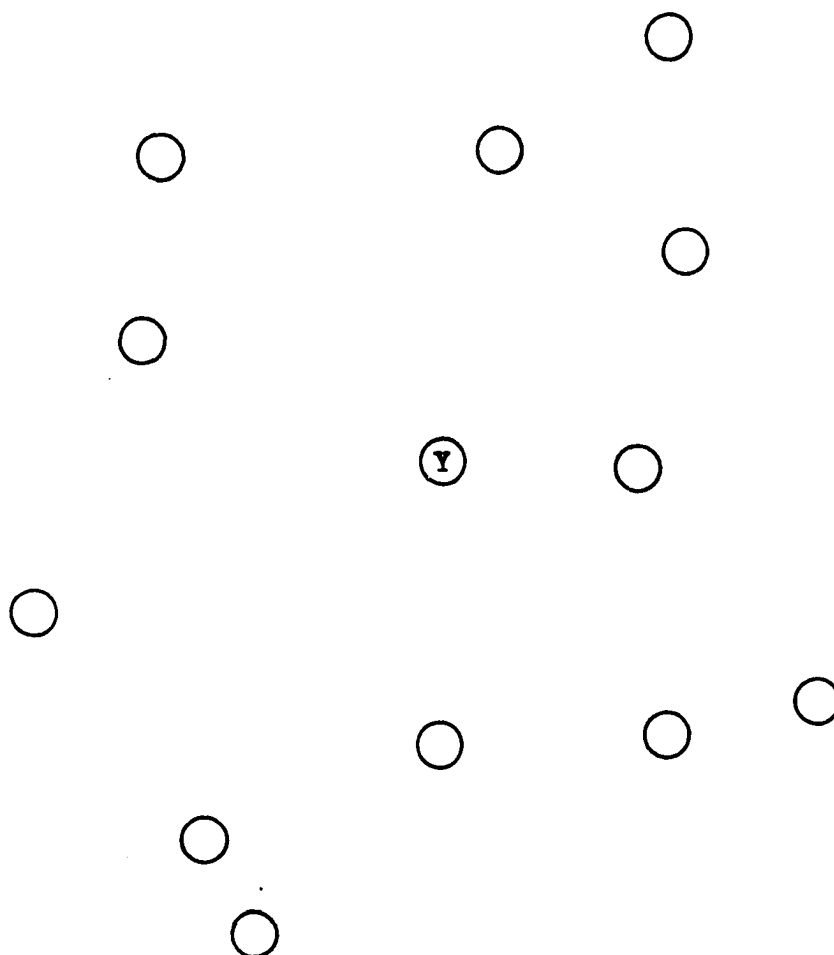
In the large circle below, draw two circles -- one to stand for yourself and a second to stand for a friend. Place an S in the circle for self and an F in the circle for your friend.



The small circles below stand for you and some other persons.
Put a "Y" in one of the small circles that stands for Yourself.



The circle marked "Y" stands for Yourself. The other circles stand for other people. Draw as many or as few lines as you wish from the circle for Yourself to the circles which stand for other people.



APPENDIX B

Oklahoma City Public Schools

900 North Klein

Oklahoma City, Oklahoma 73106

A sample of the children who are currently in our learning disabilities classes as well as a sample of average achieving students in regular classrooms are to be used in a research project to be conducted through the Testing Department. The project will be aimed at studying some of the social orientations of these children. In other words, the study will be exploring the way in which the student sees himself as related to the significant people in his social world. Such information can contribute to our better understanding of children with learning disabilities and hence aid in the special programs we offer.

Each student will be given a non-verbal set of tasks requiring them to arrange some circles and symbols. From this will be gained the information discussed above. All students participating will be assigned a code number so that no child's name will be used.

Permission is requested for your son to participate in this study. The results of the study will be readily available for any interested parents. If there are any questions concerning this study please call 232-0581 ext. 267. Please check the appropriate box below and sign your name on the line provided.

☐

has my permission to participate in this research.

☐

does not have my permission to participate in this research.

Parent's name

APPENDIX C

Means and Ranges of Subjects According
to Chronological Age in Months

Sample	N	\bar{X}	Range
LDP Group	30	106	84 - 132
LDU Group	30	98	84 - 120
AA Group	30	108	84 - 120

APPENDIX D

Means, Ranges, and Total Number of
Siblings for Each Group

Sample	N	\bar{X}	Range	Total
LDP Group	30	1.9	0 - 7	58
LDU Group	30	2.6	0 - 7	78
AA Group	30	2.3	0 - 7	68

APPENDIX E

Reported Construct Validity for SOT

I. Self-Esteem

1. Pre-school children categorized as less mature by the Ilg-Ames tests for school entrance show lower self-esteem (Long & Henderson, 1968).

2. Negro school beginners show lower self-esteem than white in two rural south samples (Scheiner, 1967; Long & Henderson, 1968).

3. Later born school beginners indicated lower self-esteem than first borns (Long & Henderson, 1967).

II. Power

1. Scores lower with grade in school (Long, Henderson, & Ziller, 1967).

III. Identification

1. Girls locate self closer to mother than do boys; boys locate self closer to father than do girls (Long, Henderson, & Ziller, 1967).

2. Under conditions where the father is absent from the family, there is less identification with the father (Long & Henderson, 1968).

3. Institutionalized behavior problem children in comparison with a control group are less identified with

a friend (Long, Ziller & Bankes, 1970) .

4. Asian Indian students in comparison with a control group of American students identified more with mother, father, and friend (Ziller, Long, Romana, & Reddy, 1968) .

5. First born children identify more closely with the father than do later born children (Kelso, 1964) .

IV. Majority Identification

1. Children who moved frequently between communities were found to identify with the majority more frequently (Ziller & Long, 1966) .

2. Twins identified less frequently with the majority than non-twins (Long, Ziller, & Bankes, 1965) .

3. Institutionalized behavior problem children identified with the majority more frequently (Long, Ziller, & Bankes, 1970) .

4. Majority identification increases with grade in school among elementary school children (Long, Ziller, & Henderson, 1967) .

5. Children in elementary school who are superior readers identify more frequently with the majority (Henderson, Long, & Ziller, 1965) .

6. A significant Pearson correlation (.50, p .01) was found between majority identification and a self report measure of majority identification.

7. Children who make frequent geographic moves as opposed to less mobile children, identify less frequently with the majority (Ziller, Alexander, & Long, 1964).

V. Social Interest

1. Elementary school children locating the self within as opposed to without the societal triangle preferred more group versus individual activities (Long, Ziller, & Henderson, 1966).

2. Institutionalized behavior problem children showed less social interest than a control group (Ziller, 1969).

3. Children in an Israeli Kibbutz as opposed to children in an Israeli religious school show more social interest (Ziller & Goldschmidt, 1968).

4. Children with lower socio-economic status show lower social interest (Long & Kramer, 1966; Ziller, 1968).

5. Asian Indian adolescents (members of relatively closed and cohesive extended families) in comparison with a sample of American adolescents matched for age showed

higher social interest (Ziller, Long, Romana, & Reddy, 1968) .

VI. Marginality These items were only recently developed.

VII. Self-Centrality

1. Sociometric isolates in comparison with sociometric stars placed the self in a central position more frequently (Ziller, Alexander, & Long, 1967) .

2. Children who moved frequently between communities placed the self in a central position more frequently than those who had remained in the same community throughout their life (Ziller & Long, 1966) .

3. Asian Indian adolescents (who are the family's "reason for being") in comparison with a sample of American adolescents were more self-centered (Ziller, Long, Romana & Reddy, 1968) .

4. Male neuropsychiatric patients in comparison with normals show higher self-centrality (Ziller & Grossman, 1967) .

5. Institutionalized behavior problem children showed higher self-centrality than a control group (Ziller, 1968) .

6. Children with lower socioeconomic status show higher self-centrality (Ziller, 1969) .

VIII. Openness These items were only recently developed.

IX. Social Inclusion These items were only recently
developed.

*Adopted from study by
B.R. Amble J. of Educ.Res.
60, (9), 1967

APPENDIX G

RECORD FORM

Name _____ Group _____ B/d _____

Length of time in L.D. class _____ Number of Sibs _____

Ordinal Position _____ School _____

Occupation _____ Examiner _____

<u>Scale</u>	<u>SOT</u>	<u>Total</u>
Self-Esteem _____	_____	_____
Centrality _____	_____	_____
Social Inclusion _____	_____	_____
Majority Identification A _____	_____	_____
Majority Identification B _____	_____	_____
Power _____	_____	_____
Openness _____	_____	_____
Social Interest _____	_____	_____
Marginality _____	_____	_____
Identification (M) _____	_____	_____
(F) _____	_____	_____
(Fr) _____	_____	_____
(T) _____	_____	_____

<u>Teacher Rating Scale</u>	<u>Score</u>
Cooperation _____	_____
Emotions _____	_____
Initiative _____	_____
Judgement _____	_____
Personality _____	_____
Reliability _____	_____

(Excellent = 5 Lacking = 1)

APPENDIX H

IBM Card Format and Print-out of Data

Column key

1-14.	<u>Name</u>
15-17.	<u>Population Code</u> 1 = L.D., 2 = Unplaced L.D., 3 = Control
18-23.	<u>Birthdate</u>
24-25.	<u>Age</u>
26.	<u>WISC Pattern</u> 1 = V < P, 2 = P < V, 3 = V = P
27.	<u>Length of time in class</u> 1 = 1 year, 2 = 2 years
28.	<u>Schools</u> 1 = Heronville, 2 = Kaiser, 3 = Lee, 4 = Sequoyah (Controls), 5 = Telstar, 6 = West Nichols Hills, 7 = Willard, 8 = Bodine, 9 = Sequoyah (L.D.)
29-50.	<u>Social Orientation Tasks</u> 29 & 30 = Self- Esteem, 31 = Centrality, 32 = Social Inclusion, 33 = Major Identification A, 34 = Major Identification B, 35 & 36 = Power, 37 & 38 = Openness, 39 = Social Interest, 40 = Margina- lity, 41 & 42 = Identification (M), 43 & 44 = Identification (F), 45 & 46 = Identification (Fr), 47 & 48 = Identification (T), 49 & 50 = Identification Total.
51.	<u>Number of Siblings</u>
52.	<u>Ordinal Position</u> 1 = Only, 2 = First of two, 3 = Second of two, 4 = First of three or more, 5 = Middle of three or more, 6 = Last of three or more.
53-54.	<u>Teacher Rating</u> Raw Score Total
55-57.	<u>Teacher Rating</u> Z Score
58-59.	<u>Teacher Rating</u> Z' Score
60-65.	<u>Individual Scale Scores of Teacher Rating</u> 60 = Cooperative, 61 = Emotions, 62 = Initia- tive, 63 = Judgement, 64 = Personality, 65 = Reliability
66-67.	<u>Mean Score of SOT Identification Scales.</u>

APPENDIX I

Number and Percentage of Subjects in Each
of Six Ordinal Positions

Sample	Position ¹					
	1	2	3	4	5	6
LDP Group	1/3%	6/20%	7/23%	2/6%	5/17%	9/30%
LDU Group	2/6%	5/17%	2/6%	2/6%	14/40%	7/23%
AA Group	1/3%	5/17%	3/10%	7/23%	11/37%	3/10%

APPENDIX J

Number and Percentage of Subjects
With Combined Categories

Subjects	Only	Oldest	Youngest	Middle
LDU & LDP Groups	3/5%	15/25%	24/42%	17/28%
AA Group	1/3%	12/40%	6/10%	11/37%

¹Position Code

1 = Only

2 = First of two

3 = Second of two

4 = First of three or more

5 = Middle of three or more

6 = Last of three or more

APPENDIX K

Occupational Listing for the Parents of
Children in the Three Samples¹Group I (LDP)

Salesman for Singer
 Constructs tires, Firestone
 Doctor's salesman
 Doctor
 Owns A/C business
 Don't know
 Works on machines
 Salesman for Kraft
 Hair dresser
 Capitol Steel & Iron
 Mechanic
 Works on roads, Midwest City
 Works with material, Tinker
 Post Office
 Fleming
 Works in office
 Sells
 Janitor
 Construction, Archie Doty
 Honeywell inspector
 Works on tractors
 Air Force
 Tree work
 Trucker
 Works on machines
 Don't know
 Works at Tinker
 Works on jet pipes, Tinker
 Works at Zale's Jewelry
 Cookie salesman

Group II (LDU)

Construction work
 Lawyer
 Oil man
 South Community Hospital
 Works for phone company
 Honeywell
 Model
 Welfare
 Goodwill Industry
 Oklahoma Gas & Electric
 Brown Manufacturing Company
 Mechanic, buses & cars
 Architect
 Works for a gas company
 Works on cars, Good Year
 General Electric
 Shoe salesman
 Works at a laundry
 Works on compressors, boss
 Works in the oil field
 Painter for a hospital
 Works at Post Office
 Kerr McGee
 Truck driver
 Highway Patrolman
 Hauls oil to oil field
 Shoe salesman
 Executive, barber shop
 Builds tires
 Foreman, Cement

¹As described by the individual child

Group III (AA)

Printer for City Service
Works for L & S Bearings
Fire station & piano tuner
Guard, Pinkerton
Works on trucks, Transcon
Salesman
Truck driver, Little Dixie Express
Puts up ceiling
Air conditioning
Air Force
Engineer
Builder
Works at Overhead Doors
Unit Parks
Builder
Bakery
Photographer
Records songs
Works on drapes
Makes mattresses, Sleep-Aire
Secretary
Water Department & Security Guard
Works for lumber company
In an office
Sears
S. W. Construction News Service
Sells land
Machinist
Central Sales promotion
Works at Tinker

APPENDIX L

Scoring Guide for the Social
Orientation TasksI. Self-Esteem

The item presents a vertical array of six circles which are described as representing other people. The task requires the child to "Put a 'Y' in one of the circles to stand for Yourself." The instructions are oral. The score is the weighted position of the self from top to bottom. To score, number the circles from bottom to top, 1, 2, 3, 4, 5, 6. The top position represents the highest self-esteem. The sum of the scores on all four measures total the self-esteem score.

II. Power

On the power items subjects were given a choice for the placement of significant other persons such as friend, doctor, teacher, and dog with regard to the self as a point of reference. The choices permitted the other to be placed (a) directly above the self, (b) diagonally above, (c) horizontal with the self, (d) diagonally below, and (e) directly below the self. The responses were scored from one to five with a higher score associated with a higher position.

Thus, location of doctor at the 12 o'clock position receives a score of 5. The power scores with regard to each significant other may be analyzed separately. A total score across items has been used previously however.

III. Identification

A horizontal display of nine circles is presented. A significant "other" such as "mother" is located in the circle to the extreme left and later to the extreme right. The task requires the subject to mark any of the other circles in the row to represent himself. Distance in units from the significant other is the measure of identification intensity. The circle immediately adjacent to the significant other is scored 8 and the succeeding circles 7, 6, 5, etc. The score for identification with one significant other such as mother is equivalent to the sum of the scores from the two identification items using mother.

IV. Majority Identification

The two Majority Identification Scales consist of four items each. Both scales are scored the same. In each item a field of ten circles is presented. A given percentage of the circles is marked with vertical lines. The subject is asked to put an X over one of the circles to stand

for themselves. Choices of the self-referrent circles as similar to the majority of circles in the field is coded as a unit of the self-other construct and is given a score of one. If any of the lower percentage circles is marked, a score of zero is given. The scores from the four items are combined to give a total score for each scale.

V. Social Interest

Location of a circle representing self within rather than without an imaginary societal triangle with apexes representing parents, teachers, and friends was presumed to be related to social interest. By drawing connecting exterior tangents between each of the pairs of circles, a triangular area is produced. Any circle representing the self which is placed within the imaginary triangle indicates social interest and receives a score of one. Any circle placed outside the imaginary triangle receives a score of zero. In the event that the circle representing the self is only partially within the triangle or is even simply touching the legs of the triangle, it is still scored as one. The sum of the scores of the six items represents the social interest score.

VI. Marginality

This item may be said to evolve from the preposition "between" indicating an intermediate position or a position which does not imply a polarization of positions as for or against. The item presents two representational groups of people separated in a social field. The subject is required to draw a circle which stands for himself anywhere in the demarked space including the two groups. Placement of the self outside of either one of the groups is assumed to represent marginality and is given a score of one. If the circle representing the self is included in any one of the subgroups or if their outer-limits coincide at all, a score of zero is ascribed. Placement of the self outside the rectangular field is also given a score of one. The sum of the scores represents the marginality score.

VII. Self-Centrality

In a series of seven identical tasks randomly distributed throughout the Social Orientation Tasks, the subject is required to draw circles representing both himself and a friend within a large circular field. The location of the self rather than the other in a more central position

is presumed to depict symbolically a focal position for the self or a definition of others in terms of the self.

In scoring the items, locate the center of the circular field. Placement of the self nearer to the center in relation to friend is given a score of one and indicates self-centrality. If friend is placed closest to the center, a score of zero is recorded. The scores are totaled to give a centrality score.

VIII. Openness

A circle representing the self is located within a field of other circles which symbolize other people. The subject is asked to draw as many or as few lines as he wishes from the circle for the self to the other circles representing other people. Five configurations are presented in the adult form, three in the children's form. The score for each item is simply the number of lines between the self and others; the final score is simply the total of the item scores.

IX. Social Inclusion

Varying numbers of small circles are located inside and outside a symbolic social field. The small circles represent the self and other persons. The subject is asked

to mark one of the small circles to stand for himself.

Choice of a circle within as opposed to outside the social field is assumed to indicate inclusion and receives a score of one. If an outside circle is selected, a score of zero is ascribed. Eight items are included which counterbalance the number of persons represented inside and outside the social field. The sum of the scores for the eight items is the total inclusion score.