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## A Comparative Investigation of Social Competence and Social Perspective-Taking Across Exceptional Categories

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A COMPARATIVE INVESTIGATION OF SOCIAL COMPETENCE  
AND SOCIAL PERSPECTIVE-TAKING ACROSS EXCEPTIONAL  
CATEGORIES

by  
David A. Grott

A Dissertation Submitted to the Faculty of the Graduate  
School of Loyola University of Chicago in Partial  
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**A Comparative Investigation of Social  
Competence and Social Perspective-Taking Across  
Exceptional Categories**

Knowledge regarding social skills and general social competence becomes particularly important when diagnosis of a handicap is based upon social behavior in addition to academic learning difficulties. Although social functioning (i.e., adaptive behavior) has been given diagnostic consideration within the behavior disordered (BD) population, it has only been within the past few years that social development has become a formal part of the diagnostic picture with respect to the evaluation of a learning disabled (LD) child.

The study was designed to focus on two goals: 1) To determine the relationship between social perspective taking (cognitive, self-perceptions) and social skill development across SED, LD and BD diagnostic categories; 2) To examine potential mediating factors (e.g., self-consciousness, cognitive ability, length of service) presumed to be relevant to interpretation of environmental events and social skill development. Eighty-eight high school students (grades 9-11) served as participants in the investigation. The students were special education students enrolled in LD resource, cross-categorical, and self-contained classrooms.

Each student participant was asked to complete the Imaginary Audience Scale (Elkind and Bowen, 1979) and a scale designed to assess their own perceptions of social functioning (Brown and Hamill, 1983). In addition, classroom teachers and/or instructional aides completed a behavior rating scale (Quay and Peterson, 1987) designed to assess social competence.

Overall, an analysis of results indicated that there were relatively large differences in the social competence scores among the emotionally disturbed, learning disabled, and cross-categorical students receiving services in a wide variety of LRE's (Least Restrictive Environments). In addition, significant self-perception differences were observed among the mildly handicapped groups across a variety of contextual settings. Group but not sex differences were found only on the individuals transient sensitivity to the imaginary audience scale. The most significant factor which appeared to discriminate across groups was a greater level of social competence as opposed to any specific social cognitive characteristic (self-consciousness, self-perception) or mediating variable (cognitive functioning, length of service).

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## DEDICATION

To my parents and my family for providing the "right stuff";  
to Shirley for the endless hours she put into this project  
and for Marissa who will always call my workroom the "middle  
room"

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Finally I appreciate the confidence of Ellen and Richard who helped me begin my career. And to the wisdom, loyalty and encouragement Elaine has and will always provide.

## VITA

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## CHAPTER 1

### INTRODUCTION

Atypical social behavior of children within the school setting and the means of assessing and teaching requisite social skills, have been reported by many psychologists (Baatche, 1990; Merrell, 1988; Gresham, 1986), to be areas of concern among contemporary school psychologists. Individuals with deficits in social competence are at a much higher risk for: a) anti-social behavior and aggression; b) school dropout; c) school maladjustment; d) delinquent behavior; e) academic achievement problems; f) conduct related discharges from the military; and g) mental health problems in adulthood (Walker and McConell, 1988). In the school setting, students with deficits in social competence are more likely to be classified as being mentally retarded, seriously emotionally disturbed, or learning disabled (Merrell, 1988). An existing problem is the lack of clarity regarding the differential nature of these social deficits across groups and an understanding of how these characteristics could link to assessment and to possible intervention.

Social competence, which is the focus of the study

reported here, is an evaluative term based upon judgments that a person has performed a task adequately (Gresham and Elliot, 1984). These performance judgments are based upon opinions of parents and/or teachers who make performance comparisons to some explicit criteria or reference to a normative sample. Zigler and Tricket (1978) proposed that a definition of social competence indicate that certain societal norms have been met and should consider to some degree the individual's level of self-actualization. Shure (1981) viewed social competence as skill in interpersonal problem solving. Others, such as Phillips (1978), see it as the link between the individual and his or her environment, (i.e., what is necessary to maintain vital interpersonal relations). Consequently, a lack of social competence can be predicted to hinder normal social and academic development. This deficit is viewed as a commonality among behavior disordered, learning disabled, and mildly mentally impaired children (Hallahan and Kaufman, 1978). Gresham (1987) claims that social competence can and should be used as one factor in consideration of the appropriateness of the "least restrictive environment". In view of present concerns around the Regular Education Initiative (REI), the remediation of social skill deficits in mainstream classrooms represents a legitimate prereferral intervention. Deficits in social skills which hinder normal social and academic development is an important focus given that referrals for psychoeducational

evaluation are often a result of social behavior deficits within the classroom situation (Hersh and Walker, 1983). Although many children are identified as being deficient in social skills, less attention is given to the nature of these deficiencies, than to mere identification. Understanding of the social cognitions and assessment of mildly handicapped groups may provide useful information with respect to the nature of their academic and social needs.

The mediation process (thinking) that occurs between the presentation of environmental events and the individual's reactions to these events are considered to direct behavior and are highly relevant to assessing social skills and potential skill development. Social perception refers to one's ability to accurately interpret a social situation. Each situation is considered to be a myriad of events, cognitions and feelings which are taken in, synthesized, and interpreted. Morrison and Bellack (1981) found that a direct relationship exists between the ability to recall a social situation and overall social competence. Moyer (1974) reported that social competence is perhaps best viewed as a developmental process. According to Morrison and Bellack (1981), social competence correlates with intelligence. Overall, children with special needs have been found to be less socially perceptive. Although these children are recognized to be deficient in social skills, little attention is given to the nature of these deficiencies. Limited

efforts have been made at determining the unique aspects of social development among mildly handicapped children.

In consideration of the role of social cognitive processes in many models of social competence and intervention programs, it is important to be aware of the developmental changes in these capacities that occur as a function of age. Thus, what is normal with regard to a particular social/cognitive skill at one age is abnormal at another age. One aspect of social cognition is perspective-taking. The adolescent's lack of differentiation between his or her own preoccupations and those of others has been termed egocentrism by cognitive developmental theorists, (Elkind, Bowen). Adolescence, according to Elkind, is marked by the acquisition of formal operational thought. Increases in knowledge are constantly subjected to a refocusing of perspective. While adolescents begin to develop a quasi-external ability to observe and consider others behavior and thought, they assume that what is of major importance is what everyone else is thinking about. That is to say that adolescents perform for an imaginary audience (Rosenthal and Simmons, 1988). A well known dimension of this imaginary audience perspective-taking is self-consciousness. According to Elkind (1967), this imaginary audience is a mental construction based upon a notion that other people are as admiring or critical of the person as the person is of himself or herself. The adolescent believes that he or she



is the focus of attention and operates on a stage on which he or she is the principal actor and the world is perceived as his or her audience. According to Elkind (1967), this ability to conceptualize one's own thoughts is the crux of what Elkind refers to as adolescent egocentrism. In this framework the adolescent fails to differentiate between his or her own concerns and those of others. Most certainly, rapid physical and physiological changes can be attributed to this heightened self-concern. This self-absorption and resurgence of narcissism has long been noted by psycho-analytically oriented theorists (cf. Blos, 1967; Sullivan, 1953). As opposed to the child's inability to take the other person's point of view, the adolescent "takes the other person's point of view to an extreme degree", (Elkind, 1968).

The notion of egocentrism as a framework may make it possible to account for characteristics of adolescent social interaction such as attention-seeking behavior, peer influence, inter-personal ineptness and typical non-permanent relationships. Elkind (1968) suggested that relationships during this period are exploitive and are founded on a need for self-definition and self-interest as opposed to a more reciprocal involvement.

Although the concept of adolescent egocentrism and the imaginary audience are well known to adolescent researchers, the manner in which it is conceptualized has been a subject of considerable debate. Lapsley and Murphy (1985) propose

that the constructions of Elkind's imaginary audience and personal fable are more directly related to levels of interpersonal understanding in adolescence. Thus, a reformulation of the construct in terms of social cognitive development is seen to better account for behaviors associated with the construct. A general problem in the study of adolescent egocentrism is the existence of these other possible explanations for characteristic behavior. Simmons, Rosenberg, and Rosenberg (1973) found that transition from elementary to junior high school represented a significant stress along various dimensions of one's self-image including self-consciousness. This increased sensitivity is a function of a major change in social context, moving from a more secure setting where the teacher is a parent surrogate to an environment that demands a more independent style of functioning.

An overall purpose of this investigation reported here was to determine which of two perspectives (either a developmental cognitive perspective or a social special programming contextual perspective) contribute more to the development of adolescent egocentrism. Specifically, which perspective: cognitive developmental or social/contextual (special programming) contributes more to the understanding of self-consciousness in adolescence. The study was designed to focus on the following: a) to determine the nature of the relationship between social perspective (cognitive) and

social skill development, across exceptional categories; b) to determine the nature of deficiencies in social competence across diagnostic categories (self-contained/ED, LD, cross-categorical); and c) to examine potential mediating factors (e.g., self-consciousness, cognitive aptitude, special programming, length of service) presumed to be relevant to the individuals' interpretation of environmental events and potential skill development.

The Behavior Rating Profile (BRP) and the Imaginary Audience Scale (IAS) were administered to the 88 adolescent subjects in groups in special education classroom settings (self-contained, instructional, resource). A Behavior Checklist (Quay Peterson) was completed by each teacher who was asked to rate each of the mildly handicapped (MH) children who were part of their caseload. School records were examined to determine the extent and length of special education service and current level of cognitive functioning (Wechsler Intelligence Scale). Differences were anticipated in measures of social competence, self-rating (perspectives) and the Imaginary Audience Scale across the groups (ED, LD, cross-categorical).

## CHAPTER II

### REVIEW OF RELATED RESEARCH

The purpose of this chapter is to review recent theoretical contributions and empirical findings related to social competence and social skill development. An attempt is made to relate this work to the mildly handicapped. The construct of egocentrism and its relation to adolescent development of perspective-taking ability and/or skills of self-reflection is reviewed. First of all a comparative presentation of various theoretical perspectives on social competence, its components and processes is presented. Afterward the studies designed to investigate the concept of adolescent egocentrism and its relationship to adolescent development of a more mature and differentiated perspective are reviewed and evaluated.

Finally, the concept of perspective-taking and its relationship to the development of social skills and issues posed by construct limitations of the construct are examined.

#### Social Competence

Adolescence is an important developmental period which is of particular interest to both educators and

psychologists. There is much recent interest in understanding and attempting to remediate the social skill deficits of at-risk youth. Social skills which are often considered to be part of a broader construct of social competence are defined as those abilities which "within a given situation prove effective and maximize the probability of producing positive effects for the interactor" (Foster and Ritchey, 1979).

There are a number of processes that are considered to be developmental in nature which are thought to contribute to social competence and most specifically to the acquisition of social skills. Cognitive processes are basic elements in some models of instruction or training. Meichenbaum, Butler, and Gresham (1981) proposed a three component model of social competence. This model included (a) overt behaviors (b) cognitive processes and (c) cognitive structures. Clearly, developmental change affects all three of these components but most specifically thinking skills, style of processing, and memory system (motivation and direction for thought and behavior). A great deal of the research in the area of social competence relates to a wide range of social cognitive capacities such as role-taking/perspective-taking, person-perception, conceptions of friendship and interpersonal problem-solving skills as central to the quality of an individual's social competence. The cognitive processes which allow an individual to assess his or her interactions with

others and develop an accurate perspective are thought to be critical to guiding his or her behavioral interactions. A differentiated perspective of one's own interactions is required for the development of competence. Two major models have been proposed, (information-processing and structural). Information-processing theorists assume that the child's behavior in a particular social situation occurs as a function of the way specific cues are processed. Skillful processing to lead to behavior that is judged as competent and deviant processing is judged as incompetent. From Flavell, (1968), a more structurally based perspective, it is assumed that knowledge systems are characterized by specific organizational structures at different points in development. These organizational structures have been proposed (Turiel, 1983; Selman, 1980) to explain the acquisition of perspective-taking skills. An association between level of perspective-taking and social competence is postulated to exist. Cognitive and contextually related change is considered to be of relevance to psychologists concerned with the development of social competence.

Definitions of social competence tend to vary widely in their relative emphasis on social cognitive skills and capacity, behavioral performance, judgments by others and psychological risk. The most fruitful questions being how are each of these aspects of competence related to one another and what, if any, is the nature of this relationship?

## Social Competence: Components and Processes

The concept of social competence is often confused with and used interchangeably with social skills. Competence as viewed by Hops (1983) is a summary term which reflects a given individual's judgment about the general quality of another's performance in a given situation. Social skill from a behavioral perspective is rooted in the assumption that certain identifiable skills form the basis of what can be construed as competent behavior and that interpersonal difficulties may arise as a function of a faulty behavioral repertoire (McFall, 1982; Bellack and Hersen, 1979). According to Gresham (1987), social competence has long been considered a fundamental aspect of human capabilities. Thorndike (1927) suggested three types of intelligence, one of which was social intelligence or social competence. Social competence is a crucial notion associated with the conceptualization and classification criteria of handicapped persons. This has been most apparent in the area of mental retardation where cognitive/academic and social competence have been given equal emphasis (Grossman, 1983).

An inability in the literature to agree on a precise definition of social competence (Anderson and Messick, 1974; Zigler and Trickett, 1978) or to identify specific social behaviors which account for competent performance has been viewed as a major impediment in treating socially problematic children. In general, what we continue to rely upon (Kazdin,

1977) is the subjective evaluation of significant others or social agents in the child's environment. The end result, since there are not clear, specific criteria to judge social behavior, is a reliance on the global impressions from these agents as to how they were impacted by such behavior. This emphasis on observable acts as indices of competence has led to a rather limited set of measures by which one can differentiate high and low competent individuals. In each event (e.g., silences, behavioral disturbances, eye gaze, conversational tone) have been investigated as measures of social competence. Social skills ultimately characterize many investigations of social competence.

Waters and Sroufe (1983) note two general perspectives, one emphasizing competence as a molar concept and the others emphasizing more specific characteristics. Defining competence as a molar concept refers to a broad array of characteristics that in a general sense speaks to an individual's effectiveness in his environment. A lack of criteria to measure individual effectiveness without falling back on specific skills or relying on a circular definition (i.e., effectiveness being a competent way of functioning) remains problematic. Defining competence (Waters and Sroufe) as related to specific skills solves measurement problems at the expense of the construct itself. Furthermore, specifics are likely to be skills contingent upon cognitive level or other individual traits. A developmental perspective is



proposed in which the central issue is formulating assessment procedures which are appropriate to each age period but retain core features. Therefore, the placing of social competence as a higher level of constructs which share in the ability to engage a wide variety of specific skills (competencies) is suggested. In general, Waters and Sroufe (1983) agree with Pepper (1942) that when approaches to theory can not be integrated, it is possible to shift from one to another as occasions require. An understanding as to the manner in which cognition, affect and behavior is integrated seems relevant.

In this conceptualization, social competence is considered to be a developmental phenomena. What may be competent behavior at one age is not necessarily competent at a later stage of development. Developmental theory and knowledge regarding normal social development is crucial. Ford (1982) found that social competence represents a domain of human functioning that can be partly distinguished from a general cognitive domain. Therefore, a relationship is suggested between social cognition and effective social behavior. Adolescents who were described as being able to function effectively in challenging social situations assign high priorities to interpersonal goals and are goal directed (Baumrind, 1975), and tend to favor setting their own course as opposed to just "going with the flow". Spivack and Shure, (1974) noted socially competent adolescents to be more

resourceful, think more divergently and demonstrate an ability to anticipate consequences of their actions for themselves and others. The concept of empathy continues to be suggested in regulating behavior and practicing competent interpersonal understanding. A majority of the studies in social competence involve children and early adolescents which makes an already acknowledged definitional problem more complex for secondary students. Adams (1983) attempted to establish a definition of social competency with secondary-age students that included elements of social knowledge, empathy and locus of control. The constructs were, however, found to be loosely related and sex differences in the correlation between the various competency indices suggested a need for a gender based definition. Albeit a linear relationship between social competency and peer popularity was supported leading the investigators to conclude that efforts should be directed toward assessment and training in social knowledge skills for both sexes. Generally, females maintained higher empathic abilities over all age levels. Although both male and female knowledge regarding motives for behavior increased with age, it suggests that this period is significant in its contribution to social competency formulation. Meyers and Nelsen (1986) found that cognitive strategies are an important aspect of competence in social interactions and that high and low-competent individuals may have a very different understanding of what transpires during

an interaction. An aspect of this research which needs further investigation, however, is looking at a population that offers a wider range of competence, such as within the mildly handicapped population.

Gresham (1986) views social competence as being composed of three subdomains: 1) adaptive behavior; 2) social skills; and 3) peer acceptance. The overall conceptualization of social competence is based upon two subdomains or content areas (i.e., adaptive behavior and social skills) and an outcome or result of socially competent behavior (i.e., peer acceptance). Greenspan (1979) developed a tripartite model of social competence. The three aspects of social competence identified in that model are: "temperament" (emotional and attentional stability), "character" (degree of pro-social orientation), and "judgment" (understanding of others). Temperament-oriented approaches seem to develop in adolescents the capacity for insight into their emotional response pattern in the hope of acquiring greater self control. Included in this category are psychodynamically oriented treatment (Redl and Wineman, 1957; Guttman, 1970), as well as more recent work done in cognitive-behavior modification. Character oriented approaches which focus on increasing roles of prosocial behavior and decreasing antisocial patterns. In this camp are included the works of Bornstein, et al (1980), Sarason and Ganzer (1973), and Goldstein (1978). Judgment oriented approaches strive to

develop within youth a better understanding of people and relationships (Selman, 1979; Chandler, Greenspan, Barenboim, 1974). More recent work in the development of problem-solving skills in adolescents (Shure and Spivack, 1979) can be included as a judgment oriented approach. The categorization of interventions based upon the aspect of social competence targeted is however overly simplistic, albeit may serve a heuristic function regarding treatment and guidelines for future research and program development. It is certainly not demonstrated within the literature that any particular conceptualization of social competence or interventions designed to address deficits provides global answers. Adolescents, for example, who demonstrate problems rooted in temperamental or characterological deficits are not likely to benefit from social foresight training or in the development of empathic skills. A multimodal form of intervention and a developmental conceptualization of social competence (Sroufe and Waters, 1983) is thought to be more productive.

A major issue in the assessment of social competence is just what to assess. McFall (1982), emphasized the need for a distinction between social skills (specific tasks) and social competence (may or may not be task or situation specific and implies the use of evaluative judgment and criteria). The principal question to be asked is what specific skills the child lacks, does he or she need to be

taught specific behaviors or provided with experience to utilize a skill already in his or her repertoire. Another dimension of such evaluation relates to the specific cognitions and emotional status of the individual in question (Cartledge and Milburn, 1986).

Gresham (1986) noted the importance of considering method variance when assessing social competence. A study conducted by Gresham, Bruce and Veitia (1983), utilizing five assessment methods (peer-ratings, parent-ratings, teacher-ratings, self-ratings and role-play), suggested what is being measured depends to a large degree on how it is being measured (multiple operationalism). As a state-of-the-art, social skills assessment instruction isn't. Although several psychometrically advanced scales exist, psychologists must depend upon skills in behavior assessment and knowledge of development to deliver a valid assessment. One of the more important tasks in accomplishing this is to develop a greater understanding of social validation. That is, we develop goals for training in an attempt to make an ecologically valid difference in the child's societal functioning. It goes without saying that the development of social skill norms is appropriate.

### Perspective-Taking

Researchers (primarily constructivists) have used the term "perspective-taking" interchangeably with role-taking to refer to a process by which a person takes on another's

constructs. Pelias (1982) summarized this conceptualization of perspective-taking as a "higher order process" by which an individual maintains a "construction of another's construction". The term however, has often been modified with other adjectives such as "egocentric", "self-reflective", "mutual", "affective" and "social" (Redmond, 1985). Perspective-taking has had a developmental link with elements such as cognitive complexity, communication adaptation ability, accountability and age (Hale and Delia, 1976; Delia and Clark, 1977; Ritter, 1979).

There is considerable variation in the ways in which social perspective-taking and related concepts (e.g., egocentrism) have been defined and operationalized. Hale and Delia (1976) used the terms "roles taking" and "social perspective-taking", interchangeably. Both were viewed as the capacity to assume another's "point of view". Perspective-taking has been used to describe the ability to understand another's thoughts, actions, feelings and intentions. The ability to construct a perception of another's experience although not necessarily a reality. A difficulty exists in determining whether an individual's understanding of another's is based upon stored knowledge or actively putting oneself in another's situation. Because of this presenting problem, exploring an individual's ability or lack of ability to understand others thoughts; intentions and feelings are thought to be more easily investigated

(Eisenberg and Harris, 1984). It is clear in the research (Selman, 1980; Flavell, Botkin, Fry, Wright, Jarvis, 1968) that an individual's understanding of others' intentions, motives and feelings increases in the elementary years as well into adolescence. Flavell (1968) presented an information-processing model of the development of perspective-taking. The steps a child goes through in the development of perspective are as follows: (a) the child is required to become cognizant of the existence of other viewpoints, that other perspectives exist; (b) in the need phase the child becomes aware of the necessity to make inferences, this is often in the service of an interpersonal goal such as directing another's behavior; (c) an inference phase in which the child must perform the mental actions that provide this knowledge; and (d) the child must apply this knowledge of others to modify subsequent behavior. Selman (1980) presented a structural model of perspective-taking as opposed to Flavell's process orientation. The five stages ranged from "undifferentiated and egocentric perspective-taking" to "in-depth societal-symbolic perspective-taking". These stages are thought to be invariant and dependent upon sophistication of cognitive processes. Selman, Lavin and Brion-Meisels (1982) present some evidence that children with emotional or interpersonal difficulties lag behind in aspects of Selman's level of interpersonal understanding (Eisenberg and Harris, 1983).

Shatz (1983) and Borke (1971) proposed that the child's understanding of another's emotions and the context in which these emotions are elicited increased dramatically with age. Children begin to understand that identities and personalities are coherent and that another's inner feelings may go beyond the immediate and observable. Additionally, Harter (1982) notes in children an increase in ability to detect emotion and knowledge that ambivalent or conflicting emotions can occur simultaneously.

A relationship between perspective-taking and various indices of social competence (e.g., peer acceptance/having friends) is not consistent (Gresham, 1983). Regardless, perspective-taking abilities have been related to social status (e.g., Ford, 1982; Peery, 1979) and having a close relationship in preadolescence. There is little research investigating perspective-taking skills and social competence in adolescence. Inconsistencies in defining constructs and problems in measurement may be a central issue. Nevertheless, a relationship appears between social competence and perspective-taking skills.

### Adolescent Egocentrism

In this section, a discussion of cognitive and social contextual considerations regarding the development of perspective-taking skills is presented.

Elkind (1967) and Looft (1972) have proposed that the ability to develop differentiated perspective-taking skills



is most strongly affected by interpersonal interaction. In such situations the adolescent is compelled to examine and reexamine his/her own ideas and perceptions with those presented by others.

As the child begins to move out into the world the goal of social exchange is to develop relationships with peers and significant authority adults and acquire knowledge and control over his environment. The explanation of the "self", therefore, the manner in which the adolescent sees himself operating in various situations is thought to be "a kind of perceived ego". It is in effect, the individual's ability to "step outside" of himself, observe his ability to cope across various contexts and with other people and modify behavior based on these perspectives. Developing an accurate and differentiated perspective of one's own interactions with others involve particularly effective social cognitive processes.

Although it is argued that the social exchange is crucial to egocentrism, some research supports the finding that the onset of formal operations is the primary factor in this inability to produce a differentiated perspective. Formal operations and social perspective-taking may well be related although one is focused on cognitive development/mental maturation and the other on interpersonal interaction and social experience. The research supports a distinction between a cognitive and a social process as the under-

pinnings of adolescent egocentrism (Adams and Jones, 1981; Elkind and Bowen, 1979; Enright and Lapsley, 1979).

Piaget (1962) proposed that the individual in the stage of formal operations is able to think hypothetically, counterfactually and propositionally. Most significant however, is that the adolescent begins to develop the reflective-self as he comes to view himself as a thinker. According to Elkind (1967) egocentrism emerges from the adolescent's more sophisticated thinking behavior. A difficulty in differentiating between transient and abiding thought is characteristic of the egocentric adolescent. Elkind explained this phenomena using the search of the adoptive adolescent for his natural parents. Elkind's hypothesis was that formal operational thought allowed the adolescent to appreciate the importance of biological inheritance. The salient point being the emotional commitment of the adoptive parents appearing transient while the commitment of the biological parents appears abiding. The adolescents' failure to differentiate between biological and psychological parentage and abiding and transient emotional commitment is at issue. Elkind (1978) applied this distinction between transient and abiding with regard to components of the self (Pesce, 1981). Abiding traits are long lived, permanent aspects such as mental ability and personality traits. The transient self consists of circumstantial situations and behaviors which are not regarded as reflective of the true

self. These may be inadvertent actions or statements, a bad haircut or inappropriate clothing for a particular social event.

Elkind's (1967) early work in the area of adolescent egocentrism centered around the individual's inability to differentiate between objective and the subjective. The imaginary audience was thought to be a characteristic form of adolescent egocentrism. Elkind (1976, 1978) sees behavior that is a reaction to the imaginary guideline as a consequence of increasing cognitive capacities that accompany puberty and adolescence. These new mental abilities allow the adolescent to think and conceptualize the imaginary audience. The adolescent who is convinced that others are preoccupied with him is continually constructing or reacting to an audience. "It is an audience because the adolescent believes that he will be the focus of attention; and it is imaginary because in actual social situations, this is usually not the case (unless he contrives it to be so)," (Elkind, 1967, P. 1030).

The imaginary audience is thought to provide some insight into the characteristic self-consciousness of the early adolescent and conversely the occasional excessive degree of self-admiration. When the adolescent is feeling critical of him or herself, he/she anticipates the environment (audience) to harbor these same feelings. The audience who is aware of every cosmetic and behavioral

sensitivity is seen as a harsh judge. A small blemish becomes a cosmetic flaw and the focus of everyone's attention. It is thought that part of the adolescent's increased desire for privacy is a reaction to this feeling of being under scrutiny. Conversely, Elkind attempts to explain the adolescent's "boorishness, loudness and susceptibility to fad as partially provoked by the inability to differentiate between what he believes to be attractive and what others admire", (Elkind, 1970). This can account for the incredulous response of the adolescent when caretakers disapprove of his dress and behavior. As the adolescent moves into social interactions with the opposite sex the hours spent in front of the mirror illustrates the part further. Both male and female entertain the reactions and glances that will come their way. In the actual social situation, one is more concerned with being observed than with observing others. As Elkind states, the adolescent is simultaneously an actor and an audience to others. Thus, the construction of the imaginary audience has the potential to explain a number of behaviors and sensitivities. As the adolescent continues to gain experience from those imagined to real, actual as opposed to self-interested relationships are developed. As more reciprocal interactions develop, the adolescent moves from a belief in the uniqueness of his/her experience to perceiving the universality of his/her feelings. Affectively, egocentrism diminishes with an

integration of the feelings of others with one's own emotions.

### Related Research

An examination of the research on adolescent egocentrism describes a distinction between a cognitive and a social process underlying the concept (Riley, Adams and Nielson, 1984). However, the developmental pattern in adolescence is uncertain and does not appear to demonstrate a consistent link to processing in formal operations of cognitive development (Enright, 1979; Elkind, Bowen, 1979; Adams and Jones, 1981). It is possible that adolescent egocentrism is not directly associated with cognitive development but is perhaps a by-product of social experience that parallels maturation, though not caused by it.

Investigators have explored social process or contextual factors that may account for adolescent egocentrism. Early studies conducted to investigate adolescent egocentrism were directed at the development of role taking skills in childhood and into early adolescence. The focus of writers such as Chandler (1973); Flavell, Botkin, Fry, Wright and Jarvis (1968) was not linked to Elkind's concept of egocentrism and perhaps contributed to the difficulty which exists today in defining the construct. Implicit in these studies however, is that egocentrism as applied to interpersonal relations connotes an inability of a person to anticipate accurately the perspective of another. As

referred to above this has been termed empathy, role-attribute discrimination and effective communication.

Social role-taking (Flavell, 1968) is viewed as involving two components (a) the ability to search and find another's perspective and (b) counteract the intrusion of one's own perspective during an interaction. Chandler (1973) tested various hypotheses with regard to egocentrism and antisocial behavior in young adolescents. In this study he showed that delinquent adolescents compared to non-delinquents demonstrated a greater degree of egocentrism on an assessment procedure designed by Flavell (1968). Thelan et al (1976) examined the use of videotaped models of appropriate social interactions with regard to their ability to improve the skills of adolescents.

The models aged 12-16 demonstrated skills such as empathy and communication across school and home/community settings. Marsh (1980) studied the effect of perspective-taking training on interpersonal problem solving. Some support was gathered for increased perspective-taking abilities increasing interpersonal problem solving skills.

Other investigators have explained social process or context which may account for adolescent egocentrism. Simmons and Rosenberg (1973) studied the effects of school transition on egocentrism. These investigators suggest that different school environments may account for as many differences in egocentrism as age or cognitive development.

The present investigation will consider the range of services provided within a special education environment in addition to length of service as additional contextual factors.

Simmons and Rosenberg (1975) investigated racial heritage and the social context surrounding race as to how that could affect white and black adolescents. The hypothesis is that differences in adolescent egocentrism could be accounted for by attitudes toward sex ideas, peer relations and feelings about physical changes (i.e., looks). In this realm Adams and Jones (1982) explained the social context of parent-child relations as possible contributors to adolescent egocentric behavior. The authors compared male and female adolescent perceptions of their relationships with their parents to adolescent egocentrism. Here the authors suggest that parental-adolescent relationships can be associated with self-consciousness during adolescence. This is qualified in that only perceived maternal rejection (boys) and maternal support (girls) demonstrated a high enough correlation between parent-adolescent relations and high egocentrism. Other correlations of interest were between high maternal support for males and male adolescent egocentrism and between withdrawal of paternal attention for females and high female self-consciousness. It is of note here that the authors are utilizing egocentrism and self-consciousness synonymously.

Anolik's (1981) study is based on the assumption that adolescent egocentrism is linked with a critical view of

interpersonal relationships. It is agreed that an adolescent's criticalness is a reaction against feelings of inferiority and as a defense to enable one to appear good in front of others. Anolik compared delinquent and non-delinquent youth on a perceived parental support scale and a measure of adolescent egocentrism. The study revealed: 1) that delinquents experienced higher levels of egocentrism than non-delinquents; and 2) lowered perceived parental support was correlated with higher degrees of adolescent egocentrism. Anolik suggested that the perception of limited parental support can impact upon the adolescents ability to appreciate the views of others and offset social interaction. Both Anolik (1981) and Adams and Jones (1982) support the idea that perceptions of parental support influence egocentrism in early adolescents. Tice, Buder and Baumeister (1985) examined the effect of audience pressure on early adolescents. The authors intent was to examine the curvilinear relationship proposed by Simmons and Rosenberg (1975) and Elkind and Bowen (1979) between self-consciousness and age. The suggestion being that a highly egocentric individual would be more likely to "choke" under pressure than a less egocentric individual. The performance of skilled video game players was observed with and without an audience. Children under 12 improved under audience pressure; adolescents from 14 to 19 showed substantial drops in performance and adults 20 and older showed moderate drops.



The articles described support a curvilinear relationship between the age of the adolescent and the degree of self-consciousness. The increase is dramatic in early adolescence and gradually decreases through middle and late adolescence. Throughout the majority of the related research several factors in the age-egocentrism relationship are alluded to. These are: 1) during early adolescence the individual is experiencing a transition from concrete operations to an early stage of formal operations; 2) pubertal changes are occurring; and 3) many transitions both social and emotional are transpiring. The exact linkage of the relationship among these factors is certainly not clear. There is some concern regarding the fundamental issue of attaining formal operations for typical adolescent egocentrism to occur. It becomes clearer in the research that although exact linkage can not be determined the organization of formal structures is greatly affected by the social milieu. The typical structural components used to analyze development of perspective-taking skill can not account for the sociological or social psychological variables at work. A contextual perspective allows for the investigation of ways in which emergent strategies may vary in their stability and change across social situations. Other contextual variables may be important such as popularity, academic situation, classroom environments and/or economic situation of the individuals involved. Perspective-taking ability is thought to have

important implications for the development of mature social behavior. The examination of this characteristic in a mildly handicapped adolescent population is a focus of this research.

### Recapitulation

The possible existence of a relationship between the cognitive and social contextual spheres of human functioning has been a theoretical issue of interest to many behavioral scientists for some time. This relationship has been addressed by many investigators: Vygotsky (1978), Marx (1953), Baldwin (1906). Serafica (1980) differentiated this relationship into three specific components (1) the relationship between structural levels of cognitive and social development; (2) the relationship between cognition and social behavior; and (3) the role of contextual factors in ontogenesis.

Piaget (1980) maintains that cognitive and social development are inseparable and that parallels may be found between cognitive structures and levels of affective or social development. Within a framework such as Piaget's, the goal is to determine which lines of social development parallel cognitive trends and whether they intersect at specific points. According to Botvin and Murray (1975), social interaction is a facilitating condition for transitions in cognitive development. This position differs from a "primacy" theory, in that it considers the

developmental level represented by a particular social act as critical. It should be noted that the overall issue is still one of emphasizing the relationship between levels of cognitive and social development.

The role of contextual factors in development has been stressed by investigators from different disciplines (Berger and Luccuan, 1966; Brofenbrener, 1977; Piaget, 1970). The task of conceptualizing the environment and empirically verifying its role in development still confronts proponents of cognitive developmental theory. That is to say that we know little about how cognitive and social functioning differ as a function of context.

Troubled children are thought to have extraordinary difficulty "looking inside" themselves and understanding relationships among their feelings and motivations (Selman, Lavin and Brion-Meisels, 1982). Behaviorally, this difficulty reportedly interferes with self-regulation and the ability to achieve expression of internal experience. This often creates the necessity for the implementation of some form of external control. Troubled children are often said to have difficulty reflecting upon their own actions as they might be seen from another's perspective. In addition, a problem exists with respect to considering the effects of their actions on others and how they might be viewed by others as a result of their behavior.

It is clear that the natural progression described by

investigators such as Selman (1976) and Schantz (1975) by which children come to understand themselves and social relationships has important implications for professionals who ask youth to reflect upon their own behavior and its consequences. When working with children of various levels of maturity, it is helpful to consider to what extent difficulty in looking at their own behavior is a natural developmental function of all children of a specific age period or a possible consequence of pathology. If disturbances exist, are they considered to represent lags in social and/or cognitive capacities. As noted above, an adolescents' ability to develop a differentiated perspective is crucial to interpersonal functioning. A particular phenomena, in the development of this ability is described by Elkind as adolescent egocentrism.

Adolescent egocentrism has been examined from both a social and cognitive point of view.

A characteristic form of egocentrism, the imaginary audience, has been investigated both within a cognitive developmental and a social contextual sphere.

A critical underlying assumption, according to Elkind, in explaining the existence of egocentrism in adolescents is that the construct is a by-product of the recent attainment of formal operations in the adolescent.

Some writers, however, Blasic and Hoeffel (1974); Lapsley (1985); Gray and Hudson (1984) fail to see the

relationship on both an empirical and conceptual level. Blasic and Hoeffel (1974), for example, reduce the role of the "cognitive developmental hypothesis of adolescence" and point out "that concrete operational thinking may be perfectly adequate in order to function as a typical western adolescent". Lapsley and Murphy (1985) reduce the role of formal thought in their account of the imaginary audience and focus on skills that arise in Selman's (1980) formulation of inter-personal understanding. Lapsley and Murphy (1985), postulate that the imaginary audience includes the anticipation of the reactions of others to the self in imaginative situations. Imaginary constructions emerge from social and cognitive skills, the ability to think hypothetically and the ability to mentally step outside dyadic relations and monitor self-other interactions (perspective-taking). Thus, Lapsley and Murphy reformulate adolescent egocentrism ala Elkind in terms of the development of interpersonal understanding.

The overall purpose of the investigation represented here was to consider these competing theories and to determine how specific constructs (e.g. egocentrism, self-reflection, self-consciousness) and/or behavioral characteristics (social ineptness, disturbed conduct) manifest themselves across groups of differentiated mildly handicapped (ED, LD, cross-categorical) children.

## CHAPTER III

### METHOD

#### Hypotheses

The following null hypotheses were tested:

1. There is no difference in social competence scores across groups (BD/ED, LD, Cross-categorical).
2. There is no difference in social perspective-taking scores across groups (BD/ED, LD, Cross-categorical).

#### Subjects

Eighty-eight adolescent special education subjects were randomly drawn from the 9th through 11th grades in a suburban high school. The high school is located in an affluent, North Shore Chicago Community of 17,430. The median age in the community is 32 with a median income upwards of \$50,000. The average cost of a home is \$186,000. The high school is accredited by North Central Association and produces a student body in which 85% go on to a 4 year college. Ninety-two percent pursue some type of post secondary education.

The high school population consisted of approximately 1250 students. The special education population in the high school was approximately 15% of the schools enrollment at the time the study was conducted. The special education sample consisted of students identified as being in one of three categories: (a) Self-Contained Behavior Disordered (BD/ED) n=28; (b) Learning Disabled, (LD) n=30; (c) Cross-categorical, (BD/LD) n=30.

All of the subjects within the special education subgroups had been identified and placed in special education programs according to definitions specified in the State of Illinois guidelines. A Learning Disability refers to a learning problem which is demonstrated by an academic profile which shows strengths and weaknesses in one or more of the basic skill areas. These discrepancies are not commensurate with measured aptitude and are thought to be a result of perceptual processing deficits which interfere with educational functioning. A Behavior Disorder refers to a disorder in which situationally inappropriate behavior observed in a school setting interferes with the learning process, interpersonal relations or individual functioning of the student. The Emotionally Disturbed category refers to a pattern of behavior which characterizes a student as behavior disordered and which is so severe as to require a self-contained setting and an extraordinary degree of related services.

Comparative student demographic data is presented in Table 1. The grade level range of the entire sample was from the 9th to 11th and the age range was 14-17. There were 87 white students and one (1) black student, 54 males (61%), and 34 females (39%), in the sample. All of the students within the 3 sub-groups were identified prior to high school matriculation, or through case study evaluation. Fifteen students of the MH group chose not to participate in the study.

TABLE 1  
SAMPLING DESIGN\*

|        | LD   | CROSS<br>CATEGORICAL | ED   |    |
|--------|------|----------------------|------|----|
| MALE   | N=14 | N=16                 | N=22 | 54 |
| FEMALE | N=14 | N=14                 | N= 6 | 34 |
|        | 30   | 30                   | 28   | 88 |

\* LD = Learning Disabled;  
BD/LD = Cross-Categorical;  
ED = Emotionally Disturbed

### Procedure

The student form of the Behavior Rating Profile (BRP) and the Imaginary Audience Scale (Elkind, 1968) were administered to the subjects in groups in classroom settings.



There were 7 different classrooms tested with a range of 4 to 12 students in each. The scales were administered by 8 different examiners, all of which were certified staff. In some instances, the investigator served as an examiner. Prior to the beginning of the data collection, the investigator explained the procedures to be followed at a departmental meeting. (Each examiner was instructed to use a standard procedure and a carefully crafted set of instructions (see Appendix A for details).

Each of the participating teachers received a Revised Behavior Problem Checklist (Quay and Peterson) along with the student packet and a letter of instruction specifying the procedures to be used to complete the form. The teacher was asked to rate the mildly handicapped (MH) child who was part of his/her caseload. Although the sample selection procedure was not truly random, there was no reason to suspect systematic bias due to the nature of assignment of case managers.

It should be noted that in a few instances where students were identified as being reading disabled, the relevant test questions were read to the students. However, this was not a usual occurrence and was only infrequently required. Prior to the start of the project, 8 students were identified as requiring this modification. This was based upon the evaluation of the investigator and the case manager. In 3 cases, students did not properly complete test items,

test items were unscorable, or test instruments were not clearly identifiable.

The school records were examined to obtain the following data: 1) Wechsler intelligence quotient scores; 2) number of semesters in special education; 3) type of educational program (resource, instructional <50%, self-contained); and 4) description of exceptional characteristics.

### Instrumentation

Teacher-student protocol packets consisted of three (3) instruments: a Behavior Problem Checklist (Quay-Peterson, 1987); a Behavior Rating Profile Student Form (Brown and Hammil, 1983); and the Imaginary Audience Scale (IAS) developed by Elkind and Bowen (1979).

### The Revised Behavior Problem Checklist (RBPC)

The RBPC is an analytically devised behavior rating scale which evaluates children's and adolescent's inappropriate behavior. The RBPC distinguishes among different clusters of behaviors so that problems are more clearly defined. The RBPC consists of 4 major scales: Conduct Disorder, Socialized Aggression, Attention Problems - Immaturity, Anxiety-Withdrawal and two minor scales: Psychotic Behavior and Motor Excess. Quay (1983) grouped these conceptually into three types of atypical behavior patterns:

1. Discipline Problems: Conduct Disorder and Socialized Aggression Scales;
2. Emotional Disturbances: Psychotic Behavior and Anxiety-Withdrawal Scales; and
3. Maturational Delays: Attentional Problems - Immaturity and Motor Excess Scales, and the Anxiety Withdrawal Scales. The Anxiety Withdrawal Scale was included because of the considerable overlap with the Attention-Problems-Immaturity Scale.

There are 89 items on the RBPC, 12 of which are not scored. The RBPC uses weighted scoring - each item circled "1" earns one point and each item circled "2" earns two points for the respective scale. The maximum obtainable score for any of the six scales is two times the number of items on that scale. The minimum is obviously, zero.

### The Behavioral Rating Profile (BRP)

The BRP is a standardized battery consisting of six independent components. Each component is normed independently and can be used separately or in conjunction with other BRP components. Both internal consistency and test-retest coefficients consistently exceed 80. Advantages of the instrument are a) ability to discriminate among groups of learning disabled, emotionally disturbed and normal students and b) use of independent measures.

Three self-rating scales were used in this study (the

Student Rating Scale: Home, the Student Rating Scale: School, and the Student Rating Scale: Peer). These three scales were completed by the individual students. Each scale consists of 20 items which are intermingled in a 60-item T-F format. The students completing these scales are asked to classify each item as being either true or false.

The items on the Student Rating Scale: Home relate to behaviors or situations which occur primarily within the home situation. Examples are:

My parents bug me alot

I often break rules set by my parent

The Student Rating Scale; School:

My teachers give me work I can't do

I sometimes stammer or stutter when the teacher calls on me

The Student Rating Scale: Peer

Some of my friends think it is fun to cheat, skip school, etc.

I seem to get into a lot of fights

### The Imaginary Audience Scale

The scale is subdivided into two sub-scales, the Transient-Self scale consisting of Items 1,3,5,7,9 and 10 and the Abiding-Self Scale consisting of Items 2,4,6,8,11 ad 12. For both sub-scales, subjects choose from three possible reactions. Item #8 is listed below:

"One young person said, "When I'm with people I get nervous because I worry about how much they like me"

I feel like this often

I never feel like this

I feel like this sometimes

Complete endorsement of this statement was given a score of 2, indifference was scored 1, and disagreement was scored zero. In relation to the example above, the first choice is scored 2, the second choice is scored 0 and the third choice is scored 1.

For both scales, the higher the score, the less willing the subject was able to expose the transient and/or abiding self to an audience. (See Appendix B for a description of the scoring criteria used for all three instruments).

### Design and Statistical Analysis

The investigator sought to test the two null hypotheses of the study within the context of the analytic paradigm illustrated in Figure 1. The dependent variables consisted of social competence scores; self-rating (perspective) scores; and scores yielded by the Imaginary Audience Scale. Independent variables were type of diagnostic group (ED, LD, Cross-categorical).

Multivariate analysis of variance and multivariate analysis of covariance procedures were used to test for differences on measures of social competence, self-rating (perspective) and the Imaginary Audience scale, across the

three diagnostic groups.

|        | GROUP |   |   |
|--------|-------|---|---|
|        | A     | B | C |
| MALE   |       |   |   |
| FEMALE |       |   |   |

FIGURE 1. Analytic paradigm of the study.

A = Emotionally Disturbed

B = Learning Disabled

C = Cross-Categorical

Where Independent Variable =

- a) Exceptional Categories (Emotionally Disturbed, Learning Disabled, Cross-Categorical)

Where Dependent Variables =

- a) Social Competence: scores assessed by the Revised Behavior Problem Checklist
- b) Self-Rating (Perspective): assessed by Behavior Rating Profile (student)
- c) Imaginary Audience Scores: assessed by the Imaginary Audience Scale.

## CHAPTER IV

### RESULTS

#### Results Related to Null Hypothesis One

Null hypothesis (I) stated there was no difference on measures of social competence across groups of mildly handicapped students enrolled in special education programs. A 2x3 (Gender and Group) Multivariate Analysis of Variance was completed using the six factor scores from the Revised Behavior Problem Checklist, as dependent variables. Raw scores for the 6 factors were used to derive descriptive statistics for diagnostic categories. (Table 2, 3, 4 and 5 presents raw score means and standard deviations from group, sex and group x sex). The Manova, using Wilks criterion, revealed a significant group main effect,  $F, (12,154) = 5.88, p < .001$  and a significant gender main effect,  $F (6,77) = 7.15 p < .001$ . No interaction effects were significant.

Analysis of univariates revealed that all dependent variables contributed to the significant multivariate  $F$ , for group main effect. However, only 3 of the six variables measuring social competence accounted for the significant multivariate  $F$  measuring a gender effect. The results of

these analyses are summarized in Table 6.

The post hoc comparisons demonstrate group mean differences on scales measuring discipline problems, emotional disturbances and maturational delays.

The three groups differed on the scales which constitute discipline problems (CD and SA). As indicated in Table 2, the group means for the self-contained category were dramatically higher than either the cross-categorical BD/LD or the Learning Disabled category. Group mean differences at the .05 level of significance were noted between the following: A&C and A&B.

Marked differences were noted on two of the three scales viewed as assessing maturational-developmental problems. As noted above mean-group comparisons on the anxiety withdrawal scale were significantly different at the .05 level. The three groups differed dramatically on the Attentional Problems scale demonstrating significant comparisons.

The three groups differed significantly on the anxiety-withdrawal scale and demonstrated significant comparisons at the .05 level between groups A-B and A-C on the scale measuring psychotic-like behaviors. The means for groups B and C for this scale were not significantly different. Group A (ED/Self-contained) demonstrated a greater degree of symptomatology than both groups B and C whose mean comparisons were not as dramatic.



In summary, the first null hypothesis was rejected. Using multivariate analysis of variance, a strong statistical difference was found among the 3 groups on measures of social competence. The self-contained/ED group means were higher on all the scales while the Cross-Categorical and LD group differences were not as dramatic.

TABLE 2  
GROUP MEAN AND STANDARD DEVIATIONS

| <u>VARIABLE</u>             | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|-----------------------------|----------|-------------|-------------|
| GROUP A (SELF-CONTAINED)    |          |             |             |
| SK1                         | 28       | 15.79       | 11.30       |
| SK2                         | 28       | 8.50        | 7.11        |
| SK3                         | 28       | 14.14       | 8.98        |
| SK4                         | 28       | 9.89        | 6.42        |
| SK5                         | 28       | 2.11        | 2.85        |
| SK6                         | 28       | 3.11        | 2.82        |
| GROUP B (LEARNING DISABLED) |          |             |             |
| SK1                         | 30       | 4.30        | 6.92        |
| SK2                         | 30       | .40         | 1.04        |
| SK3                         | 30       | 4.77        | 5.13        |
| SK4                         | 30       | 2.97        | 3.22        |
| SK5                         | 30       | .13         | .73         |
| SK6                         | 30       | 1.57        | 2.53        |
| GROUP C (CROSS-CATEGORICAL) |          |             |             |
| SK1                         | 30       | 8.03        | 8.05        |
| SK2                         | 30       | 1.93        | 3.78        |
| SK3                         | 30       | 8.83        | 5.05        |
| SK4                         | 30       | 6.00        | 4.37        |
| SK5                         | 30       | .70         | 1.56        |
| SK6                         | 30       | 1.90        | 2.54        |

TABLE 3  
MEANS AND STANDARD DEVIATIONS X SEX

| <u>VARIABLE</u> | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|-----------------|----------|-------------|-------------|
| SEX = MALE      |          |             |             |
| SK1             | 54       | 12.31       | 10.53       |
| SK2             | 54       | 3.96        | 6.21        |
| SK3             | 54       | 11.50       | 7.94        |
| SK4             | 54       | 6.41        | 5.81        |
| SK5             | 54       | 1.39        | 2.44        |
| SK6             | 54       | 3.07        | 2.95        |
| SEX = FEMALE    |          |             |             |
| SK1             | 34       | 4.32        | 6.72        |
| SK2             | 34       | 2.76        | 4.91        |
| SK3             | 34       | 5.38        | 5.02        |
| SK4             | 34       | 5.88        | 5.13        |
| SK5             | 34       | .26         | .79         |
| SK6             | 34       | .74         | 1.21        |

TABLE 4

## MEANS AND STANDARD DEVIATIONS: GROUP X SEX

| <u>VARIABLE</u>                             | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|---|----------|-------------|-------------|
| SEX = FEMALE; GROUP = A (SELF-CONTAINED)    |          |             |             |
| SK1   | 6        | 11.00       | 6.23        |
| SK2   | 6        | 10.50       | 4.51        |
| SK3   | 6        | 9.67        | 6.59        |
| SK4   | 6        | 13.00       | 4.43        |
| SK5   | 6        | .83         | 1.60        |
| SK6   | 6        | 1.33        | 1.03        |
| SEX = FEMALE; GROUP = B (LEARNING DISABLED) |          |             |             |
| SK1   | 14       | 1.71        | 5.58        |
| SK2   | 14       | .36         | 1.08        |
| SK3   | 14       | 2.36        | 3.43        |
| SK4   | 14       | 3.36        | 2.34        |
| SK5   | 14       | 0.00        | 0.00        |
| SK6   | 14       | .57         | 1.60        |
| SEX = FEMALE; GROUP C (CROSS-CATEGORICAL)   |          |             |             |
| SK1   | 14       | 4.07        | 6.37        |
| SK2   | 14       | 1.86        | 4.19        |
| SK3   | 14       | 6.57        | 3.96        |
| SK4   | 14       | 5.36        | 4.81        |
| SK5   | 14       | .29         | .61         |
| SK6   | 14       | .64         | .74         |

TABLE 5

## MEANS AND STANDARD DEVIATIONS: GROUP X SEX

| <u>VARIABLE</u>                         | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|---|----------|-------------|-------------|
| SEX MALE; GROUP A (SELF-CONTAINED)      |          |             |             |
| SK1                                     | 22       | 17.09       | 12.11       |
| SK2                                     | 22       | 7.95        | 7.66        |
| SK3                                     | 22       | 15.36       | 9.28        |
| SK4                                     | 22       | 9.05        | 6.69        |
| SK5                                     | 22       | 2.45        | 3.04        |
| SK6                                     | 22       | 3.59        | 2.97        |
| SEX = MALE; GROUP B (LEARNING DISABLED) |          |             |             |
| SK1                                     | 16       | 6.56        | 7.35        |
| SK2                                     | 16       | .44         | 1.03        |
| SK3                                     | 16       | 6.88        | 5.52        |
| SK4                                     | 16       | 2.63        | 3.88        |
| SK5                                     | 16       | .25         | 1.00        |
| SK6                                     | 16       | 2.44        | 2.90        |
| SEX = MALE; GROUP C (CROSS-CATEGORICAL) |          |             |             |
| SK1                                     | 16       | 11.50       | 7.92        |
| SK2                                     | 16       | 2.00        | 3.52        |
| SK3                                     | 16       | 10.81       | 5.18        |
| SK4                                     | 16       | 6.56        | 4.02        |
| SK5                                     | 16       | 1.06        | 2.02        |
| SK6                                     | 16       | 3.00        | 3.03        |

TABLE 6  
UNIVARIATE F VALUES OF SOCIAL COMPETENCE SCORES  
FOR SIX DEPENDENT VARIABLES

| VARIABLE | SOURCE |      | SOURCE |      | SOURCE       |      |
|----------|--------|------|--------|------|--------------|------|
|          | GROUP* |      | SEX**  |      | GROUP*SEX*** |      |
|          | F      | P    | F      | P    | F            | P    |
| SK1      | 13.60  | .000 | 10.16  | .002 | .17          | .843 |
| SK2      | 24.50  | .000 | .25    | .617 | .58          | .560 |
| SK3      | 16.16  | .000 | 10.96  | .001 | .08          | .921 |
| SK4      | 15.20  | .000 | .51    | .478 | 1.68         | .192 |
| SK5      | 8.48   | .000 | 3.41   | .068 | .78          | .463 |
| SK6      | 3.12   | .049 | 14.99  | .000 | .08          | .922 |

\* DF = 2

\*\* DF = 1

\*\*\* DF = 2

### Results Related to Null Hypothesis Two

Null hypothesis (2) stated there was no difference in social perspective-taking across groups of mildly handicapped students enrolled in special education programs. A 2\*3 (gender x group) Multi-Variate Analysis of Variance was completed using the following five measures of perspective-

taking: 1) students perceptions of home functioning; 2) students perceptions of functioning with peers; 3) students perceptions of in-school behavior; 4) Imaginary Audience-Transient scale; 5) Imaginary Audience-Abiding Scale. Perspective-taking was measured by the number of statements the students endorsed as accurately describing their functioning across a variety of hypothetical and presumed to be actual contexts. Table 7, 8, 9 and 10 presents raw score means and standard deviates for group and sex differences. The Manova, using Wilks criterion, revealed a significant group main effect,  $F, (10,156) = 3.81, p < .001$ . There was not a significant main effect for sex,  $F, (5,78) = 1.58, p > .05$ , nor was there a significant interaction,  $f, (10,156) = 1.37, p > .05$ .

Analysis of univariates revealed that 4 of the 5 dependent variables contributed to the significant multivariate  $f$ , for group main effect. The results of these analyses are presented in Table 11.

Post hoc comparisons demonstrated group mean differences with respect to the following: perceptions of home, of school and peer interactions.

Group mean comparisons varied. ED/self-contained students indicated a significantly poorer degree of home functioning ( $p < .05$ ) than the learning disabled group. A comparison of means yielded a significant difference ( $p < .05$ ) between the Learning Disabled and the Cross-categorical

group.

Comparison of means yielded significant differences  $p < .05$  between the ED/self-contained and the learning disabled group. Practically speaking the LD group perceived their level of functioning to be the most adaptive of the 3 mildly handicapped categories with no significant difference between the ED/self-contained and cross-categorical students perceptions.

The three groups differed on the perceptions of interactions with peers. Group mean differences at the .05 level of significance were noted between the following: A and B and B and C. Generally, the learning disabled group viewed peer interactions as significantly more adaptive than either of the two other mildly handicapped categories. Perceptions of functioning between the ED/self-contained and the cross-categorical group were not significantly different.

There were no significant differences noted between groups and the adolescents willingness to reveal their transient selves to an imaginary audience. Additionally, no significant differences were noted between mildly handicapped groups and their willingness to reveal their abiding self to an imaginary audience. Means, standard deviations and  $f$ -ratios are reported in Table 5.

In summary, self-consciousness as measured by the Imaginary Audience Scale was not found to significantly differentiate between the mildly handicapped categories.



However, significant group differences were found on all three (home, school, peer) scales related to the students perceptions of behavioral functioning. Based on the differences on the scales, the hypothesis that no significant difference between perspective-taking scores would be found between mildly handicapped categories is partially rejected.

Finally, it should be noted that Analysis of Covariance was utilized to investigate the following initial differences between the mildly handicapped groups: full scale I.Q. and semesters in special education. In addition the factors related to overall social competence scores were analyzed as covariates to control for initial individual differences. This analysis continued to demonstrate significant group differences with only one significant covariate. In view of these results it could be interpreted that the overall effect was negligible and with consideration given to the number of factors perhaps produced spurious findings. Specific areas of interest deserving consideration will be addressed in the discussion.

TABLE 7  
 MEANS AND STANDARD DEVIATIONS: GROUP

| <u>VARIABLE</u>             | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|-----------------------------|----------|-------------|-------------|
| GROUP A (SELF-CONTAINED)    |          |             |             |
| Home                        | 28       | 9.46        | 3.97        |
| School                      | 28       | 8.64        | 4.59        |
| Peer                        | 28       | 12.57       | 5.17        |
| Tran (Ego 1)                | 28       | 5.54        | 3.18        |
| Abid (Ego 2)                | 28       | 6.50        | 2.87        |
| GROUP B (LEARNING DISABLED) |          |             |             |
| Home                        | 30       | 14.67       | 4.03        |
| School                      | 30       | 13.77       | 4.44        |
| Peer                        | 30       | 17.20       | 2.12        |
| Tran (Ego 1)                | 30       | 3.77        | 2.42        |
| Abid (Ego 2)                | 30       | 5.20        | 2.81        |
| GROUP C (CROSS-CATEGORICAL) |          |             |             |
| Home                        | 30       | 11.40       | 4.64        |
| School                      | 30       | 11.40       | 4.54        |
| Peer                        | 30       | 14.33       | 4.05        |
| Tran (Ego 1)                | 30       | 5.30        | 3.00        |
| Abid (Ego 2)                | 30       | 5.57        | 2.54        |

TABLE 8  
MEANS AND STANDARD DEVIATIONS: BY SEX

| <u>VARIABLE</u> | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|-----------------|----------|-------------|-------------|
| SEX = MALE      |          |             |             |
| Home            | 54       | 12.11       | 4.17        |
| School          | 54       | 11.17       | 4.55        |
| Peer            | 54       | 14.59       | 4.04        |
| Tran (Ego 1)    | 54       | 5.19        | 2.93        |
| Abid (Ego 2)    | 54       | 5.69        | 2.74        |
| SEX = FEMALE    |          |             |             |
| Home            | 34       | 11.56       | 5.48        |
| School          | 34       | 11.59       | 5.55        |
| Peer            | 34       | 15.00       | 4.85        |
| Tran (Ego 1)    | 34       | 4.32        | 2.94        |
| Abid (Ego 2)    | 34       | 5.82        | 2.84        |

TABLE 9

## MEANS AND STANDARD DEVIATIONS: GROUP X SEX

| <u>VARIABLE</u>                        | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|--|----------|-------------|-------------|
| SEX = MALE; GROUP = A (SELF-CONTAINED) |          |             |             |
| Home                                   | 22       | 10.64       | 3.44        |
| School                                 | 22       | 9.14        | 4.18        |
| Peer                                   | 22       | 12.82       | 4.38        |
| Tran (Ego 1)                           | 22       | 5.77        | 3.26        |
| Abid (Ego 2)                           | 22       | 6.41        | 3.03        |

## SEX = MALE; GROUP = B (LEARNING DISABLED)

|              |    |       |      |
|--------------|----|-------|------|
| Home         | 16 | 14.75 | 4.25 |
| School       | 16 | 13.06 | 4.02 |
| Peer         | 16 | 17.13 | 2.28 |
| Tran (Ego 1) | 16 | 3.50  | 1.79 |
| Abid (Ego 2) | 16 | 5.25  | 2.59 |

## SEX = MALE; GROUP = C (CROSS-CATEGORICAL)

|              |    |       |      |
|--------------|----|-------|------|
| Home         | 16 | 11.50 | 3.98 |
| School       | 16 | 12.06 | 4.67 |
| Peer         | 16 | 14.50 | 3.78 |
| Tran (Ego 1) | 16 | 6.06  | 2.82 |
| Abid (Ego 2) | 16 | 5.13  | 2.36 |

TABLE 10  
 MEANS AND STANDARD DEVIATIONS: GROUP X SEX

| <u>VARIABLE</u>                             | <u>N</u> | <u>MEAN</u> | <u>S.D.</u> |
|---|----------|-------------|-------------|
| SEX = FEMALE; GROUP = A (SELF-CONTAINED)    |          |             |             |
| Home  | 6        | 5.17        | 2.64        |
| School                                      | 6        | 6.83        | 5.95        |
| Peer  | 6        | 11.67       | 7.89        |
| Tran (Ego 1)                                | 6        | 4.67        | 2.94        |
| Abid (Ego 2)                                | 6        | 6.83        | 2.40        |
| SEX = FEMALE; GROUP = B (LEARNING DISABLED) |          |             |             |
| Home  | 14       | 14.57       | 3.92        |
| School                                      | 14       | 14.57       | 4.89        |
| Peer  | 14       | 17.29       | 2.02        |
| Tran (Ego 1)                                | 14       | 4.07        | 3.02        |
| Abid (Ego 2)                                | 14       | 5.14        | 3.13        |
| SEX = FEMALE; GROUP = C (CROSS-CATEGORICAL) |          |             |             |
| Home  | 14       | 11.29       | 5.44        |
| School                                      | 14       | 10.64       | 4.43        |
| Peer  | 14       | 14.14       | 4.49        |
| Tran (Ego 1)                                | 14       | 4.43        | 3.06        |
| Abid (Ego 2)                                | 14       | 6.07        | 2.73        |

TABLE 11  
UNIVARIATE F VALUES OF PERSPECTIVE-TAKING SCORES  
FOR 5 DEPENDENT VARIABLES

| VARIABLE | SOURCE |      | SOURCE |      | SOURCE       |      |
|----------|--------|------|--------|------|--------------|------|
|          | GROUP* |      | SEX**  |      | GROUP*SEX*** |      |
|          | F      | P    | F      | P    | F            | P    |
| Home     | 12.00  | .000 | 2.50   | .117 | 2.97         | .057 |
| School   | 9.29   | .000 | .26    | .612 | 1.26         | .288 |
| Peer     | 9.88   | .000 | .15    | .699 | .15          | .857 |
| Ego 1    | 3.31   | .041 | 1.07   | .304 | 1.18         | .313 |
| Ego 2    | 1.68   | .193 | .45    | .503 | .27          | .764 |

\* DF = 2

\*\* DF = 1

\*\*\* DF = 2

## CHAPTER V

### DISCUSSION

In this chapter the results of the investigation are discussed in relation to the null hypotheses tested. Special attention is directed at the nature of the relationship between social perspective-taking and social competence across mildly handicapped categories, a consideration of the nature of deficiencies across diagnostic categories, and an investigation of potential mediating factors (e.g., self-consciousness, cognitive aptitude, special programming, length of service) thought to be related to the individuals current functioning. The discussion is anchored within a cognitive developmental and a social, contextual, theoretical perspective.

#### Differences in Social Competence across Diagnostic Categories

Null Hypothesis One was crafted to address the issue of whether differences existed in the levels of teacher-rated social competencies across sub-groups (emotionally disturbed, learning disabled, and cross-categorical) of a mildly handicapped sample of secondary adolescents. Additional consideration was given to describing the nature of these

expected deficiencies.

Social competence differences were found to be statistically significant across the sub-groups. In addition a gender difference was noted. These findings indicate that there are relatively large differences in the levels of social competence among emotionally disturbed, learning disabled, and cross-categorical students receiving special education services in a variety of LRE's (Least Restrictive Environments). The emotionally disturbed student receiving services within a self-contained setting demonstrated a significantly poorer degree of functioning in all areas of social competence, but one related to developmental immaturity (i.e. motor excess). This fact is not surprising in view of the educational setting in which this study took place. Secondary students, who demonstrate a significant degree of hyperactivity as measured on the Quay-Peterson (Revised Behavior Problem Checklist), would most likely be served in a setting other than the local school building. Context in this case is considered to be related to the diagnostic profile and decision-making process regarding placement considerations. The raw scores for problems related to motor excess reported here are very similar to the results reported by Knoff (1989) in a nationwide study evaluating special services for the severely emotionally disturbed. As demonstrated by Knoff and supported in this investigation, there was also significant gender effect, (i.e. males having a greater number of social



competence problems than females). Differences in the levels of teacher-rated behaviors between the subgroups were evident for 5 of the 6 areas assessed. It should be noted that while deficiencies in social competence are expected, most of the research reported in the literature does not demonstrate such a clear differentiation between (among) sub-groups (Gresham, 1987) as reported here. Albeit the social competence differences were found to be less dramatic between the learning disabled and the cross-categorical groups.

It is particularly interesting to note that some of the largest differences among the sub-groups were found to be in those behaviors associated with discipline problems. These behaviors resemble characteristics that Cartledge and Milburn (1978) refer to as "classroom survival skills". Although the emotionally disturbed male sub-group demonstrated the greatest degree of social competence dysfunction, all of the mildly handicapped categories exceeded group norms for non-handicapped peers. As measured by the Quay-Peterson discipline problems were reported to be the most salient, which is not particularly surprising in that discipline problems elicit the greatest degree of referrals at this level of schooling. This fact is supported in research by Lambert (1975), Walker and Rankin (1983). One of the more noticeable aspects of the data set was the extremely wide range of judged social competencies. This is a factor which is certainly not evident within mainstream classrooms. This broad continuum of

social competence characteristics among the special education sample is probably related to a narrow band of tolerance for atypical behavior within the mainstream and the assignment of atypical learners to special education. This failure to accommodate for individual differences has resulted in skill deficits among mainstream teachers regarding the management of the atypical student. The typical intervention for difficult to manage behavior or socially unskilled children is a referral for consideration of special education services. Although the outcome of being able to differentiate between sub-groups is somewhat surprising in this instance, it may have been related to the severity dimension of the emotionally disturbed students who were placed in the self-contained classes. In the past, the mildly handicapped groups have been considered, by researchers, to be more alike than different on a variety of academic and social behaviors (Hallahan and Kaufman, 1978). In addition, the relatively homogenous cultural factors and contextual expectations within this particular sample may have a net effect of more false positives in view of such clearly defined criteria, and narrow tolerance at the socio-emotional/behavioral disorder groupings. The diagnostic role that context plays becomes evident within the less extreme (e.g., learning disabled) sub-groups. In general, the social competence of learning disabled students is not perceived to be dramatically different than the "normal" population. There is enough of a

difference reported here to lend some support to the notion espoused by Merrell (1988) that the social deficits in a learning disabled population, warrant specific diagnostic consideration. This fact has been noted by other researchers (Wanant, 1983; Bryan and Bryan, 1977; Wander, 1988). Although within this sample the differences across the three groups appear to be more a function of intensity and severity rather than kind of social competence. The idea that each specific group has an identifiable diagnostic pattern of social competence functioning, is clearly not supported by the results reported here. Perhaps the most significant factor which would discriminate the three groups is a greater level of overall social competence as opposed to any specific social competence cognitive characteristic. This is given more support by the fact that across the three groups, mean cognitive functioning was remarkably consistent. In addition, the average length of time the students received special services ranged from a mean of 13.38 to 17.63 semesters. This time variable was found to be a non-significant discriminator across groups.

In view of the rather unique sample used in the investigation, the continuum of services warrants further discussion. The emotionally disturbed/self-contained population is clearly a severe and low incidence exceptionality. Overall, the protocols generated on this group are consistent with those protocols from more diverse

populations. However, while the other two categories (learning disabled and cross-categorical) are certainly considered to be pathologic within the context (setting) under study, several issues need to be considered. Context plays a significant role with regard to the level of tolerance for individual differences. That is, that a label a particular child is given (e.g. learning disabled, emotionally disturbed) may be based on factors other than the diagnostic criteria, which could mask true group differences. Cutting scores and diagnostic criteria are not standardized for diagnostic purposes which creates numerous inconsistencies. What is considered to be exceptional within a very specialized setting would perhaps not be considered to be exceptional within another context. The fact is that what appears to be a clear curriculum problem related to creating exceptional instructional groupings, results in many instructional failures and an inability on the part of the institution to address individual differences on a consistent basis.

Thus, there are many limitations with regard to the generalizability of the findings reported here. Furthermore, the clinical reliability and validity of the learning disability diagnosis creates problems within a school setting. Unless diagnosis is limited to a criteria similar to (Rourke, 1983), the validity of the sample selection criteria is certainly in question. Of course, such clearly defined criteria is often not practical or possible in a public

institution. Although the subjects were diagnosed as being learning disabled by standards of the state, the heuristic value of these results remain limited in application to similar institutions (schools). The percentage of learning disabled students within the setting was considerably higher (13%) than Ysseldyke's (1990) recommendation that only the bottom 3% of the population be classified as learning disabled. Although context can appear to be confounding, the end result is that these subjects were in fact functioning considerably below expectations both socially and academically. From a strictly behavioral viewpoint, they are considered to be pathological within the regular school setting. In that, the issue of exceptional classification relates directly to the ability or inability of the institution to address (accommodate) individual differences among the students.

The findings reported here demonstrating the existence of significant differences in the level of social competence across exceptional categories provide considerable support for the argument that social skills should be taught in the special education and the mainstream. The findings reported by Cartledge & Milburn (1978) Gottlieb (1981), Maddan & Slavin, (1983) provide additional support for the notion that we should attempt to teach social competencies to all learners not merely assign them to special classes. Gresham (1985) argued that mildly handicapped children should be taught

social skills before, during, and after being mainstreamed into regular education classes. Generally, it is the student who is best behaved, academically competent, and socially skilled who is mainstreamed. The differences between sub-groups of a mildly handicapped population may be a result of competing, interfering behaviors, and deficits in social competence. This notion is supported here since the greatest differences reflected categories typically referred to as discipline problems.

One additional caveat should be noted here. Only one method was used to assess social competence. It is not known if similar findings would hold true using other assessment methods such as parent ratings, self-report, peer-rating or observations. In addition, this data is based upon teacher appraisal which are judgments about behavior as opposed to the specific behavior as it occurs. Hoge (1983) has indicated however, that teacher judgments received heavy weight in the early identification of the learning disabled and in the process of classification for the emotionally disturbed. Therefore, although the data points may be indirect, it is the type of data that is valued and weighed heavily in diagnostic decisions in naturalistic school settings.

#### Differences in Perspective-Taking Across Diagnostic Categories

Null Hypothesis Two was formulated to address the issue of whether differences existed among levels of self-reflection and/or self-consciousness across the diagnostic sub-groups

(the emotionally disturbed/self-contained, learning disabled, and cross-categorical groups) of a mildly handicapped population. Special attention was given to the examination of the possible difference within the context of a cognitive developmental versus a social contextual point of view. Significant differences were found among the sub-groups which indicates that there are rather large discrepancies with regard to the manner in which the sub-groups of a mildly handicapped population perceive their functioning across a variety of environmental settings (home, school, and peer).

The extraordinary difficulty that many troubled children have in accurately assessing their behavior, and in some sense observing themselves "so to speak" as a regulatory mechanism to modify inappropriate behavior, is well documented (Selman, Lavin, Brion, Meisels, 1982). More specifically, these troubled children seem to have difficulty reflecting upon their own actions as they may be viewed by others. A major finding of the study reported here is a clear demonstration of group differences with regard to the manner in which individuals perceive themselves functioning across a variety of social-contextual situations. Emotionally disturbed/self-contained students can be reliably differentiated from students classified as learning disabled in their perceptions of home, school or peer interaction. The ability to differentiate between the learning disabled group and the cross-categorical sub-grouping was also clearly demonstrated.

However, mean comparisons between the emotionally disturbed/self-contained group and the cross-categorical group were found insignificant. Generally speaking, the perceptions of the emotionally disturbed/self-contained and the cross-categorical group could not be reliably differentiated regardless of social context. The more severe the mildly handicapped category the more disturbed the perception of functioning. Emotionally disturbed/self-contained and cross-categorical groups were found to be more alike than different. In this investigation, context (i.e., special programming) apparently related to perception of social functioning. It should be noted here that questions regarding the accuracy or legitimacy of perceptions are not considered to be an important issue. The child viewed diagnostically as demonstrating a more severe need for academic and socio-emotional intervention is also perceiving his/her behavior as consistently dysfunctional. The question to answer seems to focus on the notion of competing behaviors, skill deficits or performance problems as opposed to the adolescents inability to accurately reflect upon their performance across contexts. In evaluating data from this investigation, the self-perceptions of these subjects, except for the learning disabled category, were found to be consistent with similarly diagnosed mildly handicapped sub-groups (Brown & Hammil, 1978). (In Figure 2, the self-perceptions of the mildly handicapped categories are



summarized).

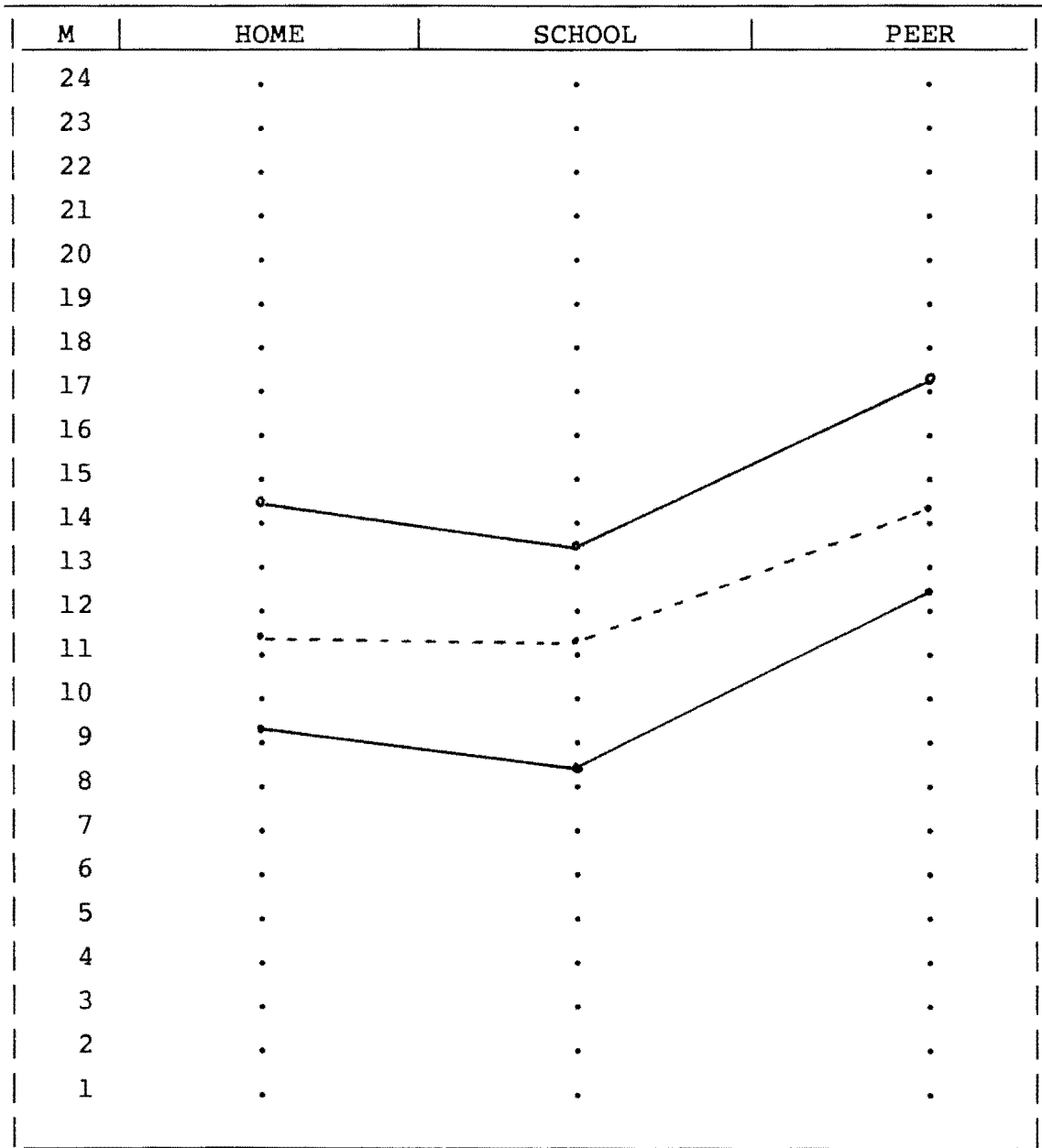


Figure 2. Self-Perceptions of Mildly Handicapped Subgroupings

- \_\_\_\_\_ ● A = ED/Self-Contained
- \_\_\_\_\_ ○ B = LD (Learning Disabled)
- - - - - - ● C = Cross-Categorical

It is recognized that the measurement used in this investigation being self-evaluative, is by its nature subjective.

However accurate self-perception may in and of itself be regarded as a social competence skill which is not in the repertoire of many troubled children. Michelson (1981) has pointed out that developmental factors, reading comprehension difficulties, problems such as "misreading, misinterpretation, and indifference" can confound these self-perceptions. Regardless, the child's self-perception is considered to be an important factor related to the motivation for remediation and learning of social competencies. That is to say that in the investigation reported here, the question of misperception does not seem to be an overriding issue. The question of the existence of a specific characteristic deficiency and intervention requires some elaboration and discussion. The findings from this investigation indicate that there are significant group differences, with respect to perspective-taking, though not evidence to support exceptional category differentiation. Future research is needed to clarify questions related to category differentiation. What appears clear in this investigation however, is that the more coercive and unpredictable the environment is perceived to be, by the student, the greater the possibility that the student will display a full range of behaviors in an unpredictable fashion. What may be the case, however, is that a category

differentiation of skill deficiencies for sub-groups is found to be wanting in view of a lack of reference to situational factors and too wide a choice of what specific behaviors to measure. Therefore, as Kazdin (1979) points out, the measurement of ones behavior in a single environmental setting is hardly a reliable index of behavior across settings. Interpreting deficiencies as McFall (1982) did within a systems framework, may be more appropriate here.

Understanding the personal deficiencies of emotionally disturbed adolescents could be an issue of stimulus-class control. According to Wahler & Domas (1986) the idea of "mapping out" organizational features of the adolescents response repertoire is in order. That is, under certain conditions mildly handicapped adolescents can display the same social skills as "normal" peers. The fact that social skills and self-reflection abilities can covary in a predictable fashion supports the notion of mapping the overall behavioral organization. Furthermore, it becomes less of an issue of skill deficits and more of a response problem due to inappropriate or competing behaviors. This is not to ignore the fact that deficiencies in communication and social perception, impact the functioning of the majority of mildly handicapped students. Within the specific population of this investigation, the learning disabled category resembles non-handicapped peers with regard to their self-perceptions of social functioning. This may have much to do with the nature

of the population and be a variable that inhibits the generalizability of these findings. That is, as noted in the previous section, factors other than diagnostic criteria qualified these students for services and may mask true group differences.

### An Examination of Self-Consciousness

One dimension of the imaginary audience is self-consciousness. This notion of egocentrism may account for characteristics of adolescent social deficits and provide some insight concerning potential differential characteristics of a mildly handicapped population. Although previous researchers have not always found clear factor scores for the transient and abiding scales (Adams and Jones, 1981), this investigator found group but not sex differences among the respondents on the transient scale, while the abiding scale did not differentiate among the sub-groups. Similar studies, such as the one conducted by Rosenthal and Simeonson (1987), found that the transient scale could be used to differentiate groups. Although unlike the study reported here, female emotionally disturbed adolescents were found to be significantly more self-conscious than male emotionally disturbed adolescents. It remains difficult to determine if sex differences actually exist as Elkind and Bowen (1979) concluded since they have not been consistently replicated. Adams and Jones (1981) did not find sex differences, while Rosenthal and Simeonson (1987), Pesce (1983), and Elkind

(1979), found that girls are more self-conscious than boys with respect to the transient as well as the abiding facets of self. Whether or not male-female differences exist with respect to sensitivity to the imaginary audience remains unclear. All of the studies seem to demonstrate only that depending upon context, there may be sex differences. A great deal more research across situations is necessary to address the question of possible sex differences. Qualitative comparison of means for regular education students and the mildly handicapped sample in this investigation were quite similar. Anolik (1981) investigated the relationship between delinquent males and the concern for the imaginary audience on both scales. The hypothesis was that in special populations there may exist a delay with respect to expected changes in imaginary audience behavior. It is interesting to note that within the emotionally disturbed/self-contained population, the perception of dysfunction within the home situation may in fact be related to greater anxieties regarding short-term potentially embarrassing situations. It could be hypothesized that lack of perceived support or control within the home situation would diminish the sense of confidence required to negotiate these confrontations. Exploration of this hypothesis requires further investigation of a special education population. It would indeed be interesting to determine if peer relations and/or perceptions of friendship exert an influence upon the sensitivity to the imaginary

audience. In reviewing cognitive development and its relationship to sensitivity to the imaginary audience the research findings are inconsistent. In the study reported here when intellectual functioning was controlled, there was still no significant evidence of group differences across mildly handicapped categories. Researchers such as Blasic and Hoeffel (1979) also failed to find a relationship between self-consciousness as demonstrated by the imaginary audience scale and the attainment of formal operations. These researchers have investigated adolescent behavior and its relationship to concrete level functioning. The argument being that personality traits, including sensitivity to the imaginary audience are observed by youth who have clearly not attained formal operations. The fact that many of the subjects in this study who showed clear signs of cognitive delays demonstrated a heightened sensitivity to the imaginary audience, may lend support to a social contextual interpretation. However, there are a number of inconsistencies in development both cognitively and socially. In addition, the fact that Elkind (1985) argues that social interaction is the primary mechanism that allows adolescents to modify their imaginary audience is inconsistent with cognitive development theory. However, this fact does not necessarily demonstrate the legitimacy of the social contextual viewpoint. Growth and development in human beings is inconsistent. The process of development is continuous not necessarily discrete. Social

cognitive phenomena occur in varying degrees as a result of "unevenness" in the development of the ability to think socially. The fact that there are operational and statistical demands for a theory's self-consistency is evident. In human development however one needs to seek to explain phenomena we encounter at the expense of self-consistency.

The students in this investigation who demonstrated the greatest sensitivity to the imaginary audience, also demonstrated the most dysfunctional views of themselves in a variety of social contexts. Variables related to self-esteem (i.e., Simmons, et al) have been thought to be sources of evidence for a social contextual position. Although this may be related to Elkind's (1967) conjecture that egocentricity could diminish as a result of social interactions. This being based on the premise that because dysfunctional kids have such difficulty with intimacy and role experimentation, their sensitivity continues to demonstrate itself. Generally speaking, context factors (type of program, exceptional characteristic) provided significantly greater insight into the nature of students self-perceptions and a possible relationship among mildly handicapped categories than a measure of abiding and transient sensitivity to an imaginary audience. It did not appear that as a group, one could be reliably differentiated by level of sensitivity to the imaginary audience. If one were to separate an emotionally

disturbed population into more severe less functional categories, (e.g., students with pervasive developmental disorders/affective disturbances/conduct disorders), there may be some within group differences.

### Summary and Conclusion

The impetus for this investigation came from a desire to explore the relationship between social perception and social competence across mildly handicapped categories. A consideration of the nature of deficiencies across diagnostic sub-groups and an investigation of potential mediating factors (e.g., self-consciousness, cognitive aptitude, special programming, length of service) was completed. The study was designed to explore these questions by systematically examining group differences in social competence, self-perception, and sensitivity to an imaginary audience across three samples consisting of emotionally disturbed/self-contained, cross-categorical and learning disabled groups.

Subjects consisted of 88 male and female students divided by their placement based on exceptional characteristics. The students were administered the imaginary audience scale and a test of their self-perceptions regarding their functioning in three (3) separate social contexts. In addition, a staff member assessed the social competence of each student subject.

Two null hypotheses were formulated to test for differences in social perspective-taking and social competence across the three diagnostic categories (emotionally



disturbed/self-contained, cross-categorical and learning disabled). Differences were found among the sub-groups as well as a gender effect being noted in some instances. Overall, the findings from this investigation suggests that there are large differences in the level of social competence across the diagnostic categories. Some of the largest differences were found to be associated with discipline problems and resemble those characteristics that Cartledge and Milbourn (1978) refer to as "classroom survival skills". Other researchers, Gresham (1987); Hallahan and Kaufman (1978), have not reported such distinct differences in social competence skills among mildly handicapped categories. It should be noted that the differences among sub-groups did appear to be more of a function of intensity/severity, rather than kind (i.e. specific group characteristic). The results of the study do not yield significant evidence supporting an identifiable pattern of functioning specific to an exceptional characteristic. The most significant factor which appears to discriminate across the three groups is a greater level of social competence as opposed to any specific social cognitive characteristics (self-consciousness, self-perception). The suggestion of a unique, pattern of social functioning characteristic of the learning disabled population (Merrell, 1988) was not fully supported by this investigation. Finally, it is recognized that a rather unique homogenous sample was used in this investigation and that a risk exists that the

exceptional classification was based on factors other than strict diagnostic criteria. These confounding effects could mask true group deficiencies and limit the generalizability of these findings.

Self-perceptions were measured and significant differences were observed between the mildly handicapped sub-groups, indicating rather large discrepancies with regard to the manner in which these students perceived their functioning across a variety of settings. The more severe the mildly handicapped setting, the more disturbed the self-perception regarding functioning. Qualitatively the questions of accuracy regarding self-perceptions did not appear to be an issue. The child perceived by the staff as demonstrating a more severe need for academic and socio-emotional intervention, also perceives his/her behavior as consistently more dysfunctional. The important question to address seemed to focus on the area of competing behaviors, skill deficits, and performance problems as opposed to the adolescents inability to accurately self-reflect. The emphasis in the literature on this need to self-reflect and develop sophisticated perspective-taking ability (Selman, Brion- Meisels) may be directed at a skill that is not, for the most part, utilized consistently by any segment of the population "normal" or "abnormal". That is, the majority of our interactions are of a surface variety. Social interactions can be very adaptive and occur within a frame of reference regulated by very

concrete expectations, rules and understandings. In the majority of day-to-day interactions, we may never be required to take the others point of view because it simply is not necessary. The development of consistent language, affective labelling, and problem-solving strategies may be significantly more beneficial than more abstract concepts, such as development of an observing ego and self-reflection. Wahler and Domas' (1986) concept of organizational "mapping" which analyzes the adolescents response repertoire seems somewhat more promising in this regard.

In the current study, group but not sex differences were found regarding an individual's transient sensitivity to the imaginary audience. As noted by Anolik (1981), and reported in this investigation, within the emotionally disturbed/self-contained population, the perception of dysfunction within the home situation may be related to greater anxieties regarding short-term embarrassing situations. The hypothesis being that lack of perceived support within the home could diminish the sense of confidence required to negotiate frustrations and subsequently increase sensitivity to the imaginary audience. Although traditional Piagetian tasks were not utilized to determine level of cognitive development, when intellectual functioning was controlled, differences continued to be demonstrated across mildly handicapped categories. Students who demonstrated the greatest sensitivity to the imaginary

audience also demonstrated the most dysfunctional views of themselves. When contrasting the statistical significance of the results with practical significance, a need is indicated for the inclusion of a more diverse sample which could possibly increase the relevance of these findings.

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## APPENDIX A



**APPENDIX A****DIRECTIONS FOR THE BEHAVIOR RATING PROFILE**

Examiner: "I am going to give you a list of sentences which describe things students do. Some of these sentences will describe you very well. Others will not describe you at all. If you think a sentence tells about something you do, fill in the shape under 'true'. If the sentence tells about something you do not do, fill in the shape under 'false'.

**DIRECTIONS FOR QUAY-PETERSON REVISED****BEHAVIOR PROBLEM CHECKLISTS**

Please indicate which of the following are problems, as far as this child is concerned. If you have no opportunity to observe or have no knowledge regarding a particular behavior, circle the zero. The example, "Does not hug and kiss members of his family; affectionless". As case manager, you may not have information about this aspect of your students functioning. As a result, you would circle zero. If an item constitutes a mild problem, circle the one; if an item constitutes a severe problem, circle the two. Please complete every item.

DIRECTIONS FOR THE IMAGINARY AUDIENCE SCALE

Examiner: Please read the following stories carefully and assume the events actually happened to you. Place a check next to the answer that best describes what you do or feel in the real situation.

Instructions: Please read the following stories carefully and assume that the events actually happened to you. Place a check next to the answer that best describes what you would do or feel in the real situation.

1. You have looked forward to the most exciting dress up party of the year. You arrive after an hour's drive from home. Just as the party is beginning, you notice a grease spot on your trousers or skirt. (There is no way to borrow clothes from anyone). Would you stay or go home?

2 Go home.  
1 Stay, even though I'd feel uncomfortable.  
0 Stay, because the grease spot wouldn't bother me..

2. Let's say some adult visitors came to your school and you were asked to tell them a little bit about yourself.

0 I would like that.  
2 I would not like that.  
1 I wouldn't care.

3. It is Friday afternoon and you have just had your hair cut in preparation for the wedding of a relative that weekend. The barber or hairdresser did a terrible job and your hair looks awful. To make it worse, that night is the most important basketball game of the season and you really want to see it, but there is no way you can keep your head covered without people asking you questions. Would you stay home or go to the game anyway?

0 Go to the game and not worry about my hair.  
1 Go to the game and sit where people wouldn't notice me very much.  
2 Stay home.

4. If you went to a party where you did not know most of the kids, would you wonder what they were thinking about you?

0 I wouldn't think about it.  
2 I would wonder about that a lot.  
1 I would wonder about that a little.

5. You are sitting in class and have discovered that your jeans have a small but noticeable split along the side seam. Your teacher has offered extra credit toward his/her course grade to anyone who can write the correct answer to a question on the blackboard. Would you get up in front of the class and go to the blackboard or would you remain seated?

0 Go to the blackboard as though nothing happened.  
1 Go to the blackboard and try to hide the split.  
2 Remain seated.

6. When someone watches me work . . .

2 I get very nervous.  
0 I don't mind at all.  
1 I get a little nervous.

7. Your class is supposed to have their pictures taken, but you fell the day before and scraped your face. You would like to be in the picture but your cheek is red and swollen. Would you have your picture taken anyway or stay out of the picture?

1 Get your picture taken even though you'd be embarrassed.  
2 Stay out of the picture.  
0 Get your picture taken and not worry about it.

8. One young person said "When I'm with people I get nervous because I worry about how much they like me.

2 I feel like this often.  
0 I never feel like this.  
1 I feel like this sometimes.

9. You have been looking forward to your friend's party for weeks, but just before you leave for the party your mother tells you that she accidentally washed all your good clothes with a red shirt. Now all your jeans are pink in spots. The only thing left to wear are your jeans that are too big and too baggy. Would you go to the party or would you stay home?

1 Go to the party, but buy a new pair of jeans to wear.  
2 Stay home.  
0 Go to the party in either the pink or baggy jeans.

10. Suppose you went to a party you thought was a costume party but when you got there you were the only person wearing a costume. You'd like to stay and have fun with your friends but your costume is very noticeable. Would you stay or go home?

2 Go home.  
0 Stay and have fun joking about your costume.  
1 Stay, but try to borrow some clothes to wear.

11. Let's say you wrote a story for an assignment your teacher gave you, and she asked you to read it aloud to the rest of the class.

2 I would not like that at all.  
1 I would like that but I would be nervous.  
0 I would like that.

12. If you were asked to get up in front of the class and talk a little bit about your hobby . . .

0 I wouldn't be nervous at all.  
1 I would be a little nervous.  
2 I would be very nervous.

**APPENDIX B**

December 1, 1988

Dear

In keeping with District goals and to continue to promote a greater understanding of human development, we periodically participate in research projects. Currently, one of our staff is conducting a comparative investigation of social development across special education categories. The actual student involvement will be limited to completing questionnaires covering general areas of social interaction. Staff (i.e., teachers, aides) will be solicited for their assessment of students' general social skills. The procedures required in this investigation do not go beyond the level of observation routinely employed on a less formal basis. In order to ensure confidentiality of the data, all reported scores will be coded and only group data will be reported.

This is, once again, in keeping with our goals of achieving a more comprehensive understanding of our students we serve.

Thank you for your help and cooperation in completing this project.

Please sign and return only in you DO NOT want your child to participate in this activity. Please respond no later than December 16, 1988.



CODE # \_\_\_\_\_

SEX \_\_\_\_\_

GRADE \_\_\_\_\_

BIRTHDATE \_\_\_\_\_

AGE \_\_\_\_\_

SEMESTERS RECEIVING SPECIAL SERVICE \_\_\_\_\_

TYPE OF PROGRAM \_\_\_\_\_

SERVICE INITIATION \_\_\_\_\_

APPENDIX C

## DESCRIPTIVE STATS BY SEX \* GROUP

| <u>VARIABLE</u> | <u>N</u> | <u>MEAN</u> | <u>STANDARD DEVIATION</u><br><u>SEX=MALE</u> |
|-----------------|----------|-------------|--|
|                 |          |             | <u>GROUP=A</u>                               |
| IQV             | 22       | 100.73      | 15.85  |
| IQP             | 22       | 103.95      | 13.60  |
| IQF             | 22       | 102.55      | 14.96  |
| TIME            | 22       | 15.00       | 7.85   |
| EG01            | 22       | 5.77        | 3.26   |
| EG02            | 22       | 6.41        | 3.03   |
| SK1             | 22       | 17.09       | 12.11  |
| SK2             | 22       | 7.95        | 7.66   |
| SK3             | 22       | 15.36       | 9.28   |
| SK4             | 22       | 9.05        | 6.69   |
| SK5             | 22       | 2.45        | 3.04   |
| SK6             | 22       | 3.59        | 2.97   |
| HOME            | 22       | 10.64       | 3.44   |
| SCHOOL          | 22       | 9.14        | 4.18   |
| PEER            | 22       | 12.82       | 4.38   |
|                 |          |             | <u>GROUP=B</u>                               |
| IQV             | 16       | 102.75      | 10.51  |
| IQP             | 16       | 104.44      | 16.44  |
| IQF             | 16       | 103.69      | 11.13  |
| TIME            | 16       | 13.38       | 5.88   |
| EG01            | 16       | 3.50        | 1.79   |
| EG02            | 16       | 5.25        | 2.59   |
| SK1             | 16       | 6.56        | 7.35   |
| SK2             | 16       | 0.44        | 1.03   |
| SK3             | 16       | 6.88        | 5.52   |
| SK4             | 16       | 2.63        | 3.88   |
| SK5             | 16       | 0.25        | 1.00   |
| SK6             | 16       | 2.44        | 2.90   |
| HOME            | 16       | 14.75       | 4.25   |
| SCHOOL          | 16       | 13.06       | 4.02   |
| PEER            | 16       | 17.13       | 2.28   |

## DESCRIPTIVE STATS BY SEX \* GROUP

| <u>VARIABLE</u> | <u>N</u> | <u>MEAN</u> | <u>STANDARD DEVIATION</u><br>SEX=MALE |
|-----------------|----------|-------------|---------------------------------------|
|                 |          |             | <u>GROUP=C</u>                        |
| IQV             | 16       | 98.13       | 10.72                                 |
| IQP             | 16       | 100.19      | 18.31                                 |
| IQF             | 16       | 98.69       | 14.07                                 |
| TIME            | 16       | 17.63       | 5.71                                  |
| EG01            | 16       | 6.06        | 2.82                                  |
| EG02            | 16       | 5.13        | 2.36                                  |
| SK1             | 16       | 11.50       | 7.92                                  |
| SK2             | 16       | 2.00        | 3.52                                  |
| SK3             | 16       | 10.81       | 5.18                                  |
| SK4             | 16       | 6.56        | 4.02                                  |
| SK5             | 16       | 1.06        | 2.02                                  |
| SK6             | 16       | 3.00        | 3.03                                  |
| HOME            | 16       | 11.50       | 3.98                                  |
| SCHOOL          | 16       | 12.06       | 4.67                                  |
| PEER            | 16       | 14.50       | 3.78                                  |

GROUP A = EMOTIONALLY DISTURBED/SELF-CONTAINED

GROUP B = LEARNING DISABLED

GROUP C = CROSS-CATEGORICAL

MEANS AND STANDARD DEVIATIONS FOR RAW SCORES OF  
STUDENTS ON PERSPECTIVE: HOME, SCHOOL, PEER AND IMAGINARY  
AUDIENCE SCALE

| <u>SCALES</u>             | <u>GROUP A</u> |           | <u>GROUP B</u> |           | <u>GROUP C</u> |           | <u>F</u> |
|---------------------------|----------------|-----------|----------------|-----------|----------------|-----------|----------|
|                           | <u>M</u>       | <u>SD</u> | <u>M</u>       | <u>SD</u> | <u>M</u>       | <u>SD</u> |          |
| HOME                      | 10.64          | 3.44      | 14.75          | 4.25      | 11.50          | 3.98      | **15.96  |
| SCHOOL                    | 9.14           | 4.18      | 13.06          | 4.02      | 12.06          | 4.67      | ** 9.61  |
| PEER                      | 12.82          | 4.38      | 17.13          | 2.28      | 14.50          | 3.78      | ** 9.37  |
| <u>IMAGINARY AUDIENCE</u> |                |           |                |           |                |           |          |
| TRANSIENT                 | 5.77           | 3.26      | 3.50           | 1.79      | 6.06           | 2.82      | 2.37     |
| ABIDING                   | 6.41           | 3.03      | 5.25           | 2.59      | 5.13           | 2.36      | 1.55     |

\*  $\leq$  .05

\*\*  $\leq$  .01

A = EMOTIONALLY DISTURBED/SELF-CONTAINED

B = LEARNING DISABLED

C = CROSS-CATEGORICAL

MEANS AND STANDARD DEVIATIONS FOR RAW SCORES  
OF STUDENTS ON LENGTH OF SERVICE AND COGNITIVE FUNCTIONING

| <u>SCALES</u>                            | <u>GROUP A</u> |           | <u>GROUP B</u> |           | <u>GROUP C</u> |           |
|--|----------------|-----------|----------------|-----------|----------------|-----------|
|  | <u>M</u>       | <u>SD</u> | <u>M</u>       | <u>SD</u> | <u>M</u>       | <u>SD</u> |
| <u>WECHSLER</u>                          |                |           |                |           |                |           |
| FULL SCALE                               | 102.55         | 14.96     | 103.69         | 11.13     | 98.69          | 14.07     |
| <br>LENGTH OF<br>SERVICE IN<br>SEMESTERS | 15.00          | 7.85      | 13.38          | 5.88      | 17.63          | 5.71      |

## MULTIVARIATE TEST FOR SIGNIFICANCE

| Source             | Multivariate<br><u>F<sup>a</sup></u> | <u>L</u>  |
|--------------------|--------------------------------------|-----------|
| Social Competence  |                                      |           |
| group              | 5.88* (12,154)                       | .47023798 |
| sex                | 7.15* (6,77)                         | .64215171 |
| group x sex        | .88 (12,154)                         | .87634164 |
| Perspective-Taking |                                      |           |
| group              | 3.81* (10,156)                       | .64610360 |
| sex                | 1.58 (5,78)                          | .90780806 |
| group x sex        | 1.37 (10,156)                        | .84463722 |

<sup>a</sup> based on Wilks Criteria

\*  $p < .01$

Note: df are reported in parentheses

Approval Sheet

The dissertation submitted by David A. Grott has been read and approved by the following committee:

Dr. R. Morgan, Director  
Associate Professor, Counseling & Educational Psychology

Dr. J. Kavanaugh  
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies that fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

10/26/90  
Date

  
Director's Signature