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**Pre-adolescent peer status as a function of the compatibility of
maternal and child temperament, and of mothers' ability to cope
with stress**

Thompson-Pope, Susan Katherine, Ph.D.

The University of North Carolina at Greensboro, 1990

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PRE-ADOLESCENT PEER STATUS AS A FUNCTION OF
THE COMPATIBILITY OF MATERNAL AND CHILD
TEMPERAMENT, AND OF MOTHERS'
ABILITY TO COPE
WITH STRESS

by

Susan K. Thompson-Pope

A Dissertation Submitted to
the Faculty of the Graduate School at
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Doctor of Philosophy

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Approved by



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APPROVAL PAGE

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This dissertation examined several aspects of parenting behavior which may play an important role in the child's social and emotional development. The purpose of the study was to expand existing knowledge of differential family relations among children who are of Popular, Average, and Rejected peer status. Although mothers of unpopular children did not report significantly more use of maladaptive coping strategies for dealing with stress, they were found to be more negative in their interactions with their children during a mildly stressful problem solving task. In addition, mothers degree of satisfaction with the child's temperament was predictive of peer status. These findings provide support for the hypothesis that a child's ability to become accepted by peers may be reflective of aspects of the mother-child relationship.

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CHAPTER ONE
INTRODUCTION

This dissertation is based on the hypothesis that parental expectations and behavior may play an important role in the shaping of a child's personality, and in the development of psychopathology in children. Competent parenting involves, among other features, allowing a child to acquire skills necessary for dealing with the ecological contexts (s)he will inhabit throughout development (Belsky, 1984). These adaptive skills are numerous, but include the ability to form good social relations, and to engage in effective problem solving, as well as to deal effectively with anxiety. If such skills do not emerge, the child may be at risk for developing maladaptive personality styles, or other psychopathology. This dissertation explores several aspects of mothers' parenting behavior which may play an important role in the development of a child's abilities. In particular, it examines whether mothers of unpopular children deal differently with stress, compared to mothers whose children have adequate social competence. In addition, it explores whether or not there is a relationship between the degree of fit of a mother's and child's temperament, and the child's ability to form

good social relations with peers.

Given that children with poor social competence may be "at risk" for developing later personality or behavior problems, this study aims to contribute to our growing understanding in the field of clinical psychology of how maladaptive behaviors develop. The ultimate goal of expanding this understanding is both to prevent the development of psychopathology in "at risk" children, and to treat its early manifestation. In order to achieve this goal, it will be necessary to identify aspects of the child's environment that are associated with abnormal development, and to improve our ability to recognize psychopathology in children.

Historical Perspective

The quest for accurate identification of developing psychopathology in children has been a growing focus in recent years. It has emerged as an intense dissatisfaction with current means of classifying emotional and behavior disorders in children. The major focus of the dissatisfaction was the claim that the official American Psychiatric Association (APA) classification system was inaccurate and lacking in utility because it was developed merely by extrapolating backward from the behaviors observed in psychopathological adults (Achenbach & Edelbrock, 1978). Conse-

quently, many clinicians did not utilize it at all (Rosen, Bahn & Kramer, 1964) and several research groups developed alternative means of classifying children's psychopathology (e.g. Achenbach (1978); Greenspan & Lourie (1981), among others). This made communication between child clinical psychologists difficult and confusing.

The neglect of children's disorders is not a new phenomenon in psychology. Emil Kraepelin, who has been described as a major architect of the current psychiatric classification system (Kendler & Tsuang, 1981), entirely omitted them from even the final edition (1888) of his psychiatric taxonomy. Even when the Diagnostic and Statistical Manual (DSM) was published by APA in 1952 it listed only Childhood Schizophrenia and Adjustment Reaction in the section on Childhood Disorders, and stated that the adult categories could also be applied to children. Phillips, Draguns, & Bartlett (1975) labelled this tendency to see the disorders of childhood as replicas of analogously named conditions in adults as "adulthoodism". Garber (1984) sees this as a fundamental problem with clinicians making the assumption that the function of a childhood symptom is identical to that in the adult; that is, the symptom plays the same role in the developing disorder as in the adult form of the disorder. She stresses that the manner in which signs of a disorder are expressed may differ dramatically over the course of development. Thus, if a child

exhibits antisocial behavior such as fighting, breaking rules, and running away from home, these behaviors may not "mean" the same as if they occur in an adult. They may be indicative of other underlying problems such as depression, rather than suggesting a developing antisocial personality disorder.

The category of personality disorders is perhaps the best example of the continuing problem with "adulthoodism", and it is certainly the category that receives the least attention. According to the most recent Diagnostic and Statistical Manual for Mental Disorders (DSM III-R) (APA, 1987) an adult personality disorder can be diagnosed when personality traits become "inflexible and maladaptive, and cause either significant functional impairment or subjective distress" (p.335). Despite the DSM III-R's claim that a personality disorder begins in childhood or adolescence, the manual does not include a section on childhood personality disorders, and continues to recommend that adult personality disorder diagnoses be used with children and adolescents. However, it does acknowledge briefly the adulthoodism issue by cautioning the clinician that not all children with Conduct Disorder (i.e. antisocial behavior) will continue to exhibit antisocial behavior into adulthood. That is, there is "obviously less certainty that the Personality Disorder will persist unchanged over time into adult life" (p.336).

It is reassuring that the DSM III-R acknowledges the aduatomorphism issue as an important one. However, clinicians and researchers are still left asking questions concerning the development of personality disorders. For example, how can we recognize a developing Paranoid Personality Disorder in children at age 5, 10, and 15 years? The next section examines why this is such a difficult task.

The Continuity-Discontinuity Debate

One reason why the diagnostic system has been slow to change its aduatomorphic approach to the development of personality disorders is the long history of assuming a continuity of personality, based on psychoanalytic or neo-psychoanalytic theories of child psychopathology (Kohlberg, LaCrosse & Ricks, 1976). These theories have assumed that psychopathology is formed in childhood around attempts to defend against experiences of conflict and stress, and that these defensive styles produce a malformation of personality which endures into adulthood and will be expressed as adult symptomology under conditions of stress. Clearly, this approach assumes a developmental continuity of personality problems, expressed as particular kinds of defensive styles at particular ages. More recently, however, three major movements of change have been made away from the psychoanalytic and neo-psychoanalytic approach to psycho-

pathological classification. The first major change resulted from the pressure that had been exerted for the versions of the DSM to become increasingly atheoretical (Bemporad & Schwab, 1986). The outcome of this has been the specification of behavioral criteria for disorders rather than alternatives such as "defensive styles" which were seen to be directly extracted from a psychoanalytic tradition.

A second major cause for change was the growing criticism of the methodology utilized in the development of psychoanalytic theories. There was increasing concern that the retrospective method of obtaining details of early development may be inaccurate (Haggard et al, 1960). As a result of the criticisms of the retrospective method there has been an increase in the number of studies employing a longitudinal methodology, in which individuals are evaluated at intervals over a period of time. Examples of this methodology are Thomas, Chess & Birch's (1968) New York Longitudinal Study (infancy to early adulthood) and Vaillant's (1977) adaptation study which followed males from teenagehood to middle age.

Less support for the notion of continuity over long periods of time has been generated by the longitudinal studies than by the retrospective approach. In fact, Vaillant concluded that "maturation makes liars of us all" (Vaillant, 1977, p.197). Interestingly, as Chess & Thomas (1984) point out, even Freud eventually became aware of

this limitation:

So long as we trace the development backwards the connection appears continuous, and we feel we have gained an insight which is completely satisfactory and even exhaustive. But if we proceed the reverse way, if we start from the premise inferred from the analysis and try to follow up the final result, then we no longer get the impression of an inevitable sequence of events, which could not have been otherwise determined (1949, p.226).

A third movement away from the psychoanalytic approach came about when some personality theorists began to describe personality (and the problems associated with it) as always in the making, rather than continuous across time. For example, Maier (1978) describes Erikson's conviction of the plasticity of human development by his comment that "children fall apart repeatedly, and unlike Humpty Dumpty grow back together again" (p.83). The plasticity of development was used as an explanation for the lack of continuity in personality variables demonstrated in some longitudinal studies (Lerner & Lerner, 1983).

Both the second and third movement of change described above resulted in the emergence of the field of developmental psychopathology, which synthesizes the study of children's normal and abnormal functioning at all stages of development. The focus of developmental psychopathology is on the continuities and discontinuities between the normal processes of change and adaptation, and the "abnormal" reactions to stress or adversity, as well as the relation-

ship between the normal and abnormal processes (Garber, 1984). The developmental psychopathological approach does not assume continuity of behavior across stages of development and emphasizes a wide range of variables that can contribute to the child's development (Lerner & Busch-Rossnagel, 1981; Sroufe, 1982). In this view, the developing organism can be molded by, and can itself mold, the environment until at least adulthood. Overt behavior is unlikely, therefore, to be stable. Given the emergence of this approach it is easier to understand why the DSM III-R does not attempt to predict the behavioral correlates of the developing personality disorders.

Redefining "Continuity"

Despite the understanding that has been gained from the various movements away from a psychoanalytic approach, the question still remains for clinicians and researchers: how do we identify children who are at risk for the development of personality and other disorders? Rather than abandoning the notion of continuity in personality style, an alternative approach has emerged. This approach retains the notion that has traditionally been at the very heart of the construct of personality; that the individual tends to maintain some general consistency in his/her approach to the world. In addition, it challenges previous findings of discontinuity, hypothesizing that it was an artifact of a

search for specific traits, rather than for general dimensions (Livson, 1973).

As a consequence of the wish to retain at least part of the traditional notion of personality, Moss & Susman (1980), and Sroufe & Fleeson (1982) have both redefined continuity as the consistency in the quality or meaning of a behavioral style, rather than specific traits or behaviors. Thus temper tantrums at age 4 might serve the same function as bullying at age 7. The focus in this approach to continuity is on the function of the behavior and not the form of it.

Many others have described an approach to the study of personality development which has focused on broad features of functioning rather than on circumscribed behaviors or specific defensive styles. For example, in Sullivan's (1953) view, personality is a collective term for a system to reduce tension when there is a threat to security. Thus it is a relatively enduring pattern of recurrent interpersonal situations (including attributions made about others). The specific ways in which an infant reduces tension may look very different from those used by older children. For example, assuring attention and care may be achieved by crying loudly and clinging to a caretaker in infancy but by being compliant and sociable in school as a first grader. Epstein's theory of personality development also demonstrates how there can be relative continuity

across stages of development, without any apparent similarity in specific behaviors. According to Epstein & Erskine (1983) a major function of the organism is to maintain an organized, coherent system (not just avoid pain/anxiety). Thus if a major aspect of the personality such as self-esteem and interpersonal trust does not develop early in childhood the individual will tend to continue to assimilate data from the environment that supports and strengthens the postulates (e.g. "I am unworthy"; "I can't trust people"). As Mischel (1977) so aptly comments, "different people select different settings for themselves; conversely the settings that people select to be in may provide clues about their personal qualities". Again, if positive experiences don't occur there may be a continuity across time in the function of the child's behavior but not in its form.

Temperament

During the growth of the field of developmental psychopathology the question was raised as to whether temperament should be considered as a childhood version of personality in order to increase the likelihood that consistency over time would be documented (Rutter, 1981). There are varying views of this. Rasmuson (1983) sees temperament as a consequence of a "genetic program" which unfolds, answering to specific stimuli, resulting in lasting consequences for behavior. Buss & Plomin (1985) are a little more cautious

in their claim that temperament in childhood is like a broad trait which narrows with age but has at least a residual effect on adult personality. Others including Rothbart (1981) and Millon (1981) describe temperament as a biological framework in which development of cognitive and affective structures occur. Belsky (1984), on the other hand, sees temperament as a "behavior style" that is neither immutable nor completely plastic, becoming one of the many variables to affect personality development.

Unfortunately, Thomas & Chess (1984), whose research has predominated in the longitudinal assessment of temperament and the development of behavior disorders, do not address the relationship between temperament and personality. However, the Thomas & Chess New York Longitudinal Study (NYLS) on 133 subjects from early infancy to early adult life has produced some intriguing findings which are of relevance to the present study. Thomas & Chess (1984) differentiate children according to three temperament constellations ranging from "easy" (adaptable, regular, positive responses to new situations) through "slow to warm up", to the "difficult" child (easily frustrated, poor adaptation to new and stressful situations). These constellations of temperament were derived from ratings of the following characteristics: Activity level (motility during bathing, playing, handling); Rhythmicity (regularity and predictability of e.g. the sleep/wake cycle); Approach and

Withdrawal (positive approaches v withdrawal in the presence of new stimuli); Adaptability (the ease with which negative responses to new situations are modified in the desired direction); Threshold of Responsiveness (intensity of stimuli necessary to provoke a response); Intensity of Reaction (energy level of a given response); Quality of Mood (pleasant v unpleasant behavior); Distractibility (extent to which extraneous environmental stimuli interferes with ongoing behavior); and Attention Span and Persistence (length of time engaged in a particular activity plus degree of persistence in the face of obstacles).

Temperament and Goodness of Fit

The results of the NYLS demonstrated that the three temperament constellations alone were not good predictors of the occurrence of behavior disorders and psychiatric problems (Chess & Thomas, 1984). However, greater predictability was obtained when the researchers looked at the "goodness of fit" between the child's temperament and the demands of the child's environment. Goodness of fit is said to exist if the child has a style of behaving that meets the demands of his/her environment. Conversely, if there is a mismatch between the child's temperament and the environment's demands, a poor fit is said to exist. Chess & Thomas (1984) point out that the goodness of fit model is based on a dissonance approach, i.e. that when the child is

faced with a stressful situation, attempts will be made to adapt to the situation to reduce anxiety and conflict. If the child is unable to adapt, (i) the demands of the environment do not match the child's capabilities (i.e. there is a "poorness of fit"); and (ii) dissonance is not reduced, and problems may occur as a consequence of the effect of chronic dissonance. Chess & Thomas (1984) stress that the concept of "goodness of fit" does not imply an absence of conflict or stress in the organism's environment. However, it does suggest that the individual is able to adapt to it.

Since Thomas & Chess (1980) first stressed the importance of including a goodness-of-fit measure in temperament studies there have been other reports of its value. J. V. Lerner (1983) demonstrated that 8th graders whose temperament matched teacher's expectations for behavioral style had more positive peer relations and better grades. In another study, Palermo (1982) demonstrated the goodness-of-fit between a 5th grader's Reactivity (see Thomas & Chess variables above), and parents' expectations of how Reactive they should be in the home environment was predictive of the child's peer relations at school.

These two studies, taken together, specifically indicate that a goodness of fit between the child's temperament and the demands of his/her environment is an important factor in predicting the quality of psychosocial relations.

The present study continues to examine this aspect of the mother-child relationship, to establish how well the goodness-of-fit between mother's and child's temperamental attributes predicts the "rejected" peer status in children of middle childhood age.

The consideration of the compatibility of child and mother's temperament is consistent with suggestions made by Rutter (1970) and with the findings of the New York Longitudinal Study (Chess & Thomas, 1984). They both note the importance of considering the goodness-of fit between parental expectations or demands, and the child's characteristics. Furthermore, J.V. Lerner (1980) produced empirical support for the goodness of fit model as an adequate discriminator between psychosocially adapted versus less adapted children.

Chess & Thomas (1984) note that goodness of fit cannot be predicted with a simple formula, such as "An easy child with an easygoing parent = goodness of fit." Therefore, in the present study the mother's degree of satisfaction with aspects of her child's temperamental attributes was assessed, using a method which has evolved from one originally developed by Lerner & Lerner (1984). This method assesses the parental expectations or demands for each aspect of temperament, and contrasts it with the actual temperament of the child. In addition, because of recent emphasis on the child's contribution to the quality of the mother-

child relationship (Lerner & Busch-Rossnagel, 1981) an assessment was also made of the child's degree of satisfaction with the parent's temperament characteristics, to examine if it is a predictor of the child's social status.

Choice of Target Population

The present study aims to contribute to an understanding of the development of maladaptive styles of dealing with the environment which might result in psychopathology, including personality disorders. It does so by identifying for comparison a group of children who may be at risk for later problems. Rather than choosing children diagnosed with a particular childhood disorder, it was decided to focus on children who have difficulty achieving social competence.

The choice of a target population with social relationship difficulties was based on some important research that has developed over the past twenty years. This research evolved from a rediscovery of the theories of Piaget (1932), and Sullivan (1953), among others, each of whom assigned a central role to social competence in facilitating child development. For example, Sullivan stressed the importance of preadolescent close relationships in providing the child with their first experiences of real intimacy and affection outside of the family. Major theorists in the field of child development expanded on this early work

but continued to maintain that the child's ability to achieve social competence was a major marker of adaptive socioemotional development (Damon, 1977; Flavell, 1977). Weiss (1974) also hypothesized that adequate preadolescent peer relationships introduce to the child the concept of reliable alliance, in which (s)he develops a sense of others' loyalty and continued availability for assistance. In addition, the child experiences nurturance, enhancement of self worth, companionship, a sense of inclusion, and instrumental aid from a successful process of socialization (Furman & Robbins, 1985).

As Parker & Asher (1987) point out, if good relations with peers contribute substantially to the development of social competence, it follows that children who are not accepted by peers might be more vulnerable to later life problems. This prediction is generally supported in the literature, at least for low acceptance associated with aggressiveness, and for outcomes such as dropping out of school (Ullman, 1952), criminality (Roff, Sells, & Golden, 1972), and a higher rate of suicide (Stengel, 1971). In addition, there have been numerous studies which point to the difficulties encountered in rejected children in their development of social competence, which suggests that when more extensive longitudinal studies are conducted there may be other kinds of mental health outcomes such as anxiety, affective, and personality disorders (Parker & Asher,

1987). For example, Gottman, Gonso, & Rasmussen (1975) found that popular children differed from unpopular children in both their general knowledge of how to make friends and in their specific ability to communicate effectively with a peer. In addition, while popular children have been identified as being cooperative and prosocial during peer interaction (Rubin, Daniels-Beirness, & Hayvren, 1982), unpopular children have been portrayed as aggressive (Coie & Dodge, 1988), more active & aversive (Coie & Kupersmidt, 1983), and less able to contribute relevant conversation in a social group (Putallaz, 1983).

The quality of parent-child relationships is now known to be important for social, emotional, cognitive and personality development (Maccoby, 1980). Researchers who are interested in the child who is rejected by peers conclude that his/her development in one or more of these areas is impaired. Differences in family and social relationship histories between children of different social status have already been documented. For example, Pettit, Dodge, & Brown (1988) found that exposure to deviant maternal values predicted the child's low social competence. In addition, McClelland & Keane (1989) documented the importance of considering the mothers' level of satisfaction with her current lifestyle and with her childhood relationship with her own mother in attempting to predict childrens' low acceptance by peers. Furthermore, Brown (1987) found sig-

nificant differences between the maternal child-rearing practices when comparing groups of popular and unpopular children. She suggests that relationships between popular children and their mothers are characterized by reciprocity, and that popular children tend to view maternal discipline as a sign of love and involvement, rather than as punishment. In contrast, the relationships between unpopular children and their mothers reflect a lack of reciprocity.

Apart from the few studies mentioned above, the impact of familial relations on peer relations has not been extensively examined empirically (Hartup, 1983). Therefore, it is a logical next step to turn attention to the parent-child relationship, and in particular to impairments in maternal functioning. The presence of such impairments in a parent might influence the child through a complex set of biological and environmental interactions (Zahn-Waxler, 1984), and may be detected in a wide range of maternal behaviors such as her attitudes, her style of coping with problems, or in the quality of her interactions with her child.

One study that addressed how the mothers' current behavior may be associated with the child's social status—documented that mothers of rejected children appear to have more difficulty in coping with stress, as shown by their tendency to overreact to minor events, compared to the

mothers of children who are not disliked by peers (Thompson-Pope & Keane, 1988). This finding makes sense given that: (i) children look to and are guided by their mothers' emotional expression in situations of emotional uncertainty or distress (Klennart et al, 1983); and (ii) one of the factors that may determine a child's ability to be successful in interpersonal interactions is his/her ability to adapt; that is, to solve problems and to assimilate new data, even under stressful conditions (Greenspan & Lourie, 1981). Furthermore, a mother who copes poorly with stress is unlikely to be adequately sensitive to her child's needs, a factor that is often cited as an essential ingredient of parental competence and, consequently, of normal child development (Winnicott (1976); Lamb (1980); Belsky, 1984; Dowdney et al, 1984).

Given the paucity of research on the mothers of low acceptance children it is not possible to gain direct support from the literature for Thompson-Pope & Keane's finding that these mothers may have inadequate mechanisms for dealing with stress. Therefore, the present study investigates this further. It does this in two ways. First, by examining the mother's report of the coping strategies she used to deal with a particular stressful event. Coping refers to the thoughts and acts that people use to manage the internal and/or external demands posed by a stressful encounter (Folkman & Lazarus, 1986). Interest

in this method resulted from the finding that the utilization of certain coping strategies can be maladaptive (Holahan & Moos, 1986). They found that an Avoidant coping style, such as keeping one's feelings of strain bottled up or expressing them antagonistically, can be a risk factor for negative psychological consequences. Other studies have also documented that the strategy of Confrontative Coping (aggressive efforts to alter the situation) was consistently associated with worsened emotional states, not with relief from stressful encounters (Folkman & Lazarus, 1988). In addition, an Escape Avoidance strategy for dealing with stressful events (reflecting "wishful thinking", denial of the problem, or avoidance of dealing with it directly) is used far more frequently by groups of depressed individuals, compared to those who are not depressed (Folkman & Lazarus, 1986).

Second, this study will assess the ability of mothers of children with different levels of social status to maintain a productive and positive interaction with their children in mildly stressful conditions. The primary focus is placed on maternal variables due to the claim that fathers do not usually operate as crisis managers (Patterson, 1980). In the present study the measures of maternal ability to cope with stress will be considered in conjunction with the goodness of fit between mother's and child's temperaments, to assess how well they predict the child's

peer status.

CHAPTER TWO

METHOD

Participants

Participants were fourth and fifth graders from nine Greensboro public schools, and their mothers. The children were classified according to their peer status using sociometric methodology developed by Coie & Dodge (1983). This involved obtaining consent from parents for their child to participate in a classroom study of children's friendship. The children for whom consent was obtained (approximately 1400) were given a list of all children in their grade, and asked to nominate their peers on various criteria. For example, they were asked to name three peers in their grade whom they liked most and three peers whom they liked least. Although several classes of children generally were present in the same room, they were asked to write down their answers without conferring with each other. For the purposes of this study participants were classified according to the three groups, Popular, Average and Rejected, conceptualized by Coie (1987). This was achieved using a computer program which consists of several steps: In STEP 1, the first Z Score (ZMLIKE) is derived from the frequency with which the child has been nominated Most Liked. The

second Z Score (ZLLIKE) is derived from the number of .MT 0.5"nominations the child received for Least Liked; In STEP 2, two other Z Scores were then calculated for each child: ZSPREF (an abbreviation of Z Score for Social Preference) and ZSIM (an abbreviation of Z Score for Social Impact). These were calculated as follows: $ZSPREF = ZMLIKE - ZLLIKE$, and $ZSIM = ZMLIKE + ZLLIKE$; In STEP 3, if ($ZSPREF > 1$) and ($ZLLIKE < 0$) and ($ZMLIKE > 0$), then participant is classified as POPULAR. Likewise, if ($-.75 < ZSIM < .75$) and ($-.75 < ZSPREF < .75$) then the child is categorized as AVERAGE. Finally, if ($ZSPREF < -1$) and ($ZMLIKE < 0$) and ($ZLLIKE > 0$) then the participant is placed in REJECTED status group.

Of the approximately 1400 children who were initially screened, 117 took part in the present study. 65 of these were fourth graders, and 52 were fifth graders. The mean age of the child participants was 10.83 years ($SD=0.66$), and the racial composition of the group was 64.29% Caucasian, 35.72% Black, with 55 females and 62 males. Table 1 shows the distribution of all demographic data, separated by status group. One of the indices from the Hollinghead Index of Socioeconomic Status (Hollingshead, 1958) was employed to categorize participants in terms of their SES level. This was the mother's educational level, which was distributed for the sample as a whole as follows: 0% had less than 7 years of education, 1.85% had completed

between the seventh and ninth grades, 4.63% had completed the tenth or eleventh grades, 23.16% had graduated from high school, 25.92% had partially completed a college course, 37.96% had a degree from a four year college or university, and 6.48% had obtained a graduate degree. This indicant of SES was utilized (as compared to e.g. the income of the major breadwinner in the family) to ensure that mothers who were single parents were not classified as disproportionately lower in SES merely because females tend to earn less than their male counterparts.

The mother's mean age was 37.91 years (SD=5.01). Table 1 also shows the distribution of mother's education level and age for each of the three status groups. It was noted that 100% of the mothers of Popular children had at least 12 years of education, whereas only 82.86% of the Rejected children's mothers completed high school or obtained a GED. In addition, there were clearly more boys, and more Black children, in the Rejected group. In terms of the sample's religious preference, 59% were Protestant, 8% were Catholic, 2% were Jewish, and 31% described themselves as Other Denomination/No Religious affiliation. Religious preferences were included for the purpose of comparison with other studies in the literature, where participants were predominantly Jewish (e.g. Chess & Thomas, 1984), or Catholic (e.g. Palermo, 1982).

Table 1
Distribution of Demographic Variables Across Status Groups

	Popular n=40		Average n=40		Rejected n=33	
	Mean	SD	Mean	SD	Mean	SD
Age of Child In Years	10.82	0.54	10.71	0.67	11.09	0.90
Age of Mother in Years	38.03	4.35	38.02	4.92	37.63	5.89
Mean number of years of mothers' education	14.60	1.91	14.51	2.08	13.25	2.54
SES (Hollingshead Index for Level of Mother's Education ^a	1 = 5.71 2 = 48.57 3 = 25.71 4 = 20.00 5 = 0		1 = 10.53 2 = 36.84 3 = 31.58 4 = 18.42 5 = 2.63		1 = 2.86 2 = 28.57 3 = 20.00 4 = 31.43 5 = 11.43	
	6 = 0 7 = 0		6 = 0 7 = 0		6 = 5.71 7 = 0	

	^b					
Caucasian ^b	62.5		70.0		56.75	
Black ^b	37.5		30.0		43.25	
Females ^b	19.66		16.34		10.26	
Males ^b	14.53		17.95		21.37	

a

Figures given as percentage of participants

- 1 = Graduate Degree
- 2 = 4 year college degree or equivalent
- 3 = At least one year of college courses
- 4 = High School Graduate or GED
- 5 = Completed 10th or 11th grade
- 6 = Completed 7th, 8th or 9th grade
- 7 = Less than seven years of education

b

Figures given as percentage of participants

Procedures

The initial consent form for the sociometric screening also asked if the parents would be willing to receive telephone contact regarding subsequent research studies. Mothers who had indicated interest in further participation were contacted several months later (see outline for telephone contact in Appendix A), and invited to come into the laboratory with their child. No further selection occurred among these lists of potential participants. Telephone calls were made at various times of the day and evening to minimize the chance of biasing the participant pool. On arrival, the child was provided with play materials in one room while his/her mother was interviewed in another room, and asked to complete some simple paperwork. All of the materials given to the mother during this phase are provided in Appendix B. The Introduction to the study was read to the mother, which included informing her that she and her child would be videotaped during the tasks they perform together. She was then asked to read and sign the consent form. In addition, the experimenter requested that the mother identify three issues on which she and her child had disagreed during the past week, and had not fully resolved. While the mother completed her paperwork, the study was explained to the child, and (s)he was asked to complete the child consent form which appears in Appendix B. The child was then asked to identify three issues on which (s)he and

the mother had disagreed during the past week, and had not fully resolved. Care was taken to reassure the child that all mothers and children have disagreements. Mother and child were then reunited, and were given instructions for the first of the two videotaped tasks: The Stressor Task. These instructions, as well as all the subsequent instructions, appear in Appendix B.

In the Stressor Task, the participants are asked to copy a picture of a dog using the popular Etch-A-Sketch game. This dog picture appears in Appendix B. The mother controls only the horizontal movement of the drawing tool while the child controls only the vertical movement. In order to achieve a diagonal line the participants must turn their control knobs simultaneously. The participants were given five minutes to complete the task. When the experimenter returned to the room after the Stressor Task, the mother was asked to indicate how stressful this task was, on a scale of one to ten. This measure was taken for only approximately half of the participants (n=50) as an attempt to verify that the task was indeed mildly stressful. All participant pairs were informed that they had done well on the task, regardless of their performance. Mother and child then proceeded to complete the Problem Solving Task. This comprised the discussion of an issue chosen by the experimenter from the lists generated by both mother and child. The criterion for this choice was that the issue

was one listed by both mother and child. If this criterion was not met, the experimenter chose an issue from the mother's list. The participants were then given the instructions which appear in Appendix B, which ask them to discuss the identified issue for ten minutes, with the intention of generating solutions to the problem. They were also told that they would need to report their solution at the end of the ten minutes to increase the probability that they would invest a sufficient amount of effort into the task.

The participants were videotaped from behind a one-way mirror which was approximately eight feet in front of the table at which they were seated. After ten minutes the experimenter returned to record the solutions generated, but did not give feedback on the quality of the solutions. Next, the mother received instructions for completing the following questionnaires: 1) The Ways of Coping-Revised (Folman & Lazarus, 1985); 2) The Porter Parental Acceptance of Children Scale (Porter, 1954); 3) The Revised Dimensions of Temperament Survey Adult (DOTS-R Adult); 4) The Revised Dimensions of Temperament Survey Child (DOTS-R Child); and 5) The DOTS-R Parent Ethnotheory Scale "How I Want my Child to Behave". A complete description of these scales is presented below, and the questionnaires themselves appear in Appendix C. The order in which the questionnaires was given was varied for each participant. In addition to the

five questionnaires, the mother answered several questions concerning demographics. These questions also appear in Appendix C.

While the mother completed her questionnaires, the child was escorted to another room to complete the DOTS-R Child Ethnotheory Scale "How I Would Like my Mother to Behave". This questionnaire also appears in Appendix D. The examiner aided the child by reading the items aloud and by writing down his/her answers. When the child had completed this questionnaire (s)he spent the remainder of the time participating in another research project unrelated to the present study.

When the mother had completed her questionnaire battery she was debriefed using the Debriefing Statement which appears in Appendix D, and given an opportunity to ask questions. If a mother asked for specific information concerning the status group of her child she was told that (s)he was either below average, average or above average in terms of popularity, according to the child's classification as Rejected, Average, or Popular, respectively. Interestingly, no parent of a Rejected status child asked for feedback on the results of the sociometric screening phase of the study.

Measures Completed by Mother

1. The Ways of Coping-Revised (Folman & Lazarus, 1985).

This 66-item questionnaire contains a wide range of thoughts and acts with which people regulate stressful emotions and alter the troubled person-environment relation causing the distress (Folkman et al., 1986). The subject is asked to think of a stressful event that has occurred recently, and to indicate whether each of the 66 coping mechanisms was (i) Not used (Score=0); (ii) Used Somewhat (Score=1); (iii) Used quite a bit (Score=2); or (iv) Used a great deal (Score=3). On completion of the questionnaire the participant was asked to write a brief description of the stressful event. Scores from the Ways of Coping-Revised contribute to eight scales (Confrontative Coping, Distancing, Self-Controlling, Seeking Social Support, Accepting Responsibility, Escape-Avoidance, Planful Problem Solving, and Positive Reappraisal). The reliability of the Ways of Coping-Revised scales (assessed using Cronbach alphas) are as follows: .70, .61, .70, .76, .66, .72, .68, and .79, respectively. Support for the validity of this instrument is provided by other reports of similar coping styles (Billings & Moos, 1981; Parkes, 1984).

The two scales of interest in this study were: Confrontative Coping and Escape-Avoidance. Confrontative Coping consists of six items which reflect an aggressive/action-oriented approach to the stressful event, regardless of the

consequence of the action. In contrast, Escape Avoidance is an 8 item scale which reflects a method of coping characterized by wishful thinking, denial of the problem, or avoidance of dealing with it directly. The Ways of Coping-Revised appears in Appendix C.

2. The Porter Parental Acceptance of Children (Porter, 1954). This 30 item questionnaire assesses three dimensions of parental acceptance: a) Recognition that the child is a person with feelings, and has a right to express those feelings; b) Valuing the unique make-up of the child; and c) Acknowledgement of the child's need to differentiate and separate his/herself from the parents. The 30 items consist of statements describing things children do and say. The mother is asked to choose one of five responses which reflect the way she would feel in that situation, or her course of action. The responses to the items are weighted from 1-5, with 1 representing low acceptance, and 5 representing high acceptance. Scores on the three dimensions are summed to produce a Total Acceptance score. Porter (1954) reports a split-half reliability of 0.865 for the Acceptance scale. Although no quantitative measures of validity have been reported, Porter (1954) describes a high agreement between five judges on the ranking of the responses of each item, and the use of a conceptual framework to serve as a guide in writing the responses. The Porter Parental Acceptance of Children appears in Appendix C.

3. The Revised Dimensions of Temperament Survey (DOTS-R) Adult Form (Windle & Lerner, 1985) is a 54 item questionnaire which measures ten temperament attributes of the mother: Activity Level- General (ALG); Activity Level-Sleep (ALS); Approach-Withdrawal (AW); Flexibility-Rigidity (FR); Quality of Mood (QM); Rhythmicity-Sleep (RHS); Rhythmicity-Eating (RHE); Rhythmicity-Daily Habits (RHDH); Distractibility (D); and Persistence (P). An example of a DOTS-R item from the ALG attribute is: "if I stay in one place for a long time I get restless". A four-choice response format is used with each item: "1" = "usually false;" "2" = "more false than true;" "3" = "more true than false;" and "4" = "usually true." Scoring of the DOTS-R Adult ten temperament attributes involves summing the scores on individual items. On the basis of the number of items per attribute, the range of possible scores for each temperament attribute is: 7-28 for ALG (7 items); 4-16 for ALS (4 items); 7-28 for AW (7 items); 5-20 for FR (5 items); 7-28 for QM (7 items); 6-24 for RHS (6 items); 5-20 for RHE (5 items); 5-20 for RHDH (5 items); 5-20 for D (5 items); and 3-12 for P (3 items). The reliability of the DOTS-R dimensions (assessed using Cronbach alphas) are as follows: .84, .89, .85, .78, .89, .78, .80, .62, .81, and .74 respectively. Construct validity for the DOTS-R has been reported by Windle (1985b) in an interinventory study among college students. Both convergent and discrim-

inant relations were found between the DOTS-R attributes and the traits measured by Emotionality, Activity, Sociability, and Impulsivity-II (EAS-II; Buss & Plomin, 1975) and Eysenck's Personality Inventory (Eysenck & Eysenck, 1968). The interpretation of the higher ends of each dimension appears together with a copy of the DOTS-R Adult in Appendix C.

5. The Revised Dimensions of Temperament (DOTS-R) Child (Windle & Lerner, 1985). This questionnaire is completed by the mother to assess her child's temperament. It uses the same 54 items as the DOTS-R Adult. The only two differences among the versions are: (1) minor variations in the instructions; and (2) the pronouns and verbs are switched to reflect that the child is the source of the ratings: (e.g., "I move a lot in bed" (an item from the ALS attribute) becomes "my child moves a lot in bed." Response format and scoring for the DOTS-R Child is identical to the DOTS-R Adult except that in the Child version the ninth and tenth attributes (Distractibility and Persistence) are combined to form a ninth attribute named Task Orientation. Windle & Lerner (1986) report that the internal consistency coefficients (Cronbach alphas) for the nine DOTS-R attributes are: .75, .81, .77, .62, .80, .69, .75, .54, and .70, respectively, for a sample of elementary school children. Construct validity has been assessed in early

and late adolescents in a study by Windle & Lerner, 1986). In addition, both convergent and discriminant relationships were found between the DOTS-R attributes and traits measured by other personality inventories (Windle & Lerner, 1986). The DOTS-R Child also appears in Appendix C.

6. The DOTS-R Parent Ethnotheory Scale "How I Want my Child to Behave." As noted earlier, it is currently thought that it is not the actual temperament of a child that impacts the parent-child interaction, but rather the difference between the child's temperament and what temperamental characteristics are wanted or expected by the parents (Thomas & Chess, 1977). Super & Harkness (1982) further expanded this idea by proposing that people have **ethnotheories** about how difficult a given attribute may be. Lerner et al (1986) then developed the DOTS-R Ethnotheory form as a means of assessing the ethnotheory of temperamental difficulty held by parents, teachers, and by the peers of children and early adolescents. In the present study, the DOTS-R Parent Ethnotheory Scale "How I Want my Child to Behave" assesses the mother's ethnotheory of her child's temperament. This could also be described as the mother's degree of satisfaction with her child's temperament. As suggested by Lerner et al (1986), the DOTS-R Child items (e.g., "My child resists changes in routine") were rated by the mother with respect to how difficult it would be for

her to interact in a positive way with her child if the child always showed the behavior in the item (i.e., if her child always resisted changes in routine). Response alternatives and scores are: 4 = "Not Difficult" (Most wanted); 3 = "Somewhat Difficult" (wanted somewhat), 2 = "A Little Difficult" (want only a little); and 1 = "Very Difficult" (do not want at all). The scoring for the DOTS-R Ethnotheory is identical to that described for the DOTS-R, resulting in a score for each of the nine temperament attributes.

Following the scoring of the DOTS-R Ethnotheory, Goodness-of-Fit Scores are obtained which represent the discrepancy between the child's temperament (as measured on the DOTS-R Child) and the mother's preferences regarding the child's temperament (as measured on the DOTS-R Parent Ethnotheory). As described by Nitz et al (1988), this fit score is an index of a relation between two levels of analysis; the individual and the familial developmental niche (or the context) of the individual. Therefore, to make this clearer, the Goodness-of-Fit score from the mother's perspective will hereafter be referred to as the **Discrepancy Score Child** (the difference between the child's temperament and how the mother wants the temperament to be). Discrepancy scores were obtained by subtracting from each child's DOTS-R score (for each of the nine temperament attributes) the corresponding Parent Ethnotheory DOTS-R Ethnotheory score. Thus, Discrepancy Score Child (Mother's

Perspective) = DOTS-R Child - Parent Ethnotheory Score. Higher discrepancy scores (positive or negative) reflect less of a fit between child temperament and mother's demands, and lower discrepancy scores reflect a better fit between child temperament and mother's demands. A discrepancy score of zero indicates the least mismatch between temperament and preferences, and, therefore, the best fit. Nitz et al (1988) provide a table which explains the scoring procedure for the Fit score most clearly. This table has been reproduced in Appendix C for clarification purposes. Psychometric properties of the DOTS-R Ethnotheory forms are reported in Windle & Lerner (1986). The internal consistency coefficients (Cronbach alphas) for the subscales of both of the ethnotheory forms used in the present study range from .65 to .92 with an average reliability of .81.

Measure Completed by Child

The DOTS-R Child Ethnotheory Scale "How I want my Mother to Behave". This scale (which appears in Appendix D) was designed to assess the ethnotheory of the mother's temperament held by the child. This could also be described as the child's preference for temperamental attributes and their beliefs concerning whether a particular temperamental attribute affords them difficulty, or ease, of interaction. In this version, the DOTS-R items and verbs reflect the person who is the source of the ratings (e.g., "My mother

resists changes in routine"). The child then rates the items with respect to how difficult it would be for him/her to interact if the mother always showed the behavior in the item (i.e., if the mother always resisted changes in routine). Response alternatives and scoring were identical to those employed for the Parent's Ethnotheory Scale, except that there are ten temperamental attributes to be scored, as with the DOTS-R Adult. Goodness-of-Fit Scores are then obtained using the same method as described above. Goodness-of-Fit of the mother's temperament with the child's expectations will hereafter be referred to as the Discrepancy Score Mother (the difference between the mother's temperament and the way the child would like the mother to be). Thus, Discrepancy Score Mother (Child's Perspective) = DOTS-R Adult score - Child's Ethnotheory score). Again, higher discrepancy scores reflect less of a fit between mother's temperament and the child's demands, lower discrepancies reflect a better fit, and a discrepancy score of zero indicates the best fit. This version of the Ethnotheory was developed specifically for this study. Therefore, its psychometric properties have not been established elsewhere.

Observation Code for Videotaped Problem Solving Task

The ten-minute duration videotaped problem solving sessions between mother and child participants were transcribed and broken down into Thought Units. The thought

unit is defined as one expressed idea or fragment (Gottman, 1986). This is distinct from the sentence, and from the utterance which is separated by pauses, which are the other two commonly used units for studying social interactions. According to Gottman (1986), the thought unit can be one utterance or several, and it can be either a phrase or a sentence; it assumes that conversation is segmented by meaningful speech units. The tapes of the mother-child problem solving session were then coded for content of the mother's verbal behavior, utilizing both videotape and transcript.

The coding system utilized in this study was the Parent Adolescent Negotiation Code (PANIC) (Forgatch & Lathrop, 1985). The PANIC is a coding system designed to assess problem solving, negative emotion, and positive interaction. There were 14 content codes utilized in this study. These were: Problem Description; Start Solution; Stop Solution; Accept Solution; Refuse Solution; Pro; Con; Positive Process; Provide Rationale; Negative Evaluation; Oppositional; Leading Question; Structuring; and Other. Table 2 further defines these codes. In previous studies raters using the PANIC were able to achieve interobserver agreement which reached a Cohen's Kappa of .68, and mean event by event agreement of .72 (Forgatch, 1989).

According to Capaldi & Patterson (1989), these content codes cluster together in factor analyses to form three

basic factors. The first consists of categories related to **Problem Solving**: Problem Description, Start Solution, Stop Solution, Accept Solution, Pro, and Con. This is in contrast to the four categories which reflect **Negative Interaction**: Negative Evaluation, Oppositionality, Leading Question, and Refuse Solution; and the two which reflect **Positive Interaction**: Positive Process and Provide Rationale.

Coders were two graduate students in a School Psychology program, who were paid \$10 for each 10-minute section of tape rated. They were trained in the use of the PANIC code over a 5-week period for a total of approximately 25 hours. Part of this training involved the rating of videotapes made from pilot subjects for the present study. Raters began coding participants for this study when they had reached event-by-event agreement of 85% on the practice tapes. Problem solving sessions were held after approximately every fifth tape rated, to discuss questions about the PANIC code and to provide feedback concerning observer drift. Coder 1 rated all 111 videotaped sections, and Coder 2 provided reliability checks on 39 of them. The coders remained "blind" to the hypotheses being tested in the study and to the sociometric status of the child.

The section following Table 2 provides a summary of the variables used in the present study. Due to the nonexperimental nature of the present study these variables are

classified as Predictor and Criterion variables.

Table 2

Description of Content Categories for the Parent Adolescent Negotiation Code (PANIC), from Forgatch & Lathrop (1985).

- Problem Description:** Talking about an issue without blaming or making accusation, and without making any other evaluation, positive or negative.
- Start Solution:** Suggesting ways to resolve the problem under discussion; "what to do", emphasizing the start-up of behavior. Also comments leading up to solutions.
- Stop Solution:** Comments related to solving a problem by stating what not to do. The usual emphasis is on stopping problematic behavior.
- Accept Solution:** Statements that indicate one likes a solution, will try a solution, or is in agreement with a solution.
- Refuse Solution:** Turning down a proposed solution, refusal to change, indicating solution did not work in the past.
- Pro:** Comments that support a solution proposed by discussing its advantages, the ease of carrying it out, or the fact that it has worked in the past.
- Con:** Statements indicating problems with a proposed solution, including its disadvantages and the reasons why it would not work.
- Positive Process:** Statements that encourage interaction, show support for the child, or otherwise play a role in interpersonal interaction.
- Provide Rationale:** Rationales that range from specific past experiences to long-term outcomes. It explains people's feelings or provides reasons why behavior occurs.
- Leading Question:** Questions seeking a rationale or intention.
- Negative Evaluation:** Statements implying criticism, guilt trips, disapproval, hostility, complaining, and blame.
- Oppositional:** Unpleasant behavior which shows an unwillingness to cooperate.
- Structuring:** Comments organizing the discussion or structuring the situation, including task-oriented behaviors that are outside the content of the problem-solving discussion.
- Other:** Anything else which does not relate to the problem solving discussion.

Summary of Variables and Model

Predictor Variables

- (1) Ways of Coping-Revised, score on two variables: Escape Avoidance and Confrontative Coping.
- (2) Discrepancy Score Child ("fit" from Mother's Perspective).
- (3) Discrepancy Score Mother ("fit" from Child's Perspective).
- (4) Mother's ability to interact appropriately with her child during a mildly stressful task (based on rating from videotapes of problem solving session); scores on three variables: Problem Solving CP, Negative Interaction CP, and Positive Interaction CP. (CP refers to the fact that these were the factors found by Capaldi & Patterson, 1989).
- (5) Child's gender
- (6) SES level (based on mother's education level)
- (7) Child's race

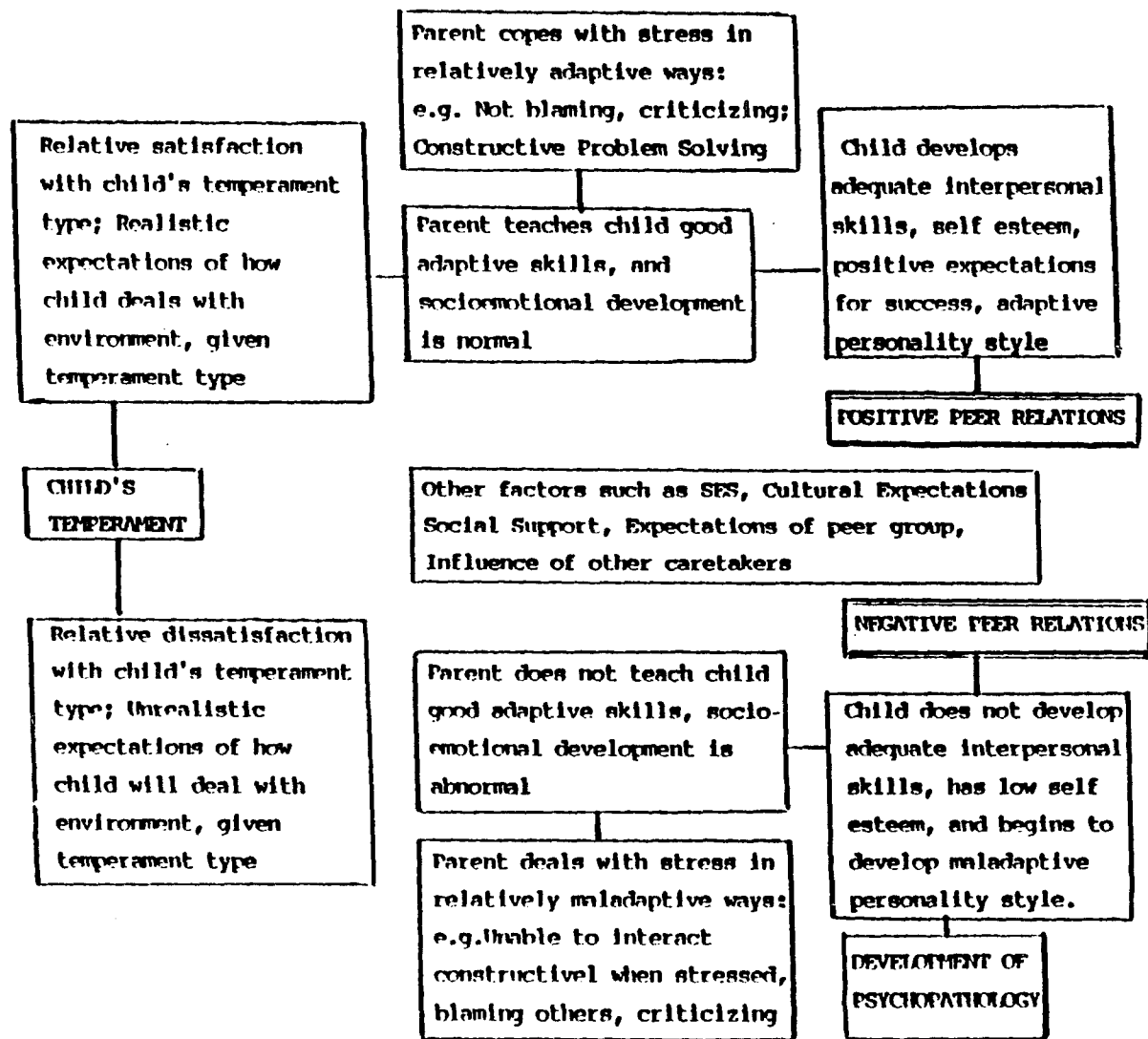
Criterion Variables

Criterion variables were the three sociometric status groups of the child participants: Popular, Average and Rejected.

Model

Figure 1 illustrates the model on which this study is based. It outlines two possible series of associations between: (i) the mother's degree of satisfaction with her

Figure 1
Model on Which the Present Study is Based



child's temperament; (ii) the mother's ability to deal with stressful events; (iii) the child's developing personality; and (iv) the child's peer relations. This model does not assume that these relationships are necessarily causal, and does not claim to include all possible variables affecting personality development. The mother's relative satisfaction with the child's temperament is measured by the Discrepancy Score Child in the present study. It is a score reflecting the difference between the child's actual temperament and the way in which the mother would like the child to be. The model assumes that if the mother is relatively satisfied with her child's temperament that this will be associated with her ability to teach the child how to cope adaptively, and how to relate to others adequately. In addition, the ability to teach adaptive skills is assumed to be associated positively with the mother's ability to deal with stressful events in relatively adaptive ways. The present study measures the mother's ability to deal with stress in two ways: (1) By looking at the mother's self report of her strategies for dealing with a particular stressful event retrospectively to assess the frequency of her use of two maladaptive coping styles (Confrontative Coping and Escape Avoidance); and (2) By examining her ability to continue to interact appropriately with her child during a stressful laboratory task, using the measures Problem Solving CP, Positive Interaction CP, and

Negative Interaction CP. Furthermore, the model assumes that if a child learns good adaptive and interpersonal skills (s)he will be more likely to develop a healthy personality style, reflected in positive peer relations. In the present study peer relations are assessed sociometrically, and the peer status groups are identified as Popular, Average and Rejected.

The model presented in Figure 1 also illustrated a second possible series of associations. If the mother is relatively dissatisfied with the child's temperament, this may be correlated with the child failing to learn how to think and behave adaptively, with low self esteem, and difficulties in relating to others. In addition, if the mother is unable to deal well with stressful events (i.e. she engages in maladaptive coping strategies and is unable to adequately interact with her child in times of stress) this may also be associated with the child's failure to learn good adaptive and interpersonal skills. In turn the child may adopt more maladaptive personality styles, and lack confidence that (s)he can cope with their environment. This may well be associated with relatively negative peer relations, and the risk of developing psychopathology.

HYPOTHESES

It was hypothesized that:

- 1) Mothers' use of Confrontative Coping and Escape Avoidance strategies to deal with a stressful event, and her interactive style with her child in times of stress would be predictive of her child's peer status. Specifically, it was expected that the mothers of Popular and Average children would be less likely to choose Confrontative Coping and Escape Avoidance styles of coping with a recent stressful event, compared to the mothers of Rejected children. In addition, it is hypothesized that the mothers of Popular children are more likely to engage in constructive problem solving and positive interaction with their child, and that they would be less likely to become involved in negative interactions, compared to mothers of Rejected children.
- 2) The child's status group (Popular, Average, or Rejected) will also be predicted by taking into account the "fit" between mother and child's temperament. "Fit" is defined as the discrepancy between the participants' temperaments and the expectations/demands of the environment. It is hypothesized that there will be a greater discrepancy, or less satisfaction, between the actual temperament and the desired temperament, from both the mother and the child's perspective in the Rejected group than in the Popular and Average groups.

3) If the hypothesis concerning the temperamental Fit from the mother's perspective is supported, then the Porter Parental Acceptance of Children scale will not be predictive of the child's social status, demonstrating that the dissatisfaction with the child's temperament is not reflective of a general dissatisfaction with the child.

CHAPTER THREE

RESULTS

Correlations Among Variables

Table 3 presents the Correlations for the sample as a whole (n=117), for the Predictor variables. Table 4 contains other correlations of interest, namely among four of the Predictor variables (Discrepancy Score Child, Discrepancy Score Mother, Confrontative Coping and Escape Avoidance) and the content codes for the PANIC. Table 5 presents correlations among the content codes from the PANIC which are later transformed to obtain the factors Negative Interaction CP, Positive Interaction CP and Problem Solving CP.

These correlational analyses produced interesting findings. For example, mothers who favored an approach to dealing with a stressful event characterized by denial, and by avoidance of dealing with the problem directly (Escape Avoidance), tended to engage in more negative evaluation of their child during the problem solving task (guilt trips, criticism, blame, hostility), and less positive interpersonal interaction such as encouragement and support (Positive Process). In addition, the more negative evaluations the mother makes, the more she is likely to also be oppositional, and to ask leading questions.

Table 3
Correlations Among the Predictor Variables

	Discrepancy Score Child	Discrepancy Score Mother	Confrontative Coping	Escape Avoidance	Negative Interaction CP	Positive Interaction CP	Problem Solving CP
Discrepancy Score Child ^a	1.000						
Discrepancy Score Mother ^a	.222*	1.000					
Confrontative Coping	.180*	.044	1.000				
Escape Avoidance	.105	.064	.323****	1.000			
Negative Interaction CP	-.149	-.006	.044	.203*	1.000		
Positive Interaction CP	-.117	-.116	-.088	-.151	.112	1.000	
Problem Solving CP	-.245**	.022	-.113	-.114	.215*	.096	1.000

* $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Table 4
Correlations Between Four of the Predictor Variables and
the Content Codes of the PANIC

	Discrep- ancy Score Child	Discrep- ancy Score Mother	Confron- tative Coping	Escape Avoidance
Problem Description	-.028	.109	-.047	-.073
Start Solution	-.179	-.111	-.106	-.090
Stop Solution	.100	.165	-.099	-.016
Accept	-.260***	.001	-.165	-.090
Refuse	-.042	.065	.103	.045
Pro	-.051	-.221*	.293***	.070
Con	-.049	.087	.076	.066
Positive Process	-.223*	-.131	-.163	-.211
Provide Rationale	.051	-.049	.033	-.018
Negative Evaluation	.198*	.006	.119	.226*
Oppositionality	.117	-.021	-.061	.048
Structuring	.198*	.028	.243**	.136
Leading Question	-.029	-.023	-.092	.102
Other	.128	.054	-.064	.010

Note: All scores rounded to the nearest thousandth.

* $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Table 5
Correlations Among the Coding Categories for the PANIC

	PD	START	STOP	ACCEPT	REFUSE	PRO	CON	PP	PR	NEG	OPP	STRUCT	IQ
PD	1												
START	.204*	1											
STOP	-.181*	.087	1										
ACCEPT	.033	.472***	-.088	1									
REFUSE	-.068	-.003	-.012	.175	1								
PRO	-.085	.257**	-.146	.044	.203*	1							
CON	.092	-.099	-.084	-.057	.346***	.090	1						
PP	.153	-.182*	-.105	-.107	-.227*	-.065	-.133	1					
PR	.025	-.015	-.009	-.253***	-.118	.080	.019	.247**	1				
NEG	-.074	-.124	.094	-.223*	-.045	-.061	.119	-.281***	.076	1			
OPP	.084	-.268**	-.032	-.071	.079	-.215*	.015	-.104	-.060	.277**	1		
STRUCT	-.424***	-.333***	-.051	-.194*	.011	-.162	-.077	-.196*	-.383***	-.128	.079	1	
IQ	-.058	-.130	-.019	-.171	-.127	-.054	-.045	.241**	.211*	.184*	.043	-.049	1
OTHER	-.210*	-.304**	-.187*	-.115	-.089	-.114	-.084	-.317**	.343***	-.065	-.054	.172	-.086

* $p < .05$, ** $p < .01$, *** $p < .005$, **** $p < .001$

Table 5 also illustrates that mothers' oppositionality was negatively correlated with her tendency to make statements which propose what to do to solve the problem (Start Solution), and to outline the advantages of a particular solution (Pro). Furthermore, the greater the frequency of mothers' "what to do" statements, the less she will need to redirect the child to the task (Structuring), and the more she is likely to inform the child when generated solutions are acceptable (Accept).

The correlations among the predictor variables produce other interesting findings concerning the mother's acceptance of her child. First, a relatively poor "fit" between the child's temperament and the mother's expectations (Discrepancy Score Child) was associated with a correspondingly poor "fit" from the child's perspective regarding his/her preferences for mother's temperament (Discrepancy Score Mother). Second, when mother's expectations for her child's temperament does not match the child's actual temperament (Discrepancy Score Child) she is more likely to engage in a confrontative style of coping, to be negative in her interaction with the child during problem solving, and to engage in a lower frequency of constructive problem solving (Problem Solving CP). In addition, the higher the Discrepancy Score Child the lower the frequency of encouraging statements and the less comments are made indicating when problem solutions are acceptable. In contrast, the

child's relative dissatisfaction with the mother's temperament (Discrepancy Score Mother) is correlated with very little, suggesting it is a less important variable for the present study.

Demographic Correlates of Peer Status

A preliminary $2 \times 3 \times 3 \times 2$ analysis of the demographic variables included in this study yielded a significant Race x SES x Status interaction. Several 2×2 analyses clarified the relationships among the three demographic variables. A Race x SES (comparing the number of mothers with more than 12 years of education with those who had 12 years or less formal schooling) analysis indicated that the mothers of Caucasian children in the study more often had more than 12 years of formal education. That is, a greater number of them had at least some college education, even if they had not completed a college degree ($X^2 = 7.22, p < .01$). In addition, an SES x Status interaction demonstrated that more of the mothers of Rejected children had 12 years of education or less, while more of the mothers of Popular and Average children had received more than 12 years of formal education ($X^2 = 8.05, p < .025$). However, no significant relationships were found in the Status x Race analysis ($X^2 = 0.92, p > .05$), indicating that the ratio of Caucasian to Black participants did not differ across status groups (there were more Caucasian than Black

participants in all three groups). Finally, a Gender x Status X² analysis revealed that although there are fewer females in the Rejected than in the other two groups, the Gender ratio does not differ across the three status groups (X² = 4.90, p > .05).

In summary, the X² analyses emphasize the importance of including the demographic variable SES in subsequent analyses. Due to its strong association with SES level, the variable Race will also be included in the analyses.

Predictor Measures

Table 6 shows the means and standard deviations of the predictor measures assessed by questionnaire. The measures Confrontative Coping and Escape Avoidance are taken from the Ways of Coping-Revised (Folman & Lazarus, 1985). As described above, Confrontative Coping refers to an action oriented approach to the identified stressful event, regardless of the consequences of the action. The potential range of scores on this subscale was 0-18. On the Escape Avoidance subscale, which reflects a tendency to deny the problem identified and to avoid dealing with it directly, the potential range of scores is 0-24. Appendix C provides a summary of the topics chosen as stressful events by the mothers for the Ways of Coping-Revised ratings. The events identified by the mothers were no more serious or stressful for any one of the three status groups.

TABLE 6

Means and Standard Deviations for the Questionnaire Predictor Measures for each of the Three Status Groups

	Popular		Average		Rejected	
	Mean	SD	Mean	SD	Mean	SD
Confrontative Coping (Range 0-18)	5.95	(3.54)	6.63	(4.89)	6.51	(4.30)
Escape Avoidance (Range 0-24)	5.34	(3.29)	7.38	(8.45)	6.97	(5.77)
Discrepancy ^a Score Child (Range 0-147)	48.13	(8.93)	51.73	(9.67)	56.05	(11.82)
Discrepancy ^a Score Mother (Range 0-147)	58.42	(12.75)	59.27	(15.94)	61.75	(11.76)
Porter Parental Acceptance (Range 30-180)	105.80	(20.69)	105.11	(14.13)	104.97	(12.50)

a

Higher scores indicate a larger discrepancy between Temperament Attributes and Ethnotheory of Temperamental Difficulty

Note: There was a significant difference only on the Discrepancy Score Child measure ($p < .05$).

Discrepancy Score Child is a composite score derived from the mother's degree of satisfaction with nine aspects of her child's temperament (Activity Level-General; Activity Level-Sleep; Approach/Withdrawal; Flexibility/Rigidity; Quality of Mood; Rhythmicity-Sleep; Rhythmicity-Eating; Rhythmicity-Daily Habits; Task Orientation). The range of

scores possible on this measure is 0-147. Similarly, the Discrepancy Score Mother is the sum of ten measures reflecting the child's degree of satisfaction with the mother's temperamental attributes. The potential range of scores on the Discrepancy Score Mother is also 0-147. For both Discrepancy scores, a higher score represents a greater discrepancy between actual temperament measured by the DOTS-R, and the participant's Ethnotheory of Temperamental Difficulty.

The final scores included in Table 6 are those obtained from the Porter Parental Acceptance of Children Scale. These reflect the mother's general level of acceptance of her child, based on characteristics other than temperament specifically.

Social Interaction Ratings

Stressor Task: Participants were asked to rate the stressor task on a scale of 1-10 to confirm that this task was indeed mildly stressful for all Status groups. A rating of 1 indicated "Not at all Stressful, and a rating of 10 indicated "Extremely Stressful". The mean rating for the Popular group was 3.58, for Average group it was 4.24, and for the Rejected group 4.00. This finding confirms that the Stressor task was indeed mildly stressful for the participants.

Reliability: Reliability checks were performed for a random selection of 35.13% (n=41) of the videotaped sections of the mother-child problem solving sessions. Cohen's Kappa, which assesses interobserver agreement beyond chance levels, was calculated. Kappa was .63. Mean event-by-event agreement for the 14 content categories was 89.39% (SD=3.61). An ANOVA demonstrated that there was no significant difference between the event-by-event agreements for the three status groups; Popular, Average, and Rejected ($F (df 2) = 0.73, p < .49$).

Table 7 provides data for the mean proportion of occurrences per category for the 14 content categories of the Parent Adolescent Negotiation Interaction Code (PANIC). The proportion scores for each participant were obtained by dividing the frequency of each content code by the total number of "thought units" for each participant. This transformation was necessary due to the variability in the total number of "thought units" across subjects.

As explained above, only the mother's behavior was coded from the videotapes. Table 7 illustrates that mothers of children in all three status groups tend to have a high frequency of statements which describe or clarify the target issue (Problem Description), which might be considered an essential prerequisite to effective problem solving under stress. In addition, the incidence of comments leading to a solution and "what to do" statements

were also relatively high across groups (Start). Furthermore, the mothers used a large number of Structuring statements, which refocus the discussion, or clarify the task instructions. In contrast, some of the categories were rarely used. In particular, the incidence of Con and of Leading Question was very low.

Table 7

Distribution of Mean Proportion of 14 Categories of Social Interactions during Videotaped Problem Solving Session.

Content Category	Status Group of Child					
	Popular		Average		Rejected	
	Mean	SD	Mean	SD	Mean	SD
PROBLEM DESCRIPTION	.169	(0.107)	.142	(.131)	.145	(.093)
START SOLUTION (What to do)	.269	(.116)	.216	(.103)	.246	(.094)
STOP SOLUTION (What not to do)	.057	(.042)	.054	(.056)	.076	(.057)
ACCEPT (Accept solution)	.037	(.041)	.023	(.021)	.031	(.035)
REFUSE (Refuse solution)	.134	(.020)	.023	(.032)	.015	(.022)
PRO (Supporting solution)	.015	(.019)	.019	(.028)	.019	(.028)
CON	.075	(.015)	.008	(.024)	.011	(.015)

Table 7 (continued)

Content Category	Status Group of Child					
	Popular		Average		Rejected	
	Mean	SD	Mean	SD	Mean	SD
POSITIVE PROCESS (Positive Interaction)	.105	(.079)	.109	(.086)	.081	(.069)
PROVIDE RATIONALE	.064	(.070)	.058	(.070)	.068	(.067)
NEGATIVE (Criticize, blame)	.026	(.036)	.046	(.047)	.055	(.059) *
OPPOSITIONAL	.025	(.047)	.023	(.028)	.031	(.039)
LEADING QUESTION	.006	(1.15)	.012	(019)	.021	(.038) *
STRUCTURING (Back to discussion)	.129	(.106)	.183	(.147)	.147	(.128)
OTHER (Irrelevant)	.075	(.104)	.082	(.131)	.052	(.083)

* Significant differences between three sociometric groups on ANOVA ($p < .05$).

Prediction of Status Groups

According to Capaldi & Patterson (1989), six of the content categories are directly related to **problem solving** (Problem Description, Start Solution, Stop Solution, Accept Solution, Pro and Con), four reflect **negative interaction** (Oppositional, Negative Interaction, Refuse, and Leading

Question), and two reflect a **positive interaction** (Positive Process and Providing Rationale). The remainder of the content categories are then classified as miscellaneous. Therefore, a discriminant analysis was conducted for these three aspects of interaction that occurred during the problem solving discussion between mother and child to assess which best predicted the child's social status group (Popular, Average and Rejected). To achieve this, the Social Interaction data from the problem solving task in the present study was transformed into the three factors described above, and were named as follows: Problem Solving CP (the problem solving factor used by Capaldi & Patterson (1989); Negative Interaction CP; and Positive Interaction CP.

The three composite factors suggested by Capaldi & Patterson (1989) were entered into the discriminant analysis, along with the other predictor variables of interest in the present study: Child's Race, SES (mother's education in years), mother's scores on the Confrontative Coping and Escape Avoidance scales of the Ways of Coping-Revised, the child's degree of satisfaction with the mother's temperament (Discrepancy Score Mother), and the mother's degree of satisfaction with the child's temperament (Discrepancy Score Child). Only the variables Problem Solving CP, Negative Interactional Style CP, and Discrepancy Score Child discriminated well enough among the three groups to

be included in the discriminant equation. Level of significance used for inclusion into the discriminant equation was the commonly used F-Probability $\leq .1$. When these three variables were used to predict the child's social status group, 52.38% of the participants were correctly classified by the discriminant function. Furthermore, 60.61% of the Popular group, 50.00% of the Average group, and 47.06% of the Rejected group were correctly classified according to their social status. This is well above the 33% chance level for correct classification.

The discriminant function analysis also indicated that the total amount of variance accounted for by the three variables included in the discriminant equation, taken together, was 21.87%. The amount of variance accounted for by each of those three variables was: Problem Solving CP = 9.47%; Discrepancy Score Child = 7.50%; and Negative Interactional Style CP = 4.90%.

The variable Discrepancy Score Child (the discrepancy between the child's temperament and the mother's demands or expectations of how the temperament should be) was found to discriminate sufficiently among the status groups to be entered into the discriminant analysis. As the Discrepancy Score Child measure is a composite of the Fit scores for the nine temperament attributes, analyses were then conducted to try to identify more specifically which aspect of the fit scores was contributing most to the Discrepancy

Score Child finding. To achieve this, another discriminant analysis was performed on the 9 separate Discrepancy Scores (instead of the total Discrepancy Score Child), and all other predictor variables. The 9 scores (Activity Level-General, Activity Level-Sleep, Approach-Withdrawal, Flexibility-Rigidity, Quality of Mood, Rhythmicity-Sleep, Rhythmicity-Eating, Rhythmicity-Daily Habits, and Task Orientation. In this analysis the variables Discrepancy Score Child-Quality of Mood, Problem Solving CP, and SES discriminated sufficiently among the groups to be entered into the discriminant equation. Together they correctly classified 52.88% of the participants into their actual status group (60.61% of the Popular, 43.24% of the Average, and 55.88% of the Rejected group). Thus, by taking into account the components of the Discrepancy Score Child, the classification rate of the Rejected group is improved by 8.82%. In this analysis the variance accounted for by the three variables was as follows: Discrepancy Score Child-Quality of Mood = 8.50%; Problem Solving CP = 6.90%; and SES = 5.9%

Of the Discrepancy Score Child variables, only Discrepancy Child-Quality of Mood discriminated sufficiently among the status groups to be included in the Discriminant equation. However, Discrepancy Score Child-Activity Level General came close to meeting the criteria for inclusion in the equation. Therefore, an ANOVA was performed to see if any significant differences existed among the means for the

three status groups that were just not great enough to allow the predictive power necessary for the variable to be included in the discriminant equation. The ANOVA confirmed that the means for the three status groups Popular, Average, and Rejected on the variable Discrepancy Score Child-Activity Level General differed significantly from each other ($F(2)=3.26, p < .05$). However, post hoc comparisons revealed that although the Rejected group differed significantly from both the Popular and the Average group, there was no significant difference between the means for the Popular and Average groups. The means and standard deviations for the variable Discrepancy Score Child-Activity Level General are presented in Table 8.

In order to confirm that Capaldi & Patterson's (1989) factors were in fact present in this study, a factor analysis was conducted on the content category scores from the PANIC. The categories were: Problem Description, Start Solution, Stop Solution, Accept Solution, Refuse Solution, Pro, Con, Negative Evaluation, Oppositionality, Leading Question, Positive Process, Provide Rationale, Structuring and Other. The Factor Analysis identified only three strong factors, by using the minimum Rotated Factor Loading criterion of .35. These three factors accounted for 40.63% of the variance in the data. However, they did not coincide exactly with the factors identified by Capaldi & Patterson (1989). For the present study, the first factor,

Positive Interaction consisted of the content categories Problem Description, Positive Process, Provide Rationale, and Leading Question. While it is easy to see how the first of these three categories cluster together into Positive Interactional Style it is more difficult to explain how Leading Question falls into this factor. A second factor, **Problem Solving**, comprised the content categories Start Solution ("what to do"), Accept Solution, and Pro (comments supporting a solution). Thus it is a considerably narrower factor than the one identified by Capaldi & Patterson. The third factor obtained in the factor analysis was **Negative Interaction**, and it consisted of the categories of Negative Evaluation, Oppositional, Refuse, and Con (comments relating to why a solution would not work). This third factor is very similar to Negative Interaction CP, except that Leading Question has been replaced by Con.

A second discriminant analysis was then performed for these new social interaction factors, in combination with the demographic and predictor variables described above. Only the variable Discrepancy Score Child (mother's degree of satisfaction with child's temperament) discriminated well enough to be included in the discriminant equation. The level of significance used as criterion for inclusion into the equation was F-probability $\leq .1$. When this variable was entered into the discriminant equation, it correct-

ly classified 44.25% of participants into their status groups. Taken alone, Discrepancy Score Child accounted for 6.5% of the variance in the data.

It was noted that the percentage of participants that was correctly classified in this latter analysis was considerably less than the correct classification rate achieved with the Capaldi & Patterson (1989) factors. One major difference was that although the discriminant function correctly classified 61.63% of the Popular participants and 61.63% of the Rejected participants, it was significantly poorer in classifying the Average group (14.63%). A reasonable explanation for this is that although the three groups differed significantly (ANOVA on Discrepancy Score Child $F(2) = 3.93$, $p < .02$), post hoc comparisons (Newman-Keuls) revealed that the mean for the Average group differed significantly from that of the Rejected group but not from the Popular group. This explains to some extent the difficulty the discriminant analysis had in correctly classifying the Average participants. To emphasize this further, a fourth Discriminant Analysis was conducted, this time to predict only classification into the Popular and Rejected groups. This improved the correct classification rate to 67.16% (72.73% of the Popular group, and 61.76% of the Rejected group).

Table 8

Means and Standard Deviations for the Variables Entered into the Discriminant Analyses, Presented by Status Group.

	Popular		Average		Rejected	
	Mean	SD	Mean	SD	Mean	SD
Discrepancy Score Child (Range 0-162)	48.13	(8.93)	51.73	(9.67)	56.05	(11.82) $p < .05$
Problem Solving CP (Range 0-1)	0.55	(0.15)	0.46	(0.15)	0.53	(0.16) $p < .05$
Negative Interaction CP (Range 0-1)	0.07	(0.06)	0.10	(0.08)	0.12	(0.09) $p < .05$
Negative Interaction (Range 0-1)	0.07	(0.08)	0.10	(0.08)	0.11	(0.09) $p = .09$
SES (Years of mothers' education)	14.61	(1.91)	14.51	(2.08)	13.25	(2.54) $p < .05$
Discrepancy Score Child Quality of Mood (Range 0-21)	2.00	(1.56)	3.55	(2.45)	6.44	(4.13) $p < .01$
Discrepancy Score Child Activity Level General (Range 0-21)	6.32	(2.63)	6.81	(2.91)	8.42	(3.81) $p < .05$

Table 8 presents the means and standard deviations for the variables entered into both the first and second discriminant analyses, as well as the Discrepancy Score for

the Activity Level-General. It also displays the results of ANOVA's performed on each of the variables entered into the discriminant analyses. For variables Discrepancy Score Child, Discrepancy Score Child-Quality of Mood, and Negative Interaction Style CP, post hoc comparisons (Newman-Keuls) revealed significant differences only between the Rejected and Popular status groups, and not between the Average group and the other two status groups. However, for the variable Discrepancy Score Child-Activity Level General, both the Average and Rejected group means differed significantly from the mean for the Rejected group. In contrast, the means for the Rejected and Popular groups were not different from each other on the variable Problem Solving CP, but were significantly greater than that for the Average group. Finally, SES (as measured by mothers' educational level) for the Popular group was significantly higher than in the Rejected group.

Table 8 also emphasizes some of the characteristics of the Rejected status group, when compared with the other two status groups. First, their mothers tend to be less educated, and they engage in more negative interaction when under stress. Second, they tend to be less satisfied with their child's temperament in general, in particular with their child's quality of mood, and, to a lesser extent, with their child's activity level in general.

As noted above, the variable Discrepancy Score Child-Quality of Mood was found to be one of the stronger predictors of the child's social status. In addition, there was also a significant difference between the status groups on the variable Discrepancy Score Child-Activity Level General. Therefore, the question arises: Why are mothers of Rejected children less satisfied with these aspects of their child's temperament? There are two possibilities: 1) They are less satisfied because these temperamental qualities are a particular problem in Rejected children, i.e. the children have such a high activity level, or such negative mood, that they are exceptionally difficult to handle; or 2) that their temperamental attributes are not significantly different from other children, but the mothers, for other reasons such as their own personality problems, have unrealistic expectations for their children.

To answer the question of why mothers of Rejected children might be more dissatisfied with their child's temperament it was necessary to compare the child's temperament scores for the two attributes across the three status groups. An ANOVA revealed that there were no significant differences between the status groups on the child's quality of mood ($F(2) = 1.11, p > .3$). In fact, children in all three status groups were rated by their mothers as having relatively good quality of mood. However, an ANOVA comparing the child's Activity Level-General

across the three status groups produced a very different result. There was a significant difference among the Popular, Average and Rejected groups in the temperamental attribute Activity Level-General ($F(2) = 6.17, p < .005$). Post hoc comparisons (Newman-Keuls) clarified that children in the Rejected group had a significantly higher level of activity compared to the other two groups, which did not differ from each other.

Table 9 presents the means and standard deviations for the child's temperament scores for all nine of the temperamental attributes. By presenting all of the temperament attributes in this tabular form, it is also possible to see that no one temperament "type" is associated with each status group.

The above findings, taken together, demonstrate that both Hypothesis 1 and Hypothesis 2 were partially supported. That is, although mothers of Rejected children did not report using Confrontative Coping and Escape Avoidance styles of dealing with a stressful event more than the mothers of Popular children, they did tend to engage in a more negative style of interaction (as defined by Capaldi & Patterson (1989)) compared to mothers of Popular children. However, Hypothesis 1 also predicted that the mothers use of constructive problem solving methods, and positive interactional style would be a predictor of peer status. Instead, mothers of unpopular children did not differ

significantly from those of popular children in their attempts at constructive problem solving, and both groups engaged in it more than the mothers of Average children. The three groups of mothers did not differ significantly in their use of the positive interactional style during problem solving.

Hypothesis 2 predicted that the degree of discrepancy between mother's and child's temperaments and their expectations regarding the other's temperament would differentiate between the child's status group. While mother's relative dissatisfaction with her child's temperamental attributes is somewhat predictive of peer status, the reverse was not found to be true, that is the child's relative satisfaction with the mother's temperament was not predictive of peer status.

Mother's Acceptance of her Child

Hypothesis 3 addressed the question of whether a mother's relative dissatisfaction with her child's temperament would be reflective of a general dissatisfaction with her child. Given the non-significant correlation ($r = -.1219$, $p > .05$) between the Porter Parental Acceptance of Children Total score and the Discrepancy Score Child, Hypothesis 3 is supported. However, it was noted that there is a trend for mothers who are less satisfied with their child's temperament to be less accepting of the child

in general. Of further interest is the finding that, when correlations were calculated between the subscales of the Porter Parental Acceptance of Children (Recognition that the child is a person with feelings, and has a right to express those feelings; Valuing the unique make-up of the child; and Acknowledgement of the child's need to differentiate and separate his/herself from the parents) and the Discrepancy Scale Child measure, a low but significant negative correlation ($r = -.1916$, $p < .05$) was produced between the third Porter subscale and the Discrepancy Score Child. This indicates that there is a tendency for the mother who acknowledges her child's need to separate from her expectations to be less dissatisfied with her child's temperament.

Table 9

Means and Standard Deviations for the Child's Temperament Attributes Assessed by the DOTS-R Child, and Presented by Status Group.

	Popular Mean SD	Average Mean SD	Rejected Mean SD
Activity Level General	2.33 (0.67)	2.63 (0.69)	3.04 (0.65)
Activity Level Sleep	2.47 (0.86)	2.41 (0.61)	2.80 (0.96)
Approach/ Withdrawal	3.02 (0.60)	3.04 (0.56)	3.11 (0.61)
Flexibility/ ^a Rigidity	3.18 (0.59)	3.04 (0.62)	2.89 (0.76)
Quality of ^b Mood	3.52 (0.50)	3.53 (0.42)	3.40 (0.49)
Rhythmicity- Sleep	2.88 (0.51)	2.65 (0.58)	2.71 (0.60)
Rhythmicity- Eating	3.24 (0.67)	2.97 (0.77)	3.08 (0.72)
Rhythmicity- Daily Habits	2.76 (0.63)	2.50 (0.49)	2.65 (0.49)
Task ^c Orientation	2.51 (0.55)	2.42 (0.57)	2.12 (0.59)

Note: All means are for scales which range from "1" to "4", where 1 = "usually false"; 2 = "more false than true"; 3 = "more true than false; and 4 = usually true.

a

Higher scores represent more flexibility

b

Higher scores indicate more positive mood

c

Higher scores reflect less distractibility and more persistence

CHAPTER FOUR

DISCUSSION

The primary purpose of this study was to examine some of the correlates of pre-adolescent peer status by investigating several aspects of the mother-child relationship. Of particular interest was the relation between the temperamental compatibility between mothers and their fourth- or fifth-grade children, and the child's acceptance by peers at school. This factor was of interest because of the possible implications for the development of personality problems in children whose temperaments were difficult for their parents to accept. In addition, this study addressed the association between the mother's coping styles for dealing with stressful events and the child's peer status in two ways. First, by looking at the mother's self-report of coping strategies utilized during a recent stressful situation in her life; and, second, by examining an interaction with her child which occurred under mildly stressful conditions in the lab. Finally, this study aimed to demonstrate that a mother's degree of satisfaction with her child's temperament is not related to her general level of satisfaction with her child.

One way in which this study improved on other similar research was by providing a more heterogenous participant pool regarding SES level and racial background. This is in contrast to studies such as those of Palermo (1982), and Nitz et al (1988), which were limited to white, middle- to upper-class individuals.

Results generated from the analyses of possible predictors of peer status generally supported previous findings that negative peer relations tend to be associated with a relatively poor "fit" between a child's temperament and the demands regarding their temperament in their home environment. That is, if the mother is dissatisfied with her child's temperamental attributes, her child is more likely to be rejected by his/her peers at school. Given that the mother-child relationship is an important factor in social-emotional development, this finding is not surprizing. Mothers attitudes are imparted to their children, and a mother's dissatisfaction with key aspects of her child's developing personality could be associated with conflict and possible self-esteem problems from very early childhood (Dix & Grusec, 1985). This is not to suggest that the results of the present study imply a causal effect. While many theories exist proposing such causality, the maternal dissatisfaction and the negative peer relations, among others, could be a product of other causal variables such as problems with Attachment, a factor that has been identi-

fied by Sroufe & Fleeson (1986) as crucial to normal child development. In addition, we know that the model for the development of a healthy, adaptive personality in the adolescent is not uni-directional, and is mediated by many factors such as social support, as well as the personality factors and involvement of caretakers other than the mother.

The finding that a greater discrepancy between child temperament and mother's temperament preferences is predictive of peer rejection is further clarified by the analysis of the components of the Discrepancy Score Child. This demonstrated that the discrepancy concerning the child's Quality of Mood was a significant predictor of whether or not the child would be classified as rejected by peers. This finding corresponds to Nitz et al's (1988) report that pre-adolescent good adjustment (measured by peer relations, scholastic competence, and behavior) was highly correlated with a better "fit" (i.e. lower discrepancy scores) in regard to Quality of Mood. The population sampled in the present study is more diverse, the mean age is almost one year younger, and the participants were recruited from a very different area of the U.S. The fact that Nitz et al's results were replicated in the present study suggests that the temperament-ethnotheory fit dimension of Mood Quality is a particularly important one to appraise in regard to psychosocial development.

Mood has also been identified as important by other researchers. For example, Graham, Rutter, & George (1973) found that 3-7 year olds identified as disordered, and who were characterized as significantly more negative in mood, were more likely to be seen as disturbed one year later. Continued disturbance in a young child is often an indication of developing personality problems, rather than a behavior problem per se. These results taken together strongly suggest that the Quality of Mood as a temperament attribute, and its relative "fit" with maternal expectations deserves further attention, to identify what part it might play in the development of personality.

One other temperament attribute was found to be important in distinguishing between children with negative and positive peer relations: Activity Level-General. Mothers of Rejected children had more difficulty in accepting this aspect of their child's temperament than mothers of children with a more positive peer status.

Unlike other studies that have appeared in the literature, the present research also examines the child's expectations/wishes regarding the mother's temperament. This measure was included to ascertain whether or not the child's degree of satisfaction with the mother's temperament might be also predictive of peer relations. If this were so, it would be additional evidence for the reciprocal influences of mother and child as determinants of the

child's socio-emotional development. For example, if an easy-going child had a mother with a difficult temperament, the mother may not be dissatisfied with her child's attributes but this combination might be very difficult for the child to tolerate. However, the "fit" between mother's temperament and child's preferences for temperamental attributes was not predictive of peer status. Although children in all groups were highly dissatisfied with the mother's temperament in general, this variable did not predominate in the Rejected group. The high rate of dissatisfaction in general may be a common feature of pre-adolescence, as the child begins to strive for autonomy. However, there may be another explanation concerning the lack of association between the child's dissatisfaction with the mother's temperament and the child's peer status. There was a slight variation in the methodology utilized to obtain the Discrepancy Score Mother compared to that of the Discrepancy Score Child. In the latter, the mother completed both the rating of her child's temperament and her ethnotheory of her child's temperament. However, in the former the mother rated her own temperament and the child completed his/her ethnotheory of maternal temperament. Therefore, because of this methodological discrepancy, it is unclear how these results should be interpreted.

The present study also addressed whether or not maternal difficulty in dealing with stress was associated with

peer status in children. It was hypothesized that mothers of Rejected children would be more likely to engage in two negative coping styles, Confrontative Coping and Escape Avoidance, and that they would be less likely to engage in positive interactions or constructive problem solving with their child when stressed. For the sample as a whole, mothers who reported using an Escape Avoidance method of coping (characterized by "wishful thinking" and behavioral efforts to escape and avoid) tended to be more negative in their interaction with their child during the problem solving session. A possible explanation for this is that if an individual's preferred style is to avoid dealing with problems directly, then her level of stress is increased disproportionately when placed in a laboratory situation where avoidance is not possible. As stress level increases, irritability and negativity also increase. However, further research is needed to clarify this relationship. In particular, caution must be used in assuming that a method of coping reported for one stressful event is representative of a coping style utilized across events, until further studies are conducted demonstrating increased reliability of the Ways of Coping-Revised across situations thought to be important in the parenting process.

Despite the correlation between the use of Escape Avoidance and a negative interactional style for the sample as a whole, the mother's coping strategy was not predictive

of the child's social status for either the Escape Avoidance or the Confrontative Coping methods. However, when the mothers were required actually to deal with a mildly stressful event (produce solutions to a problem while being videotaped, following a frustrating task), the mothers of Rejected children were more likely to engage in a negative interactional style (as defined by Capaldi & Patterson, 1989). This negative style of interaction included criticizing and blaming the child, and being hostile and oppositional. This finding is similar to the previous report by Green, Forehand & McMahon (1975) that mothers of clinically referred children with behavior and personality problems tend to be more negative in their interactions with their children.

The apparent lack of correspondence between the two types of measures of mothers' ability to deal with stress could be a result of several factors. First, reporting in retrospect about how one dealt with a stressful event is very different from actually dealing with stress in vivo. While mothers of Rejected children did not report using a negative coping strategy any more than other mothers, they may have more difficulty when faced with the problem solving task in the lab, and tended to resort to familiar styles of interaction. If this were the case, it would support the hypothesis that they have more difficulties when under stress. Second, the Ways of Coping-Revised may

not have been a sufficiently sensitive instrument to detect group differences, whereas the microanalytic technique of the PANIC rates every piece of the mothers' verbal behavior during the problem solving task. Whatever explanation is most valid, this finding supports a general trend in the peer status literature to assess functioning by situation specific methods.

The present study also predicted that mothers of Popular and Average children would be more likely to engage in constructive problem solving with their children, compared to mothers of unpopular children. In fact, mothers of both Popular and Rejected children demonstrated that they used this method more than the mothers of Average children. Unfortunately, this study did not assess the quality of the outcomes generated in the problem solving task, a factor that might have aided in the interpretation of this finding.

The third hypothesis addressed in the present study was also partially supported. It predicted that a mother's relative dissatisfaction with her child's temperament did not reflect a general lack of acceptance of her child. This did in fact appear to be the case, for two reasons. First, the degree of discrepancy between the child's temperament and the mother's preference concerning temperament did not correlate significantly with each other; and, second, the lack of "fit" (high discrepancy) clearly

reflected primarily a dissatisfaction with the child's quality of mood and general activity level, not a general dissatisfaction. However, when the measure of general parental acceptance was broken down into its component parts, the relatively poor temperamental "fit" did correlate negatively with the parental acceptance of a child's need to differentiate and separate from parents. Therefore, during pre-adolescence the mother's perception of poor temperament "fit" could reflect in part her own difficulty with her child's increasing need for autonomy. However, this relationship needs further examination in future research, particularly given the very low correlation observed. One method of examining this possible relationship would be a longitudinal study of "goodness of fit" between temperament and mothers' ethnotheories to identify if an increase in discrepancy scores is observed during this period.

The results from the present study have implications for several areas of current research regarding children's social and personality development. Although the family's SES level was not consistently found to be a good predictor of social status, it is clear from preliminary analyses of the demographic variables that sociometric status is not independent of SES, or gender. There are more males, and a lower SES, in the Rejected category than would be expected by chance. While some researchers would support control-

ling for these factors by limited sampling (e.g only using one gender of child) this severely limits the generalizability of the findings. Instead it appears that a viable alternative is to examine the effects of these variables with statistical analyses.

Limitations of the Study and Implications for Future Research

The results of the present study suggest that there is utility in continuing to examine aspects of the mother-child relationship that might theoretically contribute to negative peer relations. However, this study is limited in a number of ways. First, some problems may still exist with the DOTS-R as an instrument for measuring temperament. Although it was expanded from the original five attributes of temperament to nine for the child and ten for the adult, the instrument may still not sample all the dimensions of temperament that contribute to the developing personality of the child. In addition, in order to accept the concept that a Discrepancy score reflects the difference between actual temperament and preferred temperament, one has to accept that a rating of "not difficult" on the ethnotheory questionnaire is equivalent to "most wanted". This may not be so. Therefore, although the present study utilizes the measures that have recently been revised by Lerner and his

associates, they may not yet be adequate to assess the concept of "fit", and may need to be further revised.

Second, while several variables identified in this study (SES, Negative Interaction, Discrepancy Score-Child), taken together, predict peer status well above the chance level, there is still a great deal of variance to be accounted for and much to be learned concerning the predictors of children's social relations with peers. The present study focused primarily on variables associated with the mother. However, clearly the father, or other significant caretakers, may have as much, if not more, influence on the child's social and personality development. In addition, other studies (e.g. Cohen & Wills, 1985) have established that the social support system of the family as a whole, or of the child individually, can be a powerful mediating variable among parental influences, SES, birth order, cultural expectations, and the child's socioemotional development. Furthermore, this study only addressed the mother's ethnotheory of temperament. Clearly, the pre-adolescent could be greatly influenced by how well (s)he "fits" into the context of school and extracurricular activities. Therefore, due to the exclusion of all these important variables, the prediction rate for peer status was high enough only to make tentative statements concerning the relationship between the variables in the present study and peer status in fourth and fifth graders.

Future research will be important to enhance knowledge of the way in which a wide variety of variables interact with a child's social and personality development. At the present time there is a growing body of research looking at the role of temperament in child development and at parental attitudes and family relationships with respect to their effects on children's development. However, there is very little that addresses the issue of a mother's faulty expectations of her child's style of responding to the environment (Rutter, 1990). A more adequate model for this developmental process could be provided by longitudinal studies that assess contextual demands and developing personality features from early childhood to adulthood. If, for example, poor "fit" exists over a long period of time in individuals who do not develop the essential psychosocial skills, then this factor is more likely to be contributing directly (in a causal sense) to the child's difficulties. However, if it only appears as a correlate during certain "difficult" developmental periods, then it may be an indication of a lack of adequate parenting skills.

The results of the present study may have some important treatment implications for children with peer relationship problems. If their mothers do tend to engage in a greater frequency of negative interactions with them, for example by blaming, criticizing, or being oppositional,

this may contribute to the child's low self esteem or anger. Using parent training techniques as one aspect of treatment, the mother could be taught how to become more positive and constructive in her problem solving with her child to help prevent further conflict in the relationship. In addition, if the mother's degree of satisfaction with her child's temperament is influencing her parenting of the child, any unrealistic expectations she may have regarding his/her temperament potential could be identified in a treatment effort to reduce cognitive distortions, and enhance coping strategies.

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APPENDIX A

Table 10

Definitions of Sociometric Status Groups:
Popular Average and Rejected

Z scores	Derived From
ZMLIKE	Number of Nominations for Most Liked
ZLLIKE	Number of Nominations for Least Liked
ZSPREF	ZMLIKE - ZLLIKE
ZSIM	ZMLIKE + ZLLIKE

Classification Rules

"Popular"	ZSPREF > 1 and ZLLIKE < 0 and ZMLIKE > 0
"Average"	- .75 < ZSim < .75 and - .75 < ZSPREF < .75
"Rejected"	ZSPREF < - 1 and ZMLIKE < 0 and ZLLIKE > 0

APPENDIX B

OUTLINE FOR TELEPHONE CONTACT

"Hello, my name is _____. I work with Dr. Susan Keane in the UNC-G Psychology Department. Do you remember that in the Fall, your child, _____, took part in a research project at school on Children's Friendship?" (If "No", remind parent what study was about and that they consented for child to participate.) (If "Yes", continue:) "Well, we are now doing a follow-up to that study in which we are inviting mothers and children to come into the lab to do several things. You and your child will be asked to complete some questionnaires about temperament and about how you handle stress. You will also be asked to plan an Etch-A-Sketch game together and to complete a problem-solving task while being videotaped through a one-way mirror. The whole thing takes about 1 1/2 hours. You will be paid \$10.00 and your child will receive \$5.00 for your participation in the study, and you can stop at any time if you do not want to finish something. Do you think you could help us with the study?" If "Yes", make appointment and give directions.)

INTRODUCTORY STATEMENT I (MOTHER)

This research project is looking at the difference of opinion and disagreements that occur between fourth and fifth grade children and their mothers. As you know, your child took part in a study earlier this school year that looked at the way in which children relate to their peers. Based on that study, the children were divided into certain groups, and we are now asking the mothers of these children to help us by completing some questionnaires about themselves and their children. The questionnaires are about the way in which you handle certain events, and the way in which you and your child act at home.

You will be asked to take part in two problem solving tasks with your child. Your child will also be asked to complete a questionnaire and answer a question regarding disagreements you and your child have had recently.

You will receive \$10.00, and your child will be given \$5.00, for participating in this study. If either of you wish to discontinue your participation at any time, you are free to do so. Results of this study will be presented in group format; you will never be identified individually. In addition, I would like to obtain your permission to videotape you and your child during the problem solving tasks, with the understanding that these tapes will be viewed only by the students and faculty involved in this project, and that they will be erased when data analysis is complete.

Are there any questions? (ANSWER ALL QUESTIONS) If there are no (more) questions, please read and sign these consent forms, one for you and one for your child. Your child will also be asked to give his/her consent to take part in the study after we have explained the project to him/her.

(If mother refuses any part of the project, ask if you can answer any concerns. If unable to resolve, reassure that this is acceptable and that they will still be paid.)

CONSENT TO PARTICIPATE IN MOTHER-CHILD RELATIONSHIP STUDY
(MOTHER)

I, _____, agree to participate in Sue Thompson-Pope's study on the ability of mothers and their fourth or fifth grade children to resolve disagreements. I understand that I will be completing five questionnaires that ask about my own and my child's reactions to certain situations. In addition, I understand that I will be answering a question concerning disagreements I have had with my child recently, as well as helping my child to complete two tasks. I have been informed that my child and I will be videotaped while we are in the lab. I also realize that the data obtained from this study will be kept confidential and that I am free to discontinue my participation at any time. I understand that I will be paid \$10.00 for taking part in this project.

SIGNED _____

WITNESS _____

PLEASE PRINT:

Name: _____
 Address: _____

CONSENT TO PARTICIPATE IN MOTHER-CHILD RELATIONSHIP STUDY
(MOTHER FOR CHILD)

I, _____, give my consent for my child, _____, to participate in Sue Thompson-Pope's study on the ability of mothers and fourth or fifth grade children to resolve disagreements. I understand that my child will be asked to complete a questionnaire concerning my reactions to certain events and that (s)he will also answer a question concerning recent disagreements between us. I also understand that my child will be asked to complete two tasks with me and that (s)he will be paid \$5.00 for participating in the study.

SIGNED _____

WITNESS _____

INSTRUCTIONS FOR MOTHER (QUESTIONNAIRES)

This study is about the differences of opinion and disagreements between mothers and their fourth/fifth grade children. All children and their parents have disagreements, but everyone deals with problems in their own way. The first thing I would like you to do is to complete this questionnaire, which is concerned with the methods you have used to cope with a stressful event in your life. We know everyone has some methods to cope with stress, but we are interested in exactly what kinds of methods people use to get things back under control during difficult times. I would like you to think of a stressful event that has occurred during the past two weeks and answer these questions based on how you dealt with that event. When you have finished your questionnaire, please check that you have answered all the items.

Here is the next questionnaire. It has 52 items and asks about how your child acts at home. (Read instructions from the DOTS-R CHILD.) Please let me know when you have completed this questionnaire and have placed it in the box.

Here is the third questionnaire. It is similar to the one you just completed on your child. This time, you will be assessing your own actions. (Read instructions to DOTS-R ADULT.)

This is the fourth questionnaire. All parents occasionally wish their child would be different in some way from the way (s)he really is. This questionnaire asks you about how difficult it would be for you to cope with certain behaviors children show. (Read instructions for DOTS-R PARENT'S ETHNOTHEORY.)

The final questionnaire (PORTER SCALE) asks about how you deal with your child. (Read instructions underlined.)

INTRODUCTORY STATEMENT I (CHILD)

This project is looking at how mothers and fourth and fifth grade children deal with the differences of opinion and disagreements they have with each other. If you are willing to help, you will be asked to tell me about some things you and your Mom disagreed about recently. You would then help your mother with two problem solving tasks. When that is over, you will complete a questionnaire (with my help) which asks about your Mom's reaction to certain things. At the end of all this, you will be given \$5.00 for helping us. If at any time you want to stop doing the project, that's OK; you don't have to do anything you don't want to do. Your Mom has already signed this form which gives you permission to help us. Now, I am asking if you would be willing to help us in this way. Are there questions? (Sign CONSENT FORM-CHILD)

CONSENT TO PARTICIPATE IN MOTHER-CHILD RELATIONSHIP STUDY (CHILD)

I, _____, understand that my mother has given permission for me to take part in Sue Thompson-Pope's study on the way that mothers and children get along together. I realize that I will complete a questionnaire about my mother's reactions to certain events and answer a question about disagreements between my mother and I recently. I also understand that I will be completing two tasks with my mother's help. I realize that I can stop at any time if I don't want to finish something and also that I will receive \$5.00 for helping with this project.

SIGNED _____

WITNESS _____

INSTRUCTIONS FOR CHILD INTERVIEW

This study is about the difference of opinion and disagreements between mothers and their fourth/fifth grade children. All children and their parents have disagreements, but everyone deals with them in their own way. The first thing I'd like you to do is to tell me three things that you and your Mom have disagreed on in the past week. Try and think of things that you haven't yet come to an agreement on: They can be things you always disagree on or things that have come up recently. By the way, I have asked your Mom the same question.

INSTRUCTIONS FOR ETCH-A-SKETCH TASK AND DISCUSSION TASK

We would like the two of you to copy this drawing as well as you can, using the ETCH-A-SKETCH. Have you ever used one of these before? (As you know), you draw a picture by turning these two knobs. When you turn this one, it draws a line from top to bottom on the screen. When you use this knob, the line is drawn from side to side. If you use both knobs, you can draw diagonal lines. There are only two rules: (1) Try to copy this design as accurately as possible; and (2) Mom controls only the right hand knob and child controls only the left one. Do not use each other's knobs at any time. You have five minutes to try and complete the task. I will come in and let you know when your time is up.

DISCUSSION: I would like you to discuss this issue that you have disagreed on recently (present issue). When I return, I would like you to tell me what solutions you came up with. Write any solutions down on this paper. Do you have questions? I will return in about 10 minutes.

APPENDIX C

PLEASE NOTE

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APPENDIX D

HOW I WANT MY MOTHER TO BEHAVE

On the following pages are some sentences about how mothers act. Some of the sentences may be about ways you want your mother to behave. Others may be about ways you do not want her to behave. For each statement, we would like you to tell us how difficult it would be for you if your mother behaved in a certain way all the time.

There are no "right" or "wrong" answers to these questions, because different children find different things difficult.

PLEASE KEEP THESE FOUR THINGS IN MIND AS YOU ANSWER:

1. Give only answers about what sorts of behavior in your mother would pose difficulty for you. It is better to say what you really think.
2. Don't spend too much time thinking over each question. Give the first natural answer that comes to you.
3. Answer every question one way or another. Don't skip any.

THANK YOU FOR YOUR HELP

If my mother showed this behavior all the time, it would be:

- | | |
|------------------------|------------------------|
| 1 = NOT difficult | 3 = SOMEWHAT difficult |
| 2 = A LITTLE difficult | 4 = VERY difficult |

1. If my mother took a long time to get used to a new thing in the home, it would be: _____
2. If my mother couldn't stay still for long, it would be: _____
3. If my mother laughs and smiles at a lot of things, it would be: _____
4. If my mother woke up at different times, it would be: _____
5. If, once my mother is involved in a task, nothing could distract her, it would be: _____
6. If my mother persisted at a task until it's finished, it would be: _____
7. If my mother moved around a lot, it would be: _____
8. If my mother could make herself at home anywhere, it would be: _____
9. If my mother could always be distracted by something else, no matter what she may be doing, it would be: _____
10. If my mother stayed with an activity for a long time, it would be: _____
11. If my mother has to stay in one place for a long time, she gets restless. If my mother did this all the time, it would be: _____
12. If my mother usually moved towards new objects shown to her, it would be: _____
13. It takes my mother a long time to adjust to new schedules. If my mother did this all the time, it would be: _____
14. If my mother did not laugh or smile at many things, it would be: _____

If my mother showed this behavior all the time, it would be:

1 = NOT difficult

3 = SOMEWHAT difficult

2 = A LITTLE difficult

4 = VERY difficult

15. If my mother is doing one thing, something else occurring won't get her to stop. If my mother did this all the time, it would be: _____
16. If my mother eats about the same amount of dinner whether at home, visiting someone or travelling, it would be: _____
17. If my mother's first reaction is to reject something new or unfamiliar to her, it would be: _____
18. Changes in plan make my mother restless. If my mother did this all the time, it would be: _____
19. If my mother often stayed still for long periods of time, it would be: _____
20. Things going on around my mother can not take my mother away from what she is doing. If my mother did this all the time, it would be: _____
21. If my mother took a nap, rest, or break at the same time every day, it would be: _____
22. Once my mother takes something up, she stays with it. If my mother did this all the time, it would be: _____
23. Even when my mother is supposed to be still, she gets very fidgety after a few minutes. If my mother did this all the time, it would be: _____
24. If my mother was hard to distract, it would be: _____
25. If my mother usually got the same amount of sleep each night, it would be: _____
26. On meeting a new person, my mother tends to move towards him or her. If my mother did this all the time, it would be: _____
27. If my mother got hungry about the same time each day, it would be: _____

If my mother showed this behavior all the time, it would be:

- | | |
|------------------------|------------------------|
| 1 = NOT difficult | 3 = SOMEWHAT difficult |
| 2 = A LITTLE difficult | 4 = VERY difficult |

28. If my mother smiles often, it would be: _____
29. If my mother never stopped moving, it would be: _____
30. It takes my mother no time at all to get used to new people. If my mother did this all the time, it would be: _____
31. If my mother usually ate the same amount every day, it would be: _____
32. If my mother moved a great deal in her sleep, it would be: _____
33. If my mother seemed to get sleepy just about the same time every night, it would be: _____
34. I do not find that my mother laughs often. If my mother did this all the time, it would be: _____
35. If my mother moved towards new situations, it would be: _____
36. When my mother is away from home, she still wakes up at the same time each morning. If my mother did this all the time, it would be: _____
37. If my mother ate about the same amount at breakfast from day to day, it would be: _____
38. If my mother moved a lot in bed, it would be: _____
39. If my mother was full of pep and energy at the same time each day, it would be: _____
40. If my mother has bowel movements at about the same time each day, it would be: _____
41. No matter when my mother goes to sleep, she wakes up at the same time the next morning. If my mother did this all the time, it would be: _____

If my mother showed this behavior all the time, it would be:

- | | |
|------------------------|------------------------|
| 1 = NOT difficult | 3 = SOMEWHAT difficult |
| 2 = A LITTLE difficult | 4 = VERY difficult |

42. In the morning, my mother is still in the same place as she was when she fell asleep. If my mother did this all the time, it would be: _____
43. If my mother ate about the same amount at supper from day to day, it would be: _____
44. When things are out of place, it takes my mother a long time to get used to it. If my mother did this all the time, it would be: _____
45. If my mother woke up at the same time on weekends and holidays as on other days of the week, it would be: _____
46. If my mother doesn't move around much at all in her sleep, it would be: _____
47. If my mother's appetite seemed to stay the same day after day, it would be: _____
48. If my mother's mood was generally cheerful, it would be: _____
49. If my mother resisted changes in routines, it would be: _____
50. If my mother laughed several times a day, it would be: _____
51. If my mother's first response to anything new was to move her head toward it, it would be: _____
52. Generally, my mother is happy. If my mother did this all the time, it would be: _____
53. The number of times my mother has a bowel movement on any day varies from day to day. If my mother did this all the time, it would be: _____
54. If my mother never seemed to be in the same place for long, it would be: _____

DEBRIEFING STATEMENT

As we discussed earlier, this study was about the ways in which children and their mothers disagree, and about their opinions of each other. We are particularly interested in childrens' and their mothers' degree of satisfaction with each others temperament and whether this has any relationship to how children get along with their friends at school. In addition, we are looking at how mothers deal with stressful events in their lives. The questionnaire you completed will provide us with some detail regarding coping mechanisms used by mothers in times of stress. You also took part in two tasks that were designed to be somewhat difficult for a mother and child to complete. We were particularly interested in how mothers dealt with the discussion task following the frustrating Etch-A-Sketch task. That is why we made it so difficult for you to complete the drawing in the time available. You were not alone in being unable to complete the drawing. In fact, here are some photocopied examples of how other mothers and children did on that task. You see, you actually did fine compared to other people.

When we have completed our analyses of these data, you will receive a summary of the results. Please don't expect to hear from us for some months, as the data analysis always takes some time. Do you have any questions about what we did here today?