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DEGREE OF CONGRUENCE BETWEEN FAMILY AND CLASSROOM FUNCTIONING AND ITS RELATIONSHIP TO ACADEMIC PERFORMANCE

by

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A dissertation submitted to the Graduate Faculty in Educational Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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Abstract

DEGREE OF CONGRUENCE BETWEEN FAMILY AND CLASSROOM FUNCTIONING AND ITS RELATIONSHIP TO ACADEMIC PERFORMANCE

By

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This study investigated whether a congruence between the classroom and family interaction patterns of cohesion and flexibility was related to academic performance in a secondary school population. Classroom cohesion and flexibility were evaluated using the Classroom Systems Observation Scale (CSOS) (Fish, & Dane, 1992). Family cohesion and adaptability were evaluated using the Family Adaptability and Cohesion Evaluation Scale (FACES-III) (Olson, Portner, & Lavee, 1985). Thirty-four academically "weak" and 39 academically "strong" students were observed in their English classes. For each of these participating students their parents completed the FACES-III. A total of 17 classes were observed. The results indicated that a lack of congruence in cohesion (p. = 0.001) was related to academic performance, while a lack of congruence in flexibility was not (p. = 0.666). Additionally, the families with academically "stronger" students had more positive patterns of interaction than did families with academically "weaker" students (p.=

0.001). Results are discussed in terms of the implications for gaining a comprehensive and systemic understanding of academic performance.

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Chapter 1

Currently, the task of determining why a student is not performing up to his or her ability involves synthesizing a great deal of information from a variety of sources. This has not always been the case. Historically, one of the more prevalent explanations for academic performance problems was based on a medical model. According to this model problems originate within an individual and are generally independent of the environment in which the behaviors in question are manifested (Rubin & Balow, 1971). As the field of education has evolved, a general dissatisfaction with this approach has prompted alternative explanations for the origins and understanding of children's difficulties (Gaddis & Hatfield, 1997). In time, the once prevalent 'test and place' mentality within the field of education evolved into a more elaborate process of investigating and proposing a wide variety of pre-referral, in-school interventions, often coordinating resources from the school, community, and home environments (Conoley, 1987). This study considers aspects of how two of these systems, the family and classroom, interact with each other. Specifically, it attempts to determine if a functional similarity or congruence between classroom and family is a benefit or a liability to a student's academic performance.

Two hypotheses are proposed that guide this study. The first states that students who are experiencing academic difficulties will demonstrate a greater disparity between their family and their classroom on measures of flexibility and cohesion than students who are not experiencing academic difficulties. The second hypothesis proposes that students defined as "weak", based on academic performance, will be more likely to have families functioning less effectively than their academically "stronger" counterparts.

Measures of family cohesion and flexibility were obtained from the family through the use of the Family Adaptability and Cohesion Evaluation Scale - III (FACES-III) (Olson, Portner, & Lavee, 1985; Appendix B). Data were gathered on classroom cohesion and flexibility through the use of the Classroom Systems Observation Scale (CSOS; Fish & Dane, 1992; Appendix C).

Data for this study were collected from a total of four public high schools. Thirty-four academically "weak" and 39 academically "strong" students were observed in their English classes. "Weak" students were defined as those with a grade point average of 64 or below; "strong" students were defined as those with a grade point average of 80 or above. A total of 17 classrooms across grades 9 through 12 were observed. Only students who were in non-special

education, mainstream classes, and who did not have a history of behavioral problems were included in the study. Additionally, teachers were asked to consider for inclusion only those students who had been in their class for at least 30 days prior to the classroom observation, and who were currently living with their biological parents.

Comparisons between "weak" and "strong" students were made in the areas of cohesion and flexibility. The hypotheses were tested using t-tests to determine whether significant differences existed between home and school for the "weak" and "strong" students, and to determine if the family profile based on the FACES differed for the academically "weak" and "strong" students. The data provided partial support for the first hypothesis, indicating that a lack of congruence in cohesion (p. = 0.001) did affect academic performance while a lack of congruence in flexibility did not (p. = 0.666). The second hypothesis was supported with the data indicating that families with academically "stronger" students had more positive patterns of interaction than did families with academically "weaker" students (p. = 0.001). The results support the need for a comprehensive, systems assessment when evaluating student academic performance.

Chapter 2

Literature Review

Theoretical Background

One of the major catalysts that helped to move problem-solving methods and intervention techniques from the linear, Newtonian, or mechanistic approach of the medical model to the present day approach of ecological systems thinking was the work of Ludwig von Bertalanffy (1968). His *general systems theory* was an attempt to understand what organization itself was all about. He argued strongly against the then prevalent belief in a mechanistic or random view of evolution and biology. Rather, he believed that the underlying principles governing all organizations were basically similar (Plas, 1992) and that problem solving approaches should attempt to identify wholes rather than individual parts. He saw life as highly organized rather than chaotic in its general manifestations (Brassard, 1986). According to *general systems theory* the whole is different from the sum of its parts. When specific units or parts of a system are examined separately, the results cannot be added together to produce an accurate representation of the whole, rather the whole should be looked at as different than merely the sum of its parts (Nichols, 1986).

The concept of *general systems theory* has been used as a template for viewing and understanding a variety of organizational settings including the family and the various systems with which it interacts. Bronfenbrenner (1986) has taken many features of *general systems theory* and formulated an ecological perspective which emphasizes the importance of the interactions of people, events, and settings as they may contribute to developing appropriate interventions. His work has highlighted the importance of viewing the several systems within which an individual functions as being mutually dependent on each other. Using his terminology, the two major systems within which a child operates -- the classroom and the family -- create a mesosystem with its own unique structure, objectives, priorities, and regularities (Fine, 1995). This ecological orientation, while still viewing the student as the focus of intervention, puts a greater emphasis on the role of the setting and systems within which the child functions (Hobbs, 1978).

Two interactive models of functioning have helped to describe the relationships that take place within a child's environment: social learning theory and family systems theory (Kruse, 1991). Social learning theory emphasizes the reciprocity between the environment and the behavior and the important role those interactions play in

the social and psychological development of the child's self - concept. It is effective in defining reciprocal causes of behavior and its effect on the development of self-concept, however, it is less adequate when it comes to describing specific behavioral interactions in family settings.

The second model, family systems theory, presents behavior as a pattern of responses that are learned and dependent on the system (s) in which the individual interacts. Family systems theory sees the individual as a member of the larger system to which he or she belongs (Braden & Sherrard, 1987). The emphasis is on the reciprocal nature of the relationships between members of the system. From this perspective each member's behavior is best understood by viewing the rules of communication and interaction which govern the functioning of the family. In general, aberrant behaviors manifested by group members are viewed as serving the family interaction system in some unique way. The family systems perspective presents behavior as a function of both the manner in which the individual's family functions as a complex whole and the nature of the roles that the individual has come to play within that system (Chapin & Vito, 1988). This functioning describes a reciprocity wherein the family system contributes to and interacts

with the individual and the individual contributes to and interacts with the family. Family Systems theory offers a unique and effective way of looking at interactive relationships within a child's environment.

The two major socializing environments for the developing child are the family and the classroom (Fine, 1995). It is within these two environments that major portions of an individual's growth and development take place. In the section that follows, relationships between these two very important social systems will be discussed.

Classrooms and Families: Relationships and Functions

While classrooms and families each constitute their own unique environment for the growing child there are a number of ways in which they function similarly.

Fisher (1986) points out a number of organizational similarities. First, both class and family function in part to care for and educate children. Second, the classroom, especially in the younger grades, is often similar to the maternal setting of the family with a teacher assuming the compassionate role of caregiver. Third, sex roles and characteristics are often stereotyped with the males more frequently found in administration and in the "hard" sciences.

Fourth, both classrooms and families have covert and overt subsystems that must be learned and understood in order to negotiate the demands of adults. Fifth, there is the presence of a clear belief system that dictates acceptable behavior in both systems. Sixth, conflict and stressful interactions at upper levels of administration or parent-level will be experienced in some fashion at the lower ends of the hierarchy. Conoley (1987) points out three areas of similarities between families and classrooms referring to functional, structural and cultural similarities. Functionally, both work to socialize the child through teaching, rewarding, punishing, and providing nurturance. Families and classes are both structurally open systems allowing for both incoming and outgoing process to occur over which a modulated degree of control is maintained. Families and classrooms are also interconnected through the culture (s) in which they both participate, frequently generating and sharing in similar stereotypes and cultural priorities.

Fish and Jain (1988) also describe three functional similarities between the family and classroom. First, membership in both the classroom and family provide the student with a sense of belonging as well as a sense of autonomy. Second, families and classrooms both maintain some degree of boundaries providing the student with

a definite structure within which to operate. Third, both families and classrooms should respond adaptively to the changing developmental needs of their members.

While the role and function of the family in the socialization process has always been primary, the role of the school in this process has continued to gain in importance over the years. According to Rotheram (1989) this is due to a number of factors. First, there has been an increase in the number of working full-time mothers with children under the age of 1 placing a heavier responsibility on the school system for early socialization skills. Second, because the economic role of children has changed dramatically with fewer children needing to work in order to support the family economically, the school has become the "primary context in which children acquire a sense of industry" (Rotheram, 1989, p. 349). Third, higher family mobility and the reduced number of two-parent families have meant that the school plays an even more important role in establishing and maintaining a sense of stability for the child. Additionally, as family size has decreased, peer relationships at school and the social skills learned therein have become more important. While historically the workplace served to socialize a large number of adolescents and young adults, as the

length of time in educational settings increases, so does the impact of the school on overall development (Rotheram, 1989). As a result of these demographic changes, greater demands have been placed on the schools to address non-academic areas such as social-emotional issues and moral development more closely approximating some of the roles of the family system.

The above concepts related to the changing role of the school as well as the similarities between family and school highlight the increased role and impact that the school setting, particularly the classroom, has on a student's educational experience. This changing nature of the family and role of the school act together to facilitate not only the positive transfer of learning from classroom to living room, but also the displaced issues from living room to classroom (Kruse, 1991). The increasing degree of interdependence between these two systems necessitates that we understand not only how they function independently but also how the structure of each setting may affect functioning in the other.

In order to provide a background on the structural functioning of the family, the next section will include an overview of several models of family functioning.

Family Structure

While the dysfunctional family is frequently easy to identify, aspects of the "normal" family are often more difficult to calibrate. Typical broad characteristics of an optimally functioning family include the ability to be flexible, to allow for the establishment of clear boundaries and hierarchical relationships, and to encourage self-differentiation (Schwartzman & Kneifel, 1985). Rathunde (1988) described five characteristics or conditions of families that would allow for optimal development. These include the provision of choice to allow for a feeling of control, the provision of clarity that allows for an appropriate focus of attention, focus on the process of learning rather than the end product itself, a feeling of support and commitment during a given learning activity, and provision of meaningful cognitive challenges.

Families and the structure that governs their behavior can be described from a number of theoretical positions. Many of these positions have been integrated into models that can be used in family research, theory, and clinical practice. Three models that have integrated the multiple and diverse concepts of family therapy are the Beavers Systems Model (Beavers, Hampson, & Hulgus, 1985), the McMaster Model of Family Functioning (Epstein, Bishop,

& Levin, 1978), and the Circumplex Model of Family Functioning (Olson, Sprenkle, & Russell, 1979). A brief description of the major constructs of each model will follow.

The Beavers Model puts a primary emphasis on adaptability and competence. The two continua along which a family is measured are family style and competence (Beavers & Hampson, 1991). Family style refers to the degree to which family members seek satisfaction from within the family versus outside of the family system. More healthy families will strike a balance between these two extremes. Family competence defines how well the family performs the tasks of organizing and managing itself. Family functioning is then mapped along both continua.

The Beavers Model places major emphasis on the structure of the family in such areas as leadership, parental coalition, and boundaries. Optimal families are described as having a systems orientation with clear boundaries, an equal division of power, some degree of individual autonomy, negotiating skills, and a positive approach to relating.

The McMaster Model states that one of the major functions of the family is to provide a setting in which members can develop socially, psychologically, and biologically (Epstein, Bishop, Ryan,

Miller, & Keiter, 1991). In this regard family functions are grouped into three areas. The Basic Task Area is the most fundamental and refers to concrete issues such as food, shelter, and money. The Developmental Task Area has to do with those issues that present at the individual and family level around normal developmental issues. The Hazardous Task Area refers to those issues that result from crises such as deaths, job loss, etc. Additionally, family functioning is composed of the six dimensions of problem solving, communication, roles, affective responsiveness, affective involvement, and behavior control.

The third model of family functioning, the Circumplex Model, is based on three dimensions: family cohesion, flexibility, and communication (Olson, Sprenkle, & Russell, 1979). Family cohesion refers to the emotional bonding that members have with each other (Olson, 1993). Flexibility refers to the amount of change in leadership, roles, and rules that is tolerated within the family. Communication is the third dimension and entails issues such as effectiveness of listening and speaking. Families are mapped within the Circumplex Model along the two dimensions of flexibility and cohesion with dysfunctionality represented by placement at any of the extremes of the continua.

In reviewing the above constructs, cohesion and flexibility, as described in the Circumplex Model, are common attributes along which both classroom and family functioning can be investigated. They represent measurable and conceptually accessible constructs that allow for an optimal comparison between these two settings. The Circumplex Model presents these two constructs in a theoretically and graphically logical format that facilitates a clear conceptualization of where along these two continua a given family or classroom might fall and their relationship to each other. Because both the Classroom Systems Observation Scale and the Family Adaptability and Cohesion Evaluation Scale are to a great extent based on the Circumplex Model it allowed for the most optimal method of comparison between the classroom and family environments. A more detailed description of the dimensions of cohesion and flexibility follows.

Cohesion and Flexibility

Cohesion is defined as the style of emotional bonding various family members experience with one another (Chapin & Vito, 1988). These patterns can be understood as existing along a continuum from enmeshed at the one extreme to disengaged at the other, either of which would constitute a pattern of dysfunctional interaction

(Fine, 1995). Within an enmeshed family system a blurring of boundaries occurs such that "its parts and subparts are too closely interlocked, and systems of this type are said to find it especially difficult to negotiate changes in their environment" (Hoffman, 1981, p. 74). These enmeshed families have boundaries that are weak and poorly differentiated such that any type of change is hampered by the limited amount of personal autonomy within the system (Minuchin, Rosman, & Barker, 1978).

At the other end of the cohesive continuum are families described as disengaged. In this case members within the system feel emotionally isolated and unsupported (Fine, 1995). Boundaries are rigid, communication is ineffective and members are poorly connected (Minuchin et. al. 1978).

According to the Circumplex Model, the second continuum along which families may be placed is their relative degree of flexibility. That is, the ability of a family system to change its power structure, roles and rules in response to stressful events. The extreme ends of this continuum are defined as rigid and chaotic (Chapin, & Vito, 1988). These concepts of cohesion and flexibility describe curvilinear dimensions that constitute aspects of the Circumplex Model of Marital and Family Systems (Olson, Sprenkle, &

Russell, 1979). This model will be further discussed as it applies to the current study.

As a way of highlighting the interdependence of family and classroom, the following section will take up role and effects of family functioning and its impact on a number of school-related outcome variables.

Family Influences on Academic Variables

There is supporting research for the connection between the type of family environment in which a child is reared and various school related outcome variables. Specifically, a number of authors have described the relationship of various family patterns and/or traits and the degree to which they impact on student academic success.

Moos (1991) cites several authors who highlight the connections between the family environment and various school related outcome variables. McMillan and Hiltonsmith (1982) have demonstrated a direct link between amount of adolescent study time and their participation in family leisure activities. Felner, Aber, Primavera, and Cauce (1985) found that better scholastic self-concept was associated with a pattern of family cohesion. Nelson (1984) also found that cohesive families tend to foster a student's

positive scholastic self-concept and that those students who had both supportive families and classrooms were highest in scholastic self-concepts.

One of the more recent studies documenting the effects of family environment on academic success is DuBois, Eitel, and Felner's (1994). Their sample consisted of 159 fourth, fifth, and sixth grade students. In a two-year longitudinal analysis they evaluated the perceived level of social support among family members including various dimensions of the family environment and its impact on a number of school related variables such as frequency of absences from school, grades, and self-reported scholastic self-concepts. In part, their results suggested that rather than the overall measure of family adjustment making a significant contribution to school adjustment, linkages were found for specific dimensions of the family climate. Specifically, "a relatively high degree of organization in the family, for example, may be associated with a variety of practices in the home that directly facilitate academic achievement" (p. 412). These included having a regular time and appropriate environment in which to do homework. They further suggested that an appropriate degree of organization in the home may help to reduce stress outside of school which may also in

turn contribute to academic success. They state that "strong bonding with parents also may facilitate success in school through other, less direct mechanisms, such as by serving as a deterrent against the emergence of delinquent behavior patterns, (e.g., truancy) that are closely associated with academic difficulties" (p. 412). A significant finding was that the associations between the measured family experiences and the grades were only evident in the longitudinal analysis as opposed to at the initial cross-sectional analysis. The authors, taking a developmental perspective, proposed that factors such as organization and structure in the home may come to assume greater importance in facilitating academic success as youths grow into adolescence. It is likely, they posit, that in view of the increased academic demands of older children the family begins to play a greater role in facilitating a student's academic development.

Feldman and Wentzel's (1990) study provides further support for the importance of a healthy family-school connection. They investigated the effect of parent-child interactions, parent-parent interactions, and preadolescent boys self-restraint on grade point average. Their population included 109 sixth graders and their families. Participating families were observed during two - problem

solving tasks to determine the type of parental control used; hostile or appropriate. Teacher and peer reports were used to determine the sixth graders' degree of self-restraint. Their results suggested that families who were characterized by a healthy amount of "appropriate control" were more likely to have sixth graders who were able to maintain productive amounts of self-restraint both in the home as well as in school. These students in turn had higher grades than those students manifesting less self-restraint. The authors conclude that "behavioral restraint appears to be an important mechanism that links the quality of parent-child relationships in the home with a child's academic performance at school" (p. 819).

Epstein (1983), in a longitudinal study of 960 middle school students, measured the effect of a match or mis-match between family and school on several variables including decision making, participation, and locus of control. Decision making and degree of participation measurements were taken from family, classroom, and teacher. Their results strongly support the interactive effects of home and school environments. Students from families characterized by high overall participation who were also placed in school settings that emphasized a high degree of participation

performed better on report card grades and measures of independence and attitude than students who were from families and schools with a lower emphasis on shared decision - making and participation and for whom there was a mismatch between family and school. Interestingly, the authors also found a "compensatory" effect in which some students from low participatory families benefited from schools characterized by a higher level of participation. They indicated that where younger children are concerned "positive growth and change may be aided by mismatched or incongruent conditions of the person in certain socializing environments" (p. 121) especially where there is an evidence of readiness or need for independence.

Dornbush, Ritter, Leiderman, Roberts, and Fraleigh (1987) looked at three parenting styles; authoritarian, permissive, and authoritative in the context of school performance. Authoritarian parenting is characterized by attempts to control and evaluate behavior with an absolute set of standards. Permissive parenting is characterized by parents who are tolerant of their child's impulses, use as little punishment as possible and make few demands for mature behavior. Authoritative parenting is characterized by an expectation of mature behavior, clear setting of standards, and

encouragement of independence and individuality. Parenting style was measured using a 25 question student report form. School performance was based on students' self-reported grades. Their results suggested that students from a wide variety of backgrounds reported lower grades when their description of their families behavior indicated a more authoritarian or permissive parenting style. Families that reflected an inconsistent style, combining authoritarian with either of the other styles had the lowest grades. The authors concluded that parenting style was a better predictor of academic achievement than parent education or ethnicity.

The above studies point out the importance of a number of family environmental variables and their impact on academic outcomes including parenting style, decision making patterns, participation practices, patterns of self-restraint, organizational structure, and style of bonding. Not surprisingly, there is evidence that a number of classroom environmental variables also effect academic outcomes. The next section will discuss some of the classroom variables that have been shown to affect academic performance.

Classroom Influences on Academic Variables

There is general consensus regarding the influence of classroom environments on academic outcome. For the most part gains in standard achievement tests have been seen in those classroom settings that emphasize supportive relationships and clear structure (Moos, 1991). And while there is evidence that academic performance increases in classes that emphasize task performance and competition, this type of classroom environment has not been as effective in improving creativity or in affecting motivation to learn.

In a meta-analysis involving 12 studies, Haertel, Walberg, & Haertel (1981) found that better achievement on a number of academic measures was consistently found in classrooms perceived by students as having greater coherence, satisfaction, and goal direction.

Looking at 119 8th and 9th grade science classes, Fraser and Fisher (1982) found support for the relationship between academic outcome measures and classroom environment. Specifically, classroom order and organization resulted in a positive influence on student achievement. Understanding what type of environments actually do foster maximum academic growth will clearly have

practical implications for teachers in terms of classroom design (Fraser, 1991).

In as much as both family and classroom functioning have a demonstrated measurable impact on academic outcomes is it likely that academic outcomes will be affected if the functioning in these two critical settings is not similar or congruent? A number of studies have looked at this issue and will be discussed in the following section.

Environmental Match and Mismatch

As discussed above, research has, in general, supported the tenet that a balanced, healthy, family results in a positive effect on academic performance. Is there likely to be a deleterious effect on academic performance if there is an incongruence in interaction style between a student's family and the classroom he or she attends? When students enter the classroom they bring with them those styles of interaction and communication patterns that they have learned within the family setting and that are functional within that environment. Are they able to adapt to the particular styles of different teachers and classroom settings? Does a lack of congruence between home and family interaction pattern result in academic or behavioral difficulties?

One of the areas of research that has specifically addressed the issue of matching environments is that taken up in the work of Chess and Thomas (1977). Their research focused on the interrelationships among systems, specifically between a child's characteristics or temperament and his or her environment. Their work, described as the *goodness of fit* model (Chess & Thomas, 1986) suggests that "the adequacy of an organism's functioning is dependent upon the degree to which properties of its environment are in accord with the organism's own characteristics and style of behaving" (Thomas, Chess, & Birch, 1968, p. 137). According to this model if the match between a child's characteristics or temperament and the demands of his or her environment is poor, a difficulty in performance may manifest itself. This poor fit or match may be created by a number of factors including differences between values and behaviors developed in the home versus the predominant expectancies at the classroom (Thomas & Chess, 1977). Unfortunately, according to Rotheram (1989) a mismatch in structural and transactional patterns between the family and the classroom is not that infrequent. The result of a mismatch may cause difficulties for those children who are not able to adapt to the different styles within those systems (Kruse, 1991). For instance,

"when an underinvolved system encounters an overinvolved system, rejection is likely to occur very soon" (Rotheram, 1989, p. 354). While there is substantial support for the fact that the functioning of both the school and the family each affect academic performance, the amount of literature on the interactive impact of the classroom and family setting is much more limited (Rotheram, 1989). Those studies that have been completed, however, generally support the notion that the greater the congruence between school and family transaction and communication patterns, the more successful the student will be. The next section will review those studies.

In a theoretical article Iglesias (1985) discussed the impact of a communication mismatch between home and school particularly from a cultural standpoint. He pointed out that children not only acquire the linguistic system of their significant others but also the rules for participation within their culture at large including the classroom. A mismatch occurs when the expectations of the classroom teacher are not congruent with those expectations of the student. Additionally, a match between one teacher and a student does not imply that he or she might not have a mismatch with other teachers in his or her school (Iglesias, 1985).

While Iglesias (1985) focused primarily on the differences between linguistic and cultural groups, Hansen (1986) explored the effects of family - classroom interaction style on the performance of elementary school children. He pointed out that "in almost any classroom some children are bored or threatened while others are challenged. But put those children into another classroom and the response may be reversed " (p. 645). He compared families and classrooms along two continua: exchange rules of interaction and communal rules of interaction. Exchange rules are those that define expected or allowed behavior based on one's relative position to others, encouraging a person to see himself or herself as a member of a specific category with little underlying difference from those within his or her category. When exchange rules are strong, individuals relate to each other along stereotypical lines of age, sex, and status differences. By contrast communal rules describe appropriate behavior based on interpersonal affinities and attitudes. Communal rules "encourage students to learn to recognize the special differences between individuals and, when faced with ambiguities, to search for coherence through identification of individual differences" (Hansen p. 648). Communal rules play a stronger role in facilitating a student's adjustment to schooling

situations. The relative strength of these two rule patterns will continually vary in every family and classroom as well as across time. Data were gathered through questionnaires given to 210 6th grade students and 8 classroom teachers to determine the predominant interaction style. Students responded based on their experiences at home, teachers described their style in the classroom. His results pointed out that the greater the discontinuity in the predominant interaction rule between home and school the more likely there would be some type of academic difficulty. Further, because of the variability of the predominant rule structure from class to class, any student will be relatively advantaged in some settings and relatively disadvantaged in others.

In a more recent study Brand and Felner (1996) looked at the issue of perceived congruence between family and classroom environments as experienced by a sample of 297 children from first to sixth grade and their behavioral adaptations as reported by teachers and parents. Children were asked to describe their perception of the classroom and family climate along several dimensions including cohesion, achievement emphasis, and organization. Additionally, parents and teachers were asked to rate the children's behavior in school and at home. The study was

designed to answer two questions; first, will greater incongruity between children's perceived levels of cohesion and achievement emphasis between school and family result in a greater divergence between parent and teacher ratings of behavioral adaptation, and second, will greater incongruence between these two areas result in poorer adaptive functioning and greater psychological distress. Their results suggested that, in fact, children who do experience settings demands that are incongruent are more likely to exhibit differences in their behavioral adaptation. Importantly, and particularly relevant to the current study, the dimension of classroom cohesion was found to be a central dimension affecting adaptation across settings. "Specifically, the Classroom Cohesion dimension was consistently related to more discrepant behavioral ratings by parents and teachers when it diverged from any of the family climate dimensions" (Brand & Felner, 1996, p. 171).

Surprisingly, their second finding suggested that lower levels of psychological distress were associated with greater dissimilarity between perceived family emphasis on achievement and classroom organization. In other words, as the authors point out, children reporting less family cohesion appeared to benefit from more teacher

directiveness and a focus on classwork. This "compensatory" response supports an alternative hypothesis proposed by Felner, Brand, DuBois, Adan, and Evans, (1995) which contends that diverging family-school orientations might act to offset or compensate for each other. In a similar vein, Moos (1987) points out, person-environment incongruence may act to spur new maturation or development. In some cases students who are from families who do not emphasize participation in decision making at home greatly benefit from school settings where the emphasis is on participation (Epstein, 1983). Thus, the Brand and Felner (1996) study point out that differences across family - school settings are linked with specific behavioral adaptations rather than more globally generalized patterns.

Providing support for the potentially deleterious effects of a home-classroom mismatch, Arunkumar, Midgley, and Urdan (1999) investigated the effects of a perceived dissonance between home and school on measures of hopefulness, self-esteem and self deprecation, anger, and self-efficacy. They hypothesized that African American students would report greater dissonance than their European American counterparts. The experimenters administered a six question survey to a sample of fifth graders in Michigan that

included questions such as, "I feel troubled because my home life and my school life are two different worlds." and "I don't like to have my parents come to school because their ideas are very different from my teachers' ideas" (Arunkumar et al., 1999, p. 448). The questions were answered on a 5-point scale ranging from 1 (not at all true) through 5 (very true). While results did not support their hypothesis that the African American students would report a greater dissonance than the European American students, they did find a relationship between the degree of dissonance and the several outcome variables. Specifically, they found that a student's academic and emotional well-being are compromised where there is a perceived dissonance between the values and expectations at home and at school. A high degree of dissonance was associated "negatively with hopefulness about the future, self-esteem, feelings of academic efficacy, and GPA and positively with anger and self-deprecation" (Arunkumar et al., 1999, p. 458).

Finally, a study by Kruse (1991), which has to a large extent guided the present research project, looked at the relative congruence between family and classroom along the continua of flexibility and cohesion based on the Circumplex Model of Olson, Sprenkle, and Russell (1979) and compared results to teacher

ratings of students as to whether or not they were behavior problems. Using regular education students from Kindergarten through fifth grade her study was designed to answer three questions: (1) are children who come from dysfunctional families more frequently identified by their teachers as having school problems; (2) do the students who are identified by their teachers as problematic have larger differences between home and school cohesion and flexibility dimensions than those who are not so identified; and (3) do problem students who are in dysfunctional classrooms have larger differences between home and school cohesion and flexibility than non-problematic children in functional classrooms.

Participating families completed the Family Adaptability and Cohesion Evaluation Scale - III (FACES III) (Olson, Portner, & Lavee, 1985). This is a 20 question self-report scale designed to measure the transaction patterns of cohesion and flexibility within the family. Classroom teachers completed the Classroom Level Assessment of Systemic Structure Evaluation Scale (CLASSES) (Kruse, 1991). This instrument is a 20 question self-report questionnaire designed to measure transactional patterns of cohesion and flexibility as well. Additionally, a Student Referral Form was completed by

participating teachers in order to identify those students who were experiencing academic, behavioral, or emotional difficulties as well as those students who were not.

Kruse's results indicated that children from both functional and dysfunctional homes were just as likely to be identified by teachers as problematic and non-problematic. An analysis of only those students from dysfunctional homes did, however, produce significant results. Looking at the cohesion continua, results suggested that teacher-identified problematic children were more likely to come from disengaged and/or rigid homes. Further, teacher-identified children without problems were more likely to come from enmeshed and/or chaotic homes. The explanation offered for this pattern suggests that children from enmeshed families may have parents who, though to an extreme degree, are involved with their child's overall education, including visiting teachers and helping with homework. This, as opposed to the student from the disengaged family, where their is little or no involvement with their child's education overall.

In terms of the adaptability continua she posits that the reason for fewer teacher identified problem children from chaotic families has to do with the fact that these children may, in general,

be able to adapt more easily to change. Children from such chaotic backgrounds may be more adept at dealing with high degrees of ambiguity in their environment. In contradistinction she suggests that children from characteristically rigid homes may have more difficulty adapting to various classroom and social environments.

For her second hypothesis -- do teacher identified students with problematic behavior have greater mean differences between home and school cohesion and adaptability -- she found significant results for the adaptability continuum. Specifically, "children identified as having problems were less like, children identified as not having problems were more like, their teacher's adaptability transactional pattern" (Kruse, p.71).

Finally, it was found that teacher-identified children with problems had greater differences between the home and school cohesion dimension when their classrooms reflected transactional patterns of an extremely disengaged or extremely enmeshed type with results suggesting that the cohesion dimension contributed more to variability than the adaptability dimension. As a possible explanation it was suggested that, when a given classroom's transactional pattern is considered, the degree of connectedness in

a classroom is more likely to influence a teacher referral than the degree of adaptability.

In discussing her results Kruse (1991) notes a number of areas that should be addressed in future research including the need for a more diverse teacher and student population. Her population included primarily a working class white population with participating teachers being primarily female. A more heterogeneous population might produce other findings.

Another potential shortcoming of her approach has to do with the method of gathering data regarding classroom structure. Her instrument consisted of a 20 question self-report Likert type of response form (CLASSES). A pilot study produced adequate construct validity and reliability, however, the accuracy of teacher reporting, especially to such questions as, "Its hard to tell who does which classroom chore" (Kruse, 1991. p. 87) may vary based on reporter and question interpretation. For instance, it is possible that a teacher's observation of a particular classroom attribute such as "togetherness" may be different than one made by an outside observer. Nonetheless, Kruse's (1991) study provides a number of substantial and provocative results using a kindergarten through elementary school population and has helped to close the knowledge

gap in understanding the potential interactive effects between family and school settings.

In surveying the available work addressing the effects of congruence between a student's family and the various environments in which he or she interacts, there does not seem to be evidence supporting a global conclusion regarding environmental match and/or mismatch. That is, a mismatch of all dimensions in any given settings does not necessarily deleteriously impact performance, and in some cases a mismatch may actually improve performance (Brand & Felner, 1996; Felner, Brand, Dubois, Adan, & Evans, 1995; Moos, 1987). However, there are specific features of dimensions of the family and school setting that do impact performance where the two settings are not congruent (Arunkumar, Midgley, & Urdan, 1999; Hansen,1986; Kruse, 1991). Hansen (1986) concluded that the greater the discontinuity between the predominant interaction rules of home and school, the more academic grades decline. Kruse's (1991) work suggests that a congruence between home and classroom in the area of flexibility positively effects academic performance. Arumkumar, Midgley, and Urdan (1999) found that where there is a perceived dissonance

between values and expectations in home and school a student's academic and emotional well-being is compromised.

Unfortunately, there is a relatively limited amount of research in this area particularly with a secondary school population. The present study will extend Kruse's (1991) work to a high school population. It will attempt to determine if the relative degree of congruence between family and classroom adaptability and cohesion will affect student academic performance in the classroom.

Based on the literature cited above, as well as the theoretical constructs from the area of family systems theory, the following research hypotheses have been formulated and were explored in this study:

H1 Students who are experiencing academic difficulties will demonstrate a greater disparity between their family and their classroom on measures of flexibility and cohesion than students who are not experiencing academic difficulties.

H2 Students defined as "weak" based on academic performance, will be more likely to have families functioning less effectively than their academically "stronger" counterparts.

Chapter 3

Method

Participants

Participants included students selected from English classes, their respective parents, as well as their English classroom teacher. A total of 73 ninth, tenth, eleventh, and twelfth grade students were selected from four suburban public high schools for inclusion in the study.

A demographic profile of the participating high schools is presented in Appendix A. All schools were located in suburban areas outside of one of two major mid-Atlantic metropolitan areas. All of the schools used in the study are fully accredited by and registered with the Middle States Association of Colleges and Schools and the New York State Education Department (New York State Education Department, 2000). The four school districts ranged in size from 1294 to 5171 students. The high schools in which the observations were made ranged in size from 314 to 1598 students. The total special education population in the four districts ranged from 7.8% to 13.10%. The percentage of Black and Hispanic students in each district ranged from 1.6% to 35.5%. All demographic and statistical

information on the four schools is for the 1997-1998 academic school year.

The rationale for selecting exclusively students from English classes was to reduce any variability related to differing content areas. Additionally, English classes were chosen over other content classes because it seemed that the nature of the material covered in high school English might be more conducive to interactive discussion than some of the other more concrete subject areas hence allowing for more opportunities to observe transactional patterns among members.

For each classroom used in the study two groups of students were formed; a "weak" group and a "strong" group. The "weak" group consisted of those students whose most recent grade average in English was 64 or below. The "strong" group included students whose most recent grade average in English was 80 or above. This 16 point spread between "weak" and "strong" students was built in to provide a degree of variability that did not preclude obtaining a reasonable sample size.

The selection of students for both groups was made with the help of each classroom teacher and his or her recorded classroom grades. Only those students who were in mainstream education

classes (non-special education), and whose curricula were at the Regents level were used in this study. (Regents level courses is a designation by the New York State Board of Regents denoting a program of study meeting particular content criteria.) Additionally, students were only included in the study if they had been with their classroom teacher for at least one month prior to the classroom observation. Students were not included in the study if they had been referred to administration for behavioral reasons in the current school year. Specific selection procedures are discussed below.

Measures

The Family Adaptability and Cohesion Evaluation Scale - III (FACES -III; Olson, Portner, & Lavee, 1985) was used to assess families for levels of functional and dysfunctional transactional patterns. Classroom interaction patterns were assesed using the Classroom Systems Observation Scale (CSOS; Fish & Dane, 1992). Academic performance was assessed through current grade point average. A detailed description of the instruments follows.

Family Adaptability and Cohesion Evaluation Scale - III FACES-III)

The FACES was developed by Olson, Portner, and Lavee (1985) and his colleagues to assess a number of dimensions of the

Circumplex Model of Marital and Family Systems as originally developed by Olson, Sprenkle, and Russell (1979; Appendix B).

The Circumplex Model is designed to provide a clinically useful typology of families that, when correctly used, can provide a diagnostic tool for family psychopathology (Maynard & Olson, 1987). According to the Circumplex Model, the components of family cohesion, flexibility, and communication are the major dimensions of any family system. Two of these components are Cohesion and Flexibility and are curvilinear in that families functioning at the extreme ends of each continuum would be described as dysfunctional. Communication is measured in a linear fashion. Families who display a balanced level of functioning are seen as functioning adequately. For the purposes of this study only two dimensions from the Circumplex model, flexibility and cohesion, were used so comparisons could be made between the FACES-III scores and the classroom measure. According to the Circumplex Model family cohesion is defined as "the emotional bonding that family members have toward one another" (Olson, 1993, p. 105). The model proposes four levels of cohesion ranging from disengaged (low level of cohesion) to separated (low to moderate) to connected (moderate to high) to enmeshed (very high). Families functioning in

the separated and connected ranges make for the most optimal functioning where individuals "are able to experience and balance these two extremes and are also able to be both independent from and connected to their families" (Olson, 1993, p. 105).

The dimension of adaptability is described as the amount of change that can be tolerated within the family's leadership, role relationships and relationship rules. "The four levels of adaptability range from rigid (very low) to structured (low to moderate) to flexible (moderate to high) to chaotic (very high)" (Olson, 1993, p. 107). As with cohesion, the central levels, structured and flexible, are most conducive to optimal family functioning.

By definition, the terms flexibility and adaptability refer to the same concepts as used in the literature relating to the FACES - III and the classroom measure, the Classroom Systems Observation Scale (CSOS). Hence, in order to provide a consistent nomenclature in discussing relationships and comparisons between these two instruments term flexibility will be used throughout.

FACES -III was designed to be taken twice by family members in order to provide for an opportunity to express both how they currently perceive their family system, and how they would ideally envision it to be. The resulting scores on the two dimensions of

flexibility and cohesion can then be graphically plotted onto the Ecomap of the Circumplex Model. For the purposes of the current study only the "perceived" responses were used.

FACES- III is a 20 - item self-report scale. Odd items comprise the cohesion score. Even items comprise the flexibility score. By the nature of the constructs measured the dimensions of cohesion and flexibility should be uncorrelated. FACES- III reports an *r* of .03 between cohesion and flexibility (Olson, 1986). The instrument is described as a "reliable and valid scale that is theoretically based and is designed for systematic research or clinical work with couples and families" (p. 344). For example, Maynard and Olson (1987) describe its use in monitoring the efficacy of counseling with a multiproblem family. The instrument was administered several times to each family member. A preliminary diagnostic reading using the FACES - III before counseling allowed for periodic assessments to determine the success of the treatment process for each participant. FACES III has been normed on 2,453 adults. Internal consistency reliability is reported as $r = .77$ for cohesion, and $r = .62$ for flexibility. The face and content validity are described as "very good". According to

Olson (1986) FACES III has overcome most of the reported shortcomings of FACES II.

The cohesion score for the FACES - III is obtained by summing all of the odd items. The flexibility score is obtained by summing all of the even items.

Classroom Systems Observation Scale (CSOS)

The CSOS is an observational instrument designed to assess classrooms from a systems perspective (Appendix C). It has been designed for use in preschool through elementary grades. The scale is based on the Circumplex Model of Olson, Sprenkle, and Russell (1979) and includes 20 items reflecting classroom cohesion, 13 items reflecting classroom flexibility, and 14 items reflecting classroom communication. For purposes of the current study only the dimensions of cohesion and flexibility were used. As the manual for administration indicates, "Classroom cohesion is demonstrated by behavior that conveys the feelings of closeness and caring shared by the classroom members (students and teachers). A cohesive classroom is one in which members spend time together, support and help each other, yet allow individuals to act independently" (Fish & Dane, 1995, p. 2). The levels of classroom cohesion on the CSOS range from low levels (disengaged) to midrange levels

(separated and connected) to high levels (enmeshed). Flexibility is "demonstrated by behavior in the classroom system that is adaptable and able to change in response to student and teacher needs. A flexible classroom is one in which teachers and students assume diverse roles and responsibilities" (Fish & Dane, 1995, p. 2). The four levels range from low (rigid) to midrange (structured and flexible) to high (chaotic).

A recommended time of 45 minutes is suggested for the classroom observation process. Additionally, a minimum of three, 2 hour training sessions are recommended before observations are made. For the present study, the CSOS was administered by trained graduate students and this examiner. For interrater reliability on the Cohesion dimension of the CSOS, the Pearson Product Moment Correlation is .804 (p=.005) (Tener & Fish, 1998). The Pearson Product Moment Correlation for the Flexibility dimension is .634 (p=.049). For test-retest reliability, a Pearson Product Moment Correlation for the Cohesion dimension is .774 (p=.000). The Pearson Product Moment Correlation for the Flexibility dimension is .791 (p=.000). Fish and Dane (2000) describe the CSOS as being theoretically derived, having acceptable interobserver agreement,

fair to moderate stability, and comprised of factors consistent with conceptual components.

This examiner underwent a total of six hours of training in the use of the CSOS. The first two hours included becoming familiar with the instrument and its administration as well as reviewing some of the basic concepts from the family systems literature including cohesion, flexibility, communication and an understanding of the Circumplex Model. This review was completed under the supervision of a clinician trained by one of authors of the CSOS. A second aspect of the training consisted of practice observations with the trainer, initially using video tapes of classroom situations, and later making several classroom observations after which scoring techniques and procedures were discussed. The final component of the training consisted of determining interrater reliability scores. Observations based on 5
classrooms yielded correlations ranging from r = .94 to r = .99 on the flexibility dimension and from r = .84 to r = .99 on the cohesion dimension.

Because the CSOS was designed to be used with a younger, preschool and elementary school population, it was necessary to determine the degree to which the existing items were applicable to

a high school population. In order to address this issue, two focus groups of five teachers each were held. Each discussion session lasted approximately 45 minutes. Teachers from the English department of one of the schools were invited to participate in these discussions. In all, ten teachers participated. In each group, members were asked to review and discuss each question in the CSOS to ascertain if any of the behaviors covered might not be appropriate or applicable to their own classrooms. The CSOS, as originally formulated, includes three areas for observation; Cohesion, Flexibility, and Communication. Because this study only makes use of the areas of cohesion and flexibility the two discussion groups were directed to address only those two areas.

In general, the consensus of the two discussion groups was that the behaviors addressed in the scale were relevant and appropriate to a secondary level population. The only area of concern was raised around one of the items that several teachers initially felt might not be particularly relevant or applicable to a high school classroom. This was in the Cohesion section and had to do with positive physical contact among classroom members. The item reads, "Teacher uses positive physical contact with student". Several teachers felt that the issue of physical contact at the

secondary level is never an issue because physical contact is rarely, if ever, made with high school students. Hence, the possible observation of a lack of physical contact in their class should not imply a lower level of cohesion. A clearer understanding of this observational point was gained through a review of the CSOS manual. In it, physical contact is defined as follows, "Teacher touches wrist, finger to help guide penmanship exercise", or "Teacher pats John on the back and says, "Nice work", or "As she is helping a student, the teacher bends down to the student's level." In so far as that particular observation was concerned, it was agreed that a strong level of cohesion could be observed without actual physical contact being made. Hence, the item was left unchanged.

Design and Procedure

Prior to beginning the study a discussion was held with the Superintendents of those schools involved and the participating high school Principals to discuss the study, its goals, and the data collection procedures. Written consent was obtained from the administration of each school allowing the study to be conducted. (See Appendix D)

In all, participation in the study was sought from twelve school districts. A total of four school districts agreed to participate.

The subject selection process involved a stratified selection of students from the combined 9th, 10th, 11th, and 12th grades of the schools involved. Data used for the study were collected from the following sources: classroom teachers, participating families, classroom observations, and school records.

Selection Process-Teachers (classrooms)

Once permission had been obtained from the respective school district Superintendents the study was reviewed and discussed with the high school Principal and English department chairperson. In three of the four participating schools a total of three English teachers were randomly selected from the total English teaching staff. In the fourth school all ten of the English teachers were asked to participate. In all cases the teachers selected were given a complete description of the study and the option of participating or not. All selected teachers agreed to participate and were asked to read and sign a consent form (Appendix E). Appendix E includes two different versions of the teacher consent form. The first version was given to those teachers in the school where the principal investigator was employed as a psychologist. As such it was written so that teachers who chose not to participate in the study and who might request psychological services for one of their

students in the future would be aware of the option to request services from the other full - time psychologist working in the building. This was to ensure that teachers would not feel that they were under any obligation to participate in the study. The second version of the consent form was given to the teachers at the three other participating schools where the principal investigator was not employed and where that potential conflict would not exist. As such, there was no need to address an alternate way of delivering psychological services with those teachers.

Once a commitment was obtained from the randomly selected teachers a more detailed meeting was held to review procedures and to answer any questions they might have. In that meeting they were asked to select a day for the observation when they would be conducting a typical lesson and when they would not be administering a test. They were asked not to introduce the observer unless students expressed curiosity, and in that case the teacher was asked to introduce the observer as "a graduate student working on a project for school". Teachers were told that the observer would not participate in the discussion or lesson plan and would prefer to sit in the rear of the classroom. Additionally, the FACES survey to

be sent home was described as was the CSOS observation process and parent permission forms.

Selection Process-Students/Families

Subject selection proceeded for each of the 9th, 10th, 11th, and 12th grades as follows. The examiner met individually with each participating English teacher at his or her school to review and discuss the student selection process. Meetings were arranged beforehand by telephone. Using their grade books teachers were asked to identify six students with a current average of 80 or above. This group of students would constitute the "strong" group. Teachers were also asked to identify six students with a current grade average of 64 or below. This group of students would constitute the "weak" group. In the cases where a teacher had fewer than 6 "weak" or 6 "strong" students in their class all available students were used. Teachers were asked to include only those students living with their biological parents who had been in their class for at least one month, and who had not been referred to administration for behavioral problems. Teachers were asked to write the names of the "weak" and "strong" students on paper and identify them as such. Because, in most cases, teachers did not have student addresses or telephone numbers, the examiner used a

master list, generally located in one of the administrative offices, to gather addresses and telephone numbers based on the student names provided. If a participating English teacher taught more than one class he or she was asked to select the largest class he or she taught. In selecting the classroom with the largest number of students, if there were two classes with the same number of students in it, the teacher was asked to use the class that met earliest in the school day.

Classroom Observation

Using the Classroom System Observation Scale (CSOS) each participating teacher's classroom was observed for one period, approximately 45 minutes. As discussed with the teacher, the observer sat in one of the seats in the back of the room that allowed for a clear view of the classroom activities. During the observation notations were made on the CSOS form and then tallied immediately after, either in the classroom where possible, or in an empty office.

Parent Survey

Following the classroom observation, a consent letter (Appendix F) and a copy of the Family Adaptability and Cohesion Evaluation Scale (FACES-III) were sent to the parents of those students who had been selected to participate. Appendix F includes

two different versions of the parent consent form. The first version was given to those families where the principal investigator was employed, and was written such that parents who chose not to participate in the study, and who might request psychological services for their child in the future, would be aware of the option to request services from the other full - time psychologist working in the building. This was to ensure that parents would not feel that they were under any obligation to participate in the study. The second survey in Appendix F was sent to families in the remaining three participating schools where the principal investigator was not employed and where that potential conflict would not exist. As such, there was no need to address an alternate way of obtaining psychological services with these parents. All mailings were done by the principal investigator with the exception of one of the high schools that completed the mailings themselves.

In order to maintain confidentiality all of the FACES III, CSOS forms, and student names were coded. After a two week period, if any of the study participants did not return their survey, a reminder note and second copy of the survey was sent out. This procedure was followed for three of the four participating school districts. In the fourth district, because the administration was not willing to

provide names and addresses of the participating families directly to the examiner, two week follow-up letters were not sent to those families who had not returned their surveys.

In total, 19 classrooms were observed. In two of the classrooms observed none of the FACES - III questionnaires were returned. Hence the total sample represents questionnaires received from 17 classrooms. In the process of reviewing students grades to determine membership in either the "weak" or "strong" category it was found that in the case of several classrooms there were fewer than the expected 6 "weak" students. As a result, while a maximum of 228 students might have been selected had there been 6 "weak" and 6 "strong" students in each of the observed 19 classrooms, the total number of students selected was 134. Of the 134 FACES surveys that were mailed to parents, a total of 73 were returned or 55%. Out of the 73 surveys returned 34% were completed by males, 64% were completed by females, and 2% were not identifiable as to gender. The breakdown by grade of the FACES surveys returned is as follows; 9th grade - 22, 10th grade - 21, 11th grade - 15, and 12th grade 15.

In terms of the gender and ethnicity of the students who were observed, since one of the schools would not provide specific

demographic information, data is only available from three of the four participating schools. Participants from those three schools for which specific demographic information is available represent 92% of the total sample. Using data from those three schools the breakdown by gender of those students who participated in the study was 55% male and 45% female. In terms of ethnicity, 82% were white, 12% black, and 6% were Hispanic.

In the case of the fourth school (comprising 8% of the sample) from which specific demographic information was not available, ethnicity percentages of participating students were extrapolated from the overall district percentages that were publicly available. These percentages, as listed in Appendix A, are as follows; 98% Caucasian, 0.70% black, and 1.20% Hispanic. Hence, the clear majority of participating students from all four schools were white and approximately evenly divided between male and female. The generalizability of the findings of this study should be tempered by these demographics. Specifically, caution should be used in applying the conclusions of this study to non-white populations.

As noted in Appendix A, the fourth school, "D", had an overall higher percentage of black students within the district (30%) than the other three participating schools. However, the total percentage

of black students from that school in the actual sample was 14%, thus reducing the likelihood that any ethnic differences among the four participating schools would have a confounding effect on the pooling of data.

Data Analysis

While the FACES-III and CSOS both measure the same concepts of cohesion and flexibility, and define the same functional areas within the Circumplex Model, the linear scales differ along the two continuua. For instance, the FACES - III cohesion scale runs from a low of 10 to a high of 50 with a midpoint of 40. The CSOS cohesion scale runs from a low of 1 to a high of 4 with a midpoint of 2.5. Similarly, the flexibility scale of the FACES - III runs from a low of 10 to a high of 50 with a midpoint of 24 while the flexibility scale on the CSOS runs from a low of 1 to a high of 4 with a midpoint of 2.5. Hence, in order to make comparisons between the two scales two formulas were developed so that the CSOS scale scores could be transformed to the FACES - III scale. For both the cohesion and flexibility scales separate formulas were arrived at by fitting a regression line to the points of each scale. This was accomplished by lining up the cohesion scale from the CSOS and the FACES - III and determining a point by point correspondence relationship

between them. The same procedure was followed for the flexibility scale on both instruments.

The resulting formula used for transforming CSOS scores to FACES scores on the cohesion continuum was as follows: FACES = -11.0824 + 47.5809 (CSOS score) - 15.3071 (CSOS score) x (CSOS score) + 1.80787 (CSOS score x CSOS score x CSOS score). The formula used for transforming CSOS scores to FACES scores on the flexibility continuum was FACES = 0.126781 + 23.7868 (CSOS score) - 9.58053 (CSOS score x CSOS score) + 1.50508 (CSOS score x CSOS score x CSOS score).

The hypotheses were tested, in part, using two formulations based on the CSOS and FACES scores: Distance From Center (DFC) scores (Olson, Portner, and Levee, 1985) and absolute difference scores. In calculating difference scores, the scores for classroom and family cohesion and flexibility as measured by the CSOS and the FACES instruments were subtracted from each other. That is, cohesion scores on the CSOS were subtracted from cohesion scores on the FACES. Similarly, flexibility scores on the CSOS were subtracted from flexibility scores on the FACES. Results were transformed into absolute values. Differences were then compared

for the academically "weak" and "strong" students. The formulas used were as follows:

| Flexibility Difference | = Flexibility(CSOS) -Flexibility(FACES)

| Cohesion Difference | = Cohesion(CSOS) -Cohesion (FACES)

Distance From Center scores were obtained from FACES scores using the following formula as developed by Olson et al. (1985): Square Root of (Individual Cohesion - 39.8) X (Individual Cohesion - 39.8) + (Individual Flexibility - 24.1) X (Individual Flexibility - 24.1). Lower DFC scores suggest higher functioning, more healthy patterns of family interaction. The formula combines cohesion and flexibility scores and hence precludes making differentiations between axes. Further, calculation of the DFC provides only a measure of distance not direction so that placement of a score in a particular region is not possible.

Following Olson, Portner, and Lavee's (1985) model the categorical breakdown and relative placement along each axis for the cohesion and flexibility scores are illustrated in Figure 1. The breakdown for cohesion is Disengaged 10-34, Separated 35-40, Connected 41-45, Enmeshed 46-50. The breakdown for flexibility is Rigid 10-19, Structured 20-24, Flexible 25-28, Chaotic 29-50. Figure 1 reflects the relationship between the two axes as well as the

continua ranging from balanced to extreme. Placement of a particular family or classroom within the model was based on the combination of scores from the two axes, cohesion and flexibility. A balanced structure (family or classroom) resulted from scores in the balanced range on both dimensions (structurally-separated, structurally-connected, flexibly-connected, flexibly-separated). Extreme scores were those that fell at the extreme ends of both axes (rigidly-disengaged, chaotically-disengaged, chaotically-enmeshed, rigidly-enmeshed). Mid-range scores were those that fell between balanced and extreme (rigidly-separated, structurally-disengaged, flexibly-disengaged, chaotically-separated, chaotically-connected, flexibly-enmeshed, structurally-enmeshed, rigidly-connected).

The hypotheses were tested using t-tests to determine whether significant differences exist between home and school on both cohesion and flexibility for "weak" and "strong" students, and to determine if the family profile of the "weak" and "strong" students differed.

Chapter 4

Results

The following is a breakdown of the placement of the 17 observed classrooms based on the CSOS score within the Circumplex Model (See Figure 1).

As the breakdown indicates in Table 1, three of the classes fell into the mid-range region and 14 fell into the balanced region with the majority falling into the structurally separated region. Based on this observational data most classes functioned constructively in the balanced regions. Three classes fell into the lower left hand quadrant of the model suggesting more extreme patterns of flexibility and cohesion.

Table 2 is a breakdown of the 73 FACES - III surveys by academically "weak" and "strong" student and their placement within the Circumplex Model. As the total percentages for the balanced, mid-range, and extreme categories indicate, overall there was a higher percentage of "strong" students from families functioning within the balanced range (54%) than "weak" students (23%). Additionally, as table 2 indicates, a greater percentage of "weaker" students were from mid-range families (70%) than "stronger" students (43%).

The first hypothesis states that students who are experiencing academic difficulties would demonstrate a greater disparity between their family and classroom on measures of flexibility and cohesion than students who are not experiencing academic difficulties.

This hypothesis was tested using difference scores as described in the above section both for CSOS and FACES cohesion and flexibility scores. The resulting difference scores constituted the dependent variable for this procedure. Means and standard deviations of these difference scores are summarized in Table 3. The results of the t-test are summarized in Table 4. A significant difference was found for home and classroom cohesion between "weak" and "strong" students ($p = 0.001$). No significant difference was found for home and classroom flexibility between "weak" and "strong" students. Figure 2 presents these findings graphically showing differences between home and school cohesion and flexibility for "weak" and "strong" students. These results suggest that students who are currently having academic difficulties in English classrooms demonstrate a greater difference between the level of cohesion at home and the level of cohesion within their classroom than their academically "stronger" classmates. That is, students who are academically "weak" come from families less

similar in terms of the style of emotional bonding or cohesiveness than that which is present in their classroom. Alternatively, academically "stronger" students come from families whose emotional bonding or cohesion patterns more closely resemble those that are present in the classroom. These results suggest that for these adolescents with lower academic performance the area of cohesion may be a more critical interactional style than flexibility in terms of facilitating positive academic performance. Thus, hypothesis #1 was partially supported.

The second hypothesis proposed that the families with "weak" students would have scores on the FACES that fell farther from the center (balanced) area of the Circumplex Model than the families with "strong" students. Table 5 presents the means and standard deviations for transformed scores on the CSOS for all classrooms, and for the FACES scores of the families of both "weak" and "strong" students. As Table 5 indicates, families with "weak" students fell within the flexibly disengaged area (See Figure 1). As mentioned above, this region is considered a mid-range region. Placement within this region would suggest functioning within the flexible or balanced section on the flexibility continua, and within the disengaged or extreme section along the cohesion continua.

Families with "strong" students on the other hand fell within the flexibly-separated section of the balanced region. Placement within this section would suggest overall functioning within the flexible or balanced section along the flexibility continua, and within the separated or balanced section along the cohesion criteria. To determine if this difference was significant a t-test using distance from center (DFC) scores was used. The findings as presented in Table 6 were significant ($p = 0.001$) suggesting that "weak" students are in fact more likely to be from families whose pattern of interaction is farther from the center of the balanced region of the Circumplex Model than their academically "stronger" counterparts. These findings are graphically represented in Figure 3 which depicts "strong" students as closer to the center and hence from healthier families than "weak" students who are located farther from the center. This finding suggests that the pattern of family interaction may be related to a students' academic performance, specifically that the more successful students' families represent a more "balanced" environment that is "most viable for healthy family functioning" (Olson et al., 1985 p. 4). Thus, hypothesis #2 was supported by the data.

Chapter 5

Discussion

Both the home and the school settings represent significant formative environments for students. These environments may or may not be congruent with each other at any given point in a student's life. This study evaluated how the degree of congruity between these two environments along the continua of cohesion and flexibility would impact academic performance in a secondary school English class.

In general, the study provided partial support for the hypothesis that a lack of congruence between these two environments would be negatively associated with academic performance. Of the two dimensions explored, a lack of congruence in the area of cohesion did seem to be related to academic performance. On the other hand there did not appear to be a relationship for flexibility. For these students then, the issues associated with interpersonal flexibility such as power structures, role relationships and rules are not associated with academic performance as much as the issues of interpersonal cohesion such as styles of emotional bonding and interpersonal boundary setting. Because none of the observed classrooms in the sample fell within

the extreme range of functioning, it is possible that the "weaker" students' performance may have been the result of having come from less functional or healthy families rather than the lack of a congruence between family and classroom.

As Table 5 indicates, academically "strong" students' mean FACES score on the cohesion axis (38.39) were almost identical to the mean CSOS score on cohesion (37.89), whereas the "weak" student's mean FACES score on the cohesion axis was 31.00. From the point of view of the family setting, cohesion is the type of emotional bonding and individual autonomy to which an individual has been exposed. Similarly, those classrooms with a balanced cohesive orientation are likely to be characterized by feelings of appropriate closeness, providing support while allowing individuals to act independently. Hence for the academically "strong" students, their home environment was quite similar to their classroom environment in terms of overall level of cohesion, an interaction pattern to which they had likely become accustomed. According to the Circumplex Model, both home and classroom environments are in the "separated" range of functioning. "Weak" students on the other hand are likely faced with quite a contrast in terms of their classroom experiences. Their mean score on the FACES of 31 places

them within the disengaged range on the cohesion axis. Hence, they are moving from a home environment that is quite low in terms of cohesion to one that demands making connections of a nature that may be somewhat foreign to them. This relationship between family and classroom for "weak" and "strong" students on cohesion is presented in Figure 4.

From the standpoint of flexibility, as is evident in Table 5, "weak" and "strong" students' mean FACES scores are generally quite similar ("weak"= 25.7, "strong" 26.5) and fall within the "flexible" range of the Circumplex Model. The mean CSOS score, however, is 21 and falls within the "structured" range. Hence, both "weak" and "strong" students appear to be coming from the more flexible environments of their homes into the more structured environments of school. Based on the above results, this change in environment does not appear to affect academic performance. This relationship is presented graphically in Figure 5. Perhaps this change, from less structure to more structure, is one to which they are accustomed having been in school for at least eight years.

It is worth noting that these results are in marked contrast to those in the Kruse (1991) study which closely paralleled this study in its goals and design. In that study the opposite transactional

patterns appeared significant, that is, flexibility had a significant impact on performance, while cohesion did not. One possible explanation for this may have to do with the differences in ages of the participants in the two studies. Kruse's population consisted of elementary school students. It is possible that for an older, adolescent population with different developmental needs, the issue of the style of emotional bonding (cohesion) is a more important issue than the issues associated with flexibility. For adolescents, the issue of relationships with adults is likely much more significant and complicated than for the elementary school student. In fact, Miller (1974) describes young adolescents as very wary in their relationships with adults, and because at many levels they distrust themselves, they also distrust others. For this reason the issue of how a teacher encourages, fosters, and manifests his or her particular style of bonding or connectedness may take on much greater significance for this age group. Teachers should be sensitive to how their own style of interaction may or may not affect the way students perform. Students not accustomed to a closer, more adaptive connectedness may need additional support or encouragement.

A second finding of this study was that the academically "weak" students' families had scores that were further from the center of the Circumplex Model than the families of the academically "strong" students. This suggests that the family interaction patterns of the "weak" students were likely to be less balanced than their academically "strong" counterparts providing support for the need to consider systemic family issues in assessing educational problems. The implications of these findings are similar to those of the DuBois, Eitel and Felner (1994) study that found that "strong supportive relationships with parents may be associated with various types of parent-child interactions that facilitate positive academic outcomes" (p. 412).

From a practical standpoint, this research clearly highlights the benefits of a systemic approach to educational assessment. Thorough educational evaluations should not only include pertinent assessments of a student's cognitive and emotional functioning, but also evaluations of the several settings in which he or she interacts. The benefits of exploring the relationship between family and classroom congruence and academic performance may be particularly appropriate where the behavior of the student in question varies from class to class and hence raises the question of

whether his or her family style of cohesion may match in some classroom settings and not in others. Teachers in classes where the mismatch manifests itself may begin to address how, in certain cases, their styles (teacher and student) might attempt to accommodate towards each other.

Given the correlational nature of the study, the findings do not necessarily reflect causal relationships between family interaction patterns and academic performance. It is possible that a number of other factors may have contributed to the apparent link between the issue of cohesion and "weak" academics. While this study looked at and found a relationship for a mismatch between family and classroom, it did not look at other student variables such as ability, the presence of a clinical diagnosis, or a relative weakness in the subject area. Where possible, future research in this area should attempt to control for some of these variables. As an extension of this idea, while the current study found support for the hypothesis that a congruence between home and classroom was related to academic performance, it remains unclear as to whether the "weak" students in the observed English class would in fact be "strong" students in other content courses where the cohesion pattern may have been congruent, or would these students be "weak" in all of

their classes. Hansen (1986) suggests that "the child from *any* type of family can be disadvantaged in some classrooms and may be advantaged in others" (p. 656). In that regard, future research might look at classroom interaction patterns across the curriculum in an effort to determine if these "weak" English students may in fact be "strong" students in other classroom settings.

An additional area for future study might address whether the supported hypothesis in this study would also be supported in those classes where the overall CSOS score was in one of the extreme ranges. In this study, all of the observed classrooms fell either into the balanced or mid-range areas with none falling into any of the extreme areas. While this is a positive reflection on the classrooms observed, it precludes extending the hypothesis of congruence to those classes and families that function in the extreme ranges of the Circumplex Model.

One of the difficulties encountered in gathering the data for this study was the reluctance of most school districts' administrations to participate. Despite guarantees of confidentiality and participant anonymity, concerns were raised as to whether or not parents would be willing to reveal if their son or daughter was doing poorly in English class. Several districts did not want the

addresses of community members to be available, others indicated that they found the questions on the FACES to be too intrusive. As mentioned above, of the twelve districts approached to participate in the study there were only four that agreed.

This study supports the notion that comprehensive, systemic evaluations of students and the environments within which they live can be useful in understanding the reason for both academic success and failure. For most school psychologists these finding come as mixed blessings, for while this information may indeed help to enhance the meaningfulness of the assessment process, it implies that the evaluative net reaches outside of the psychologists office into the classroom and home of students, a time consuming enterprise on top of an all too frequently overloaded schedule. The role of the school psychologist will be greatly enhanced when standardized individual assessments are coordinated with a more complete understanding of a student's classroom setting, his or her family interpersonal style, and their interaction effects.

Tables

Table 1

Placement of 17 Observed Classes within the Circumplex Model

Region	Frequency	Range
Structurally Separated	8	balanced
Flexibly Connected	4	balanced
Rigidly Separated	1	mid-range
Structurally Disengaged	2	mid-range
Flexibly Separated	1	balanced
Structurally Connected	1	balanced
	17	

Table 2

Placement of FACES - III Respondents within the Circumplex Model

Breakdown by Academically "Weak" and "Strong" Student

Weak		Balanced / Mid-Range / Extreme		
Structurally Disengaged	9		mid-range	
Structurally Separated	2	balanced		
Structurally Connected	2	balanced		
Structurally Enmeshed	1		mid-range	
Flexibly Connected	1	balanced		
Flexibly Disengaged	4		mid-range	
Flexibly Separated	3	balanced		
Flexibly Enmeshed	0			
Rigidly Disengaged	2			extreme
Rigidly Separated	1		mid-range	
Chaotically Separated	9		mid-range	
Chaotically Connected	0			
Chaotically Enmeshed	0			
	Total 34	8 (23%)	24 (70%)	2(6%)
Strong				
Structurally Disengaged	2		mid-range	
Structurally Separated	8	balanced		
Structurally Connected	3	balanced		
Structurally Enmeshed	0			
Flexibly Connected	3	balanced		
Flexibly Disengaged	3		mid-range	
Flexibly Separated	7	balanced		
Flexibly Enmeshed	3		mid-range	
Rigidly Disengaged	0			
Rigidly Separated	0			
Chaotically Separated	5		mid-range	
Chaotically Connected	4		mid-range	
Chaotically Enmeshed	1			extreme
	Total 39	21 (54 %)	17 (43%)	1 (3%)

Table 3

Mean Disparity and Standard Deviations Between Home and School Cohesion and Flexibility for "Weak" and "Strong" Students

	Weak N=34 Mean	--- S D	Strong N=39 Mean	--- S D
Axis				
Cohesion	9.06	6.76	4.20	2.96
Flexibility	5.30	4.66	5.35	4.92

Table 4

T-tests Comparing "Weak" and "Strong" Students on Flexibility and Cohesion

Axis/Comparisons	T	df	P-Value
Cohesion:			
Weak vs Strong	-4.07	71	0.001*
Flexibility			
Weak vs Strong	0.43	71	0.666

* Significant at p<.05

Table 5

Means, Standard Deviations, and Summary Transaction Patterns for All Students and Classrooms

	Mean		S D		Mean Transaction Pattern
	Cohesion	Flexibility	Coh. /	Flex.	Coh. / Flex.
Classrooms (CSOS) N=17					
Total	37.89	21.95	2.73	1.83	Structurally Separated (Balanced)
Families (FACES)					
Weak N=34	31.00	25.73	8.67	5.18	Flexibly Disengaged (Mid-Range)
Strong N=39	38.39	26.59	5.57	5.83	Flexibly Separated (Balanced)

Table 6

Means and Standard Deviations for "Weak" and "Strong" Students Using Distance From Center (DFC) Scores

	Mean	/	Standard Deviation
"Strong"	7.28	/	4.35
"Weak"	11.91	/	6.20

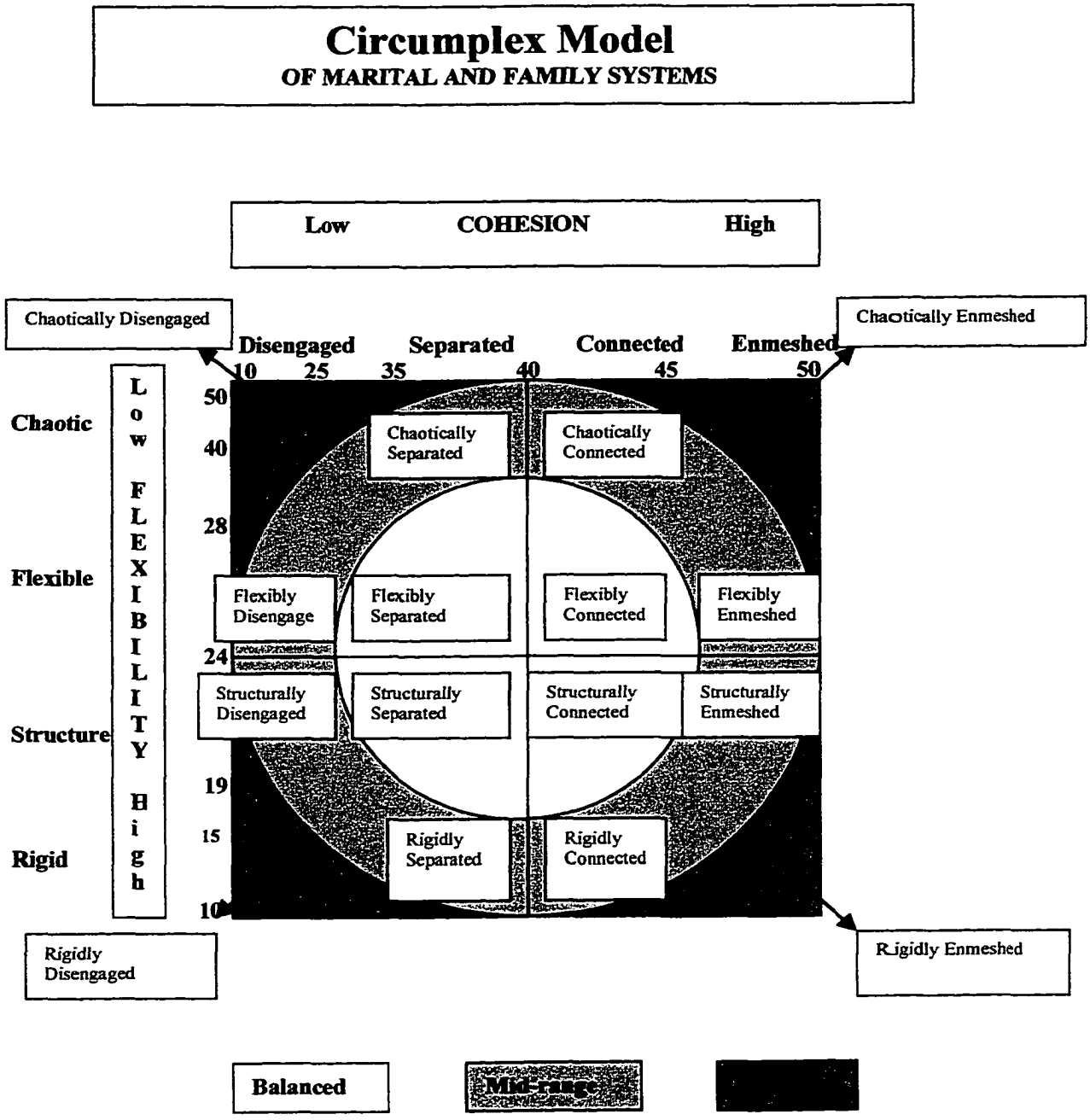
T-test Comparing "Weak" vs. "Strong" students on Distance From Center Scores

	T	df	P-value
weak vs strong	-3.64	58	0.001*

* Significant at p<.05

Figures

Figure 1



Family Social Science
290 McNeal Hall University of Minnesota St. Paul MN. 55108

Figure 2

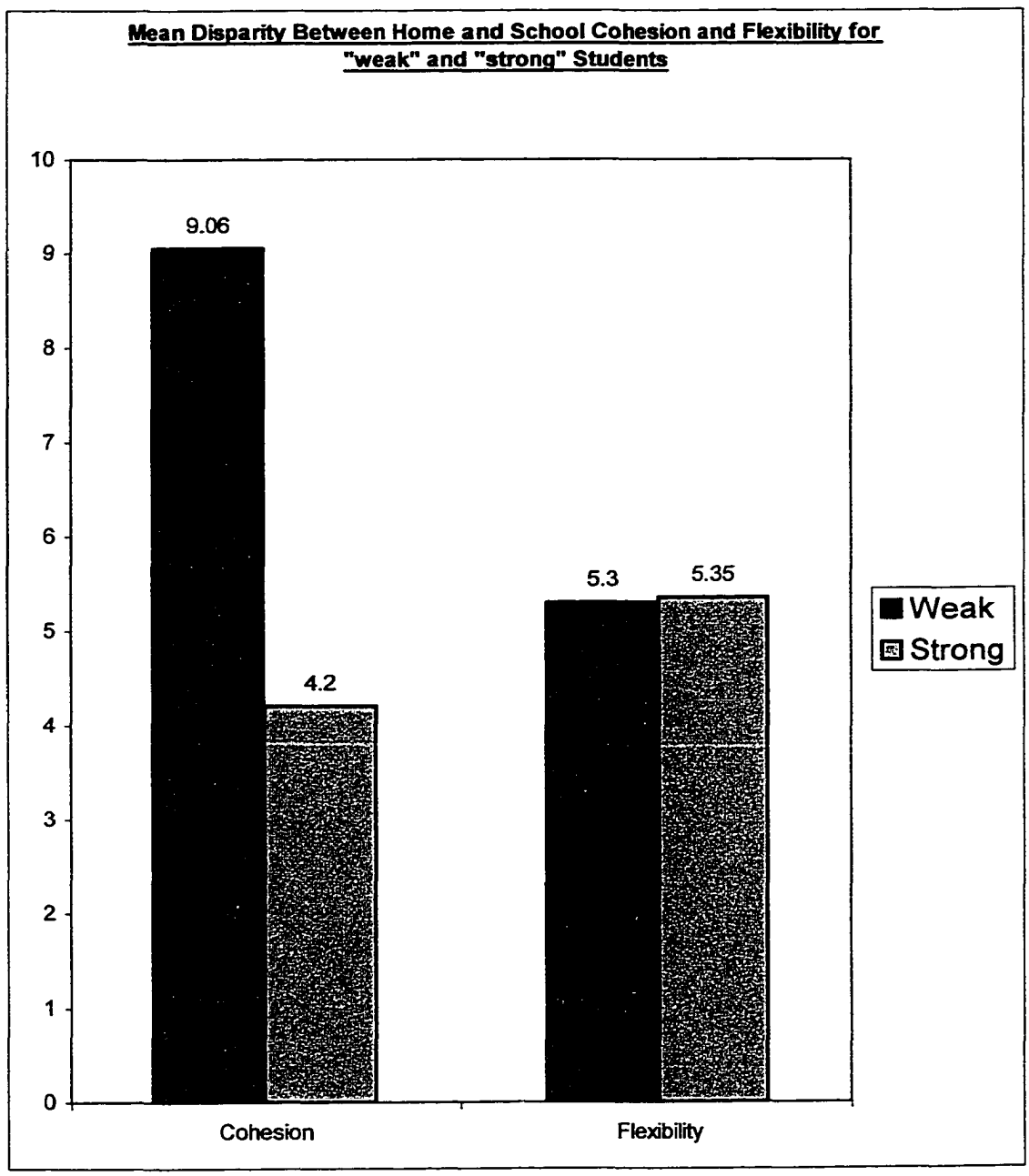
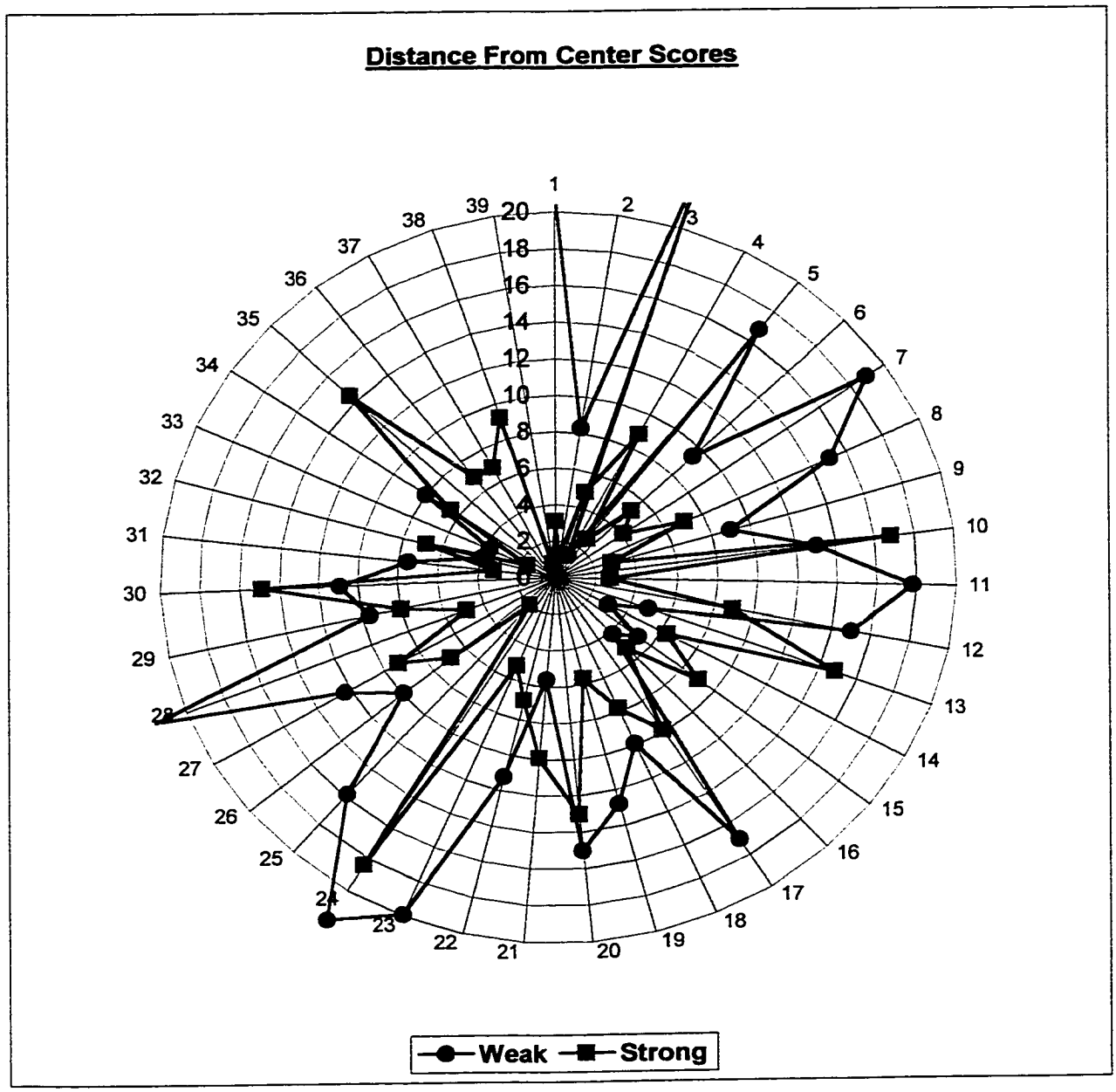
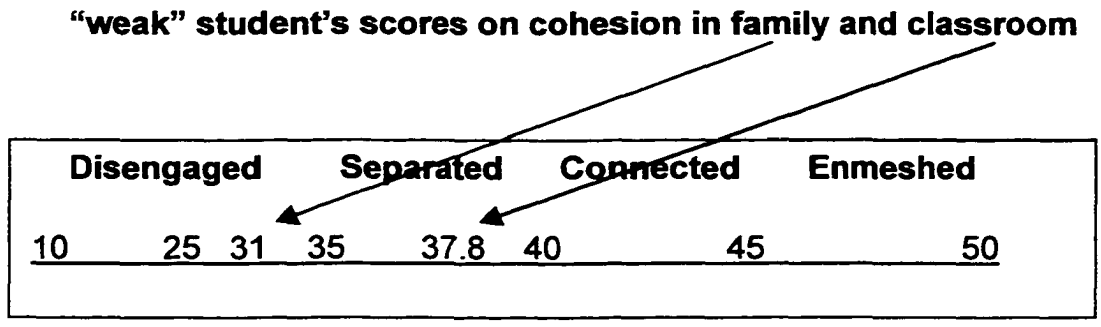


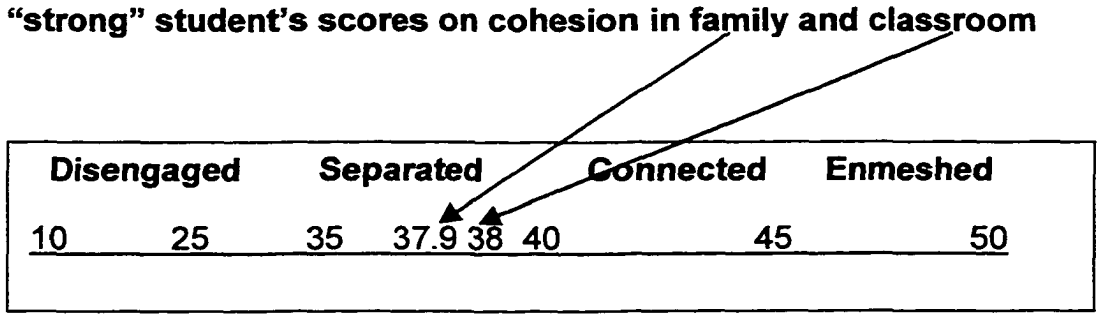
Figure 3



Mean Scores for "Weak" and "Strong"

FACES and CSOS Scores on Cohesion

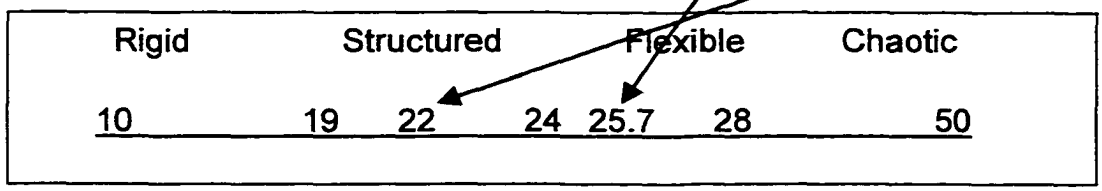




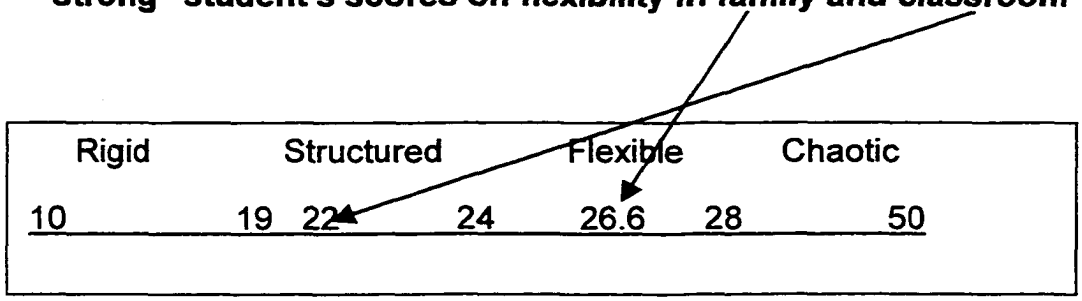
Mean Scores for "Weak" and "Strong"

FACES and CSOS Scores on Flexibility

"weak" student's scores on flexibility in family and classroom



"strong" student's scores on flexibility in family and classroom



Appendix A

Profiles of Participating Schools

	PROFILES OF SCHOOLS AND CLASSROOMS				
	(All data from 1997-1998 academic school year)				
	(Percentages are district-wide)				
	SCHOOL				
	A (TZ)	B (WG)	C (BM)	D (N)	
Urban/Suburban/Rural	Suburban	Suburban	Suburban	Suburban	
District Size	2761	5171	1294	3026	
White	77%	96.50%	91.70%	59%	
Black	3.30%	1.30%	0.70%	30.20%	
Hispanic	5.20%	0.30%	1.20%	5.30%	
Special Education	13.10%	9.10%	7.80%	12%	
English Language Learners	3%	1.10%	2.40%	7%	
Eligible for Free Lunch	5.40%	13.90%	0.30%	28.00%	
Regents Diplomas	69.00%	62.00%	70.00%	51.00%	
High School Size	805	1598	314	890	
Subject Area Observed	English	English	English	English	
Classrooms Observed	10	3	3	3	
Male Teacher	1	1	1	0	
Female Teacher	8	2	2	3	
Curriculum	Regents	Regents	Regents	Regents	

Appendix B

FACES III

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
Almost Never	Once in a While	Sometimes	Frequently	Almost Always

Describe Your Family Now

_____ 1. Family members ask each other for help.

_____ 2. In solving problems, the children's suggestions are followed.

_____ 3. We approve of each other's friends.

_____ 4. Children have a say in their discipline.

_____ 5. We like to do things with just our immediate family.

_____ 6. Different persons act as leaders in our family.

_____ 7. Members feel closer to each other than to people outside the family.

_____ 8. Our family changes its way of handling tasks.

_____ 9. Family members like to spend free time with each other.

_____ 10. Parent(s) and children discuss punishment together.

_____ 11. Family members feel very close to each other.

_____ 12. The children make the decisions in our family

_____ 13. When our family gets together for activities, everybody is present.

_____ 14. Rules change in our family.

_____ 15. We can easily think of things to do together as a family.

_____ 16. We shift household responsibilities from person to person.

_____ 17. Family members consult other family members on their decisions.

_____ 18. It is hard to identify the leader(s) in our family.

_____ 19. Family togetherness is very important.

_____ 20. It is hard to tell who does which household chores.

FAMILY SOCIAL SCIENCE, 290 McNeal Hall, University of Minnesota, St. Paul, MN 55108
*used with permission

Appendix C

Classroom System Observation Scale

Quick Score Sheet

(Fish & Dane, 1992)

COHESION	Disengaged (never) 1	Separated (sometimes) 2	Connected (regularly) 3	Enmeshed (constantly) 4
C-1 T. encourages class to work s a group				
C-2 T. refers to class as a group using a label or name				
C-3 S. refer to their class membership				
C-4 T. discourages put-downs or derogatory comments between S.				
C-5 S. discourages put-downs or derogatory comments				
C-6 T. uses warm tone of voice				
C-7 T. acknowledges S. who support other S.				
C-8 T. uses a positive physical contact with S.				
C-9 T. encourages physical closeness of S. with each other				
C-10 S. demonstrate affection				
C-11 S. are helpful to other S. (personal needs)				
C-12 T. encourages S. helpfulness (personal needs)				
C-13 T. encourages S. to work together or share supplies				
C-14 S. share materials or supplies				
C-15 S. listen to classmates' comments or discussion				
C-16 S. assist other S. with academic homework				
C-17 S. share classroom space				
C-18 T. encourages S. with similar interests to work together				
C-19 T. shows respect for S. feelings				
C-20 T. moves around class in response to S. need				

FLEXIBILITY	Rigid 1	Structured 2	Flexible 3	Chaotic 4
F-1 T. accepts S. suggestions				
F-2 T. asks for S. input on classroom activities				
F-3 T. shares control of class activities				
F-4 T. T. is responsive to S. need for orientation				
F-5 T. permits class movement				
F-6 T. discusses disciplinary decisions with S.				
F-7 T. considers circumstances in enforcing consequences				
F-8 Resolution of S-T conflicts are negotiated				
F-9 Decisions made through T-S compromise				
F-10 Classroom job assignments are rotated				
F-11 S. & T. roles vary				
F-12 T. considers circumstances				
F-13 Rules changed as needed				

COMMUNICATION	Low (infrequently) 1	2	(sometimes) 3	4	High (often) 5	6
CO-1 T. listens to S. without interrupting						
CO-2 T. looks directly at S. when they are speaking						
CO-3 S. uses "I" statements to express feelings & opinions						
CO-4 T. uses "I" statements to express feelings & opinions						
CO-5 T. asks S. to speak for themselves						
CO-6 S. speak about their feelings, likes & dislikes to each other and/or T.						
CO-7 T. speaks about values with S.						
CO-8 S. speaks about friends & families with T. & each other						
CO-9 T. speaks about friends & families with S.						
CO-10 T. verbal messages are clear & consistent						
CO-11 T. verbal statements are consistent with nonverbal actions						
CO-12 T-S conversation stays on topic						
CO-13 S. ask classmates for opinions on nonacademic issues						
CO-14 T. acknowledges S. expression of feelings						

*used with permission

Appendix D

Administration Permission Form

Dear Ms. Fisher,

I have reviewed Mr. Honcharski's proposal for the Degree of Congruence Between Family and Classroom Functioning and Its Effect on Academic Performance study and have given my permission to conduct the research within our district.

_____

Superintendent/Administrator

_____

Date

Appendix E

Consent Letter For High School "A"Teachers

November 1, 1998

Dear Teacher,

My name is Edward Honcharski and I am a doctoral student in Educational Psychology at the City University of New York. As part of my graduation requirements for my Ph.D. I will be conducting a research project regarding some of the relationships between family and classroom environments. The information obtained from this study is designed to help teachers work more effectively with students.

As part of the study you will be asked to complete a short survey concerning the interaction patterns in your classroom. Additionally, a classroom observation will be conducted assessing similar issues. The families of one or more students in your class will be asked to complete a short survey assessing the way their family members interact.

If you agree to participate, please read and sign the statement on the consent form. Please return the survey to me in my mailbox by December 1st. All materials will be kept strictly confidential and will be stored in a locked file for one year after which time they will be destroyed. If you would like more information about the study, or if you have any questions, please don't hesitate to ask. If you have any questions concerning your rights as a participant in this study, you can call Sponsored Research at the Graduate School and University Center/CUNY (212) 817-7520. Following the study, participating teachers will be given the opportunity to review the surveys and receive a copy of the results.

Whether or not you agree to participate in this study, should any students in your classes need psychological services through the school in the future, you will be given the option of receiving them from the other full-time school psychologist in the building or myself.

Thank you very much for taking the time to read and respond to this request. Your time and cooperation are greatly appreciated.

Sincerely,
Edward Honcharski

Dr. Marian Fish
Committee Advisor (212) 817-8290

I have read all the information that appears on this consent form. I understand my rights and I voluntarily consent to participate in this study.

_____ _____

Teacher's signature Date

Appendix E

Consent Letter for High Schools B, C, and D Teachers

November 1, 1998

Dear Teacher,

My name is Edward Honcharski and I am a doctoral student in Educational Psychology at the City University of New York. As part of my graduation requirements for my Ph.D. I will be conducting a research project regarding some of the relationships between family and classroom environments. The information obtained from this study is designed to help teachers work more effectively with students.

As part of the study you will be asked to complete a short survey concerning the interaction patterns in your classroom. Additionally, a classroom observation will be conducted assessing similar issues. The families of one or more students in your class will be asked to complete a short survey assessing the way their family members interact.

If you agree to participate, please read and sign the statement on the consent form. Please return the survey to me in the enclosed envelope by December 1st. All materials will be confidential and will be stored in a locked file for one year after which time they will be destroyed. If you would like more information about the study, or if you have any questions, please do not hesitate to call me at (914) 680-1613. If you have any questions concerning your rights as a participant in t his study, you can call Sponsored Research at the Graduate School and University Center/CUNY (212) 817-7520. Following the study, participating teachers will be given the opportunity to review the surveys and receive a copy of the results.

Thank you very much for taking time to read and respond to this request. Your time and cooperation are greatly appreciated.

Sincerely,

_____

Edward Honcharski

Dr. Marian Fish
Committee Advisor (212) 817-8290

I have read all the information that appears on this consent form. I understand my rights and I voluntarily consent to participate in this study.

_____ _____

Teachers' signature Date

Appendix F

Consent Letter to High School "A" Parent/Guardian

November 1, 1998

Dear Parent/Guardian,

My name is Edward Honcharski and I am a doctoral student at the City University of New York. I am currently employed as a full-time school psychologist at Tappan Zee High School. As part of my graduation requirements I will be conducting a research project regarding some of the relationships between family and classroom environments. The information obtained from this study will help teachers work more effectively with students.

As part of the study your child's English classroom will be assessed in terms of how his or her teacher interacts within that class.

If you agree to participate, please sign the consent form below and return it to me in the enclosed envelope by December 1st. All materials will be kept strictly confidential and will be stored in a locked file cabinet for one year after which time they will be destroyed. If you would like more information about the study, or if you have any questions, please call me at the High School at 680-1613. If you have any questions concerning your rights as a participant in this study, you can call Sponsored Research at the Graduate School and University Center/CUNY at (212) 817-7520.

Whether or not you agree to participate in this project, if in the future, you or your child need psychological services through the high school, you will be given the option of receiving them from the other full-time school psychologist in the building or myself.

Thank you very much for taking the time to read and respond to this letter. Your time and cooperation are greatly appreciated.

Sincerely,

_____
Edward Honcharski

Dr. Marian Fish,
Committee Advisor (212) 817-8290

I have read all the information that appears in this consent form. I understand my rights and I voluntarily consent to participate in this study.

_____ _____
Parent's/Guardian's signature Date

Appendix F

Consent Letter For High Schools "B", "C", and "D" Parent/Guardian

November 1, 1998

Dear Parent/Guardian,

My name is Edward Honcharski and I am a doctoral student at the City University of New York. I am currently employed as a full-time school psychologist at Tappan Zee High School in Orangeburg, New York. As part of my graduation requirements I will be conducting a research project regarding some to the relationships between family and classroom environments. The information obtained from this study will help teachers work more effectively with students.

As part of the study your child's English classroom will be assessed in terms of how his or her teacher interacts within that class.

If you agree to participate, please sign the consent form below and return it to me in the enclosed envelope by December 1st. All materials will be kept strictly confidential and will be stored in a locked file cabinet for one year after which time they will be destroyed. If you would like more information about the study, or if you have any questions, please call me at 680-1613. If you have any questions concerning your rights as a participant in this study you can call Sponsored Research at the Graduate School and University Center/CUNY at (212) 817-7520.

Thank you very much for taking the time to read and respond to this letter. Your time and cooperation are greatly appreciated.

Sincerely,

_____

Edward Honcharski

Dr. Marian Fish
Committee Advisor (212) 817-8290

I have read all the information that appears in this consent form. I understand my rights and I voluntarily consent to participate in this study.

_____ _____

Parent/Guardian's signature Date

References

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