MOTHER-ADOLESCENT CONFLICT:
IS THERE A ROLE FOR ADOLESCENTS’ MOOD STATES?

by

Norma Mammone D’Agostino

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy Graduate Department of Psychology University of Toronto

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Mother-Adolescent Conflict: Is there a Role for Adolescents’ Mood States?

Ph.D. 2001

Norma Mammone D’Agostino
Department of Psychology
University of Toronto

Abstract

This study investigated whether adolescents’ mood states prior to engaging in a disagreement with their mothers influenced their perceptions of parenting efficacy. Sixty-one early adolescents (M age = 12.82 years), from predominantly middle-class Caucasian families, were interviewed about two recent disagreements: the first was one that was preceded by a “neutral” mood state, the second was one preceded by an “aroused” mood state. Within the “aroused” mood states, adolescents were randomly assigned to report on arguments that were preceded either by a “bad” mood or a “good” mood. Parenting efficacy was measured by: (a) how the adolescents were feeling at the end of the argument; (b) the adolescents’ evaluations of how well their mothers understood them, how fair they perceived their mothers’ behavior to be, and how satisfied they were with the outcome of the disagreement; and (c) how long it took before the adolescents felt like things returned to “normal” between them and their mothers.
In addition to adolescents' mood states, mothers' general parenting style (measured using the Index of Mother's Style Questionnaire, Lamborn, Mounts, Steinberg, & Dornbusch, 1991), and mothers' ability to sensitively tailor their actions to the adolescents' state during the conflict (measured by coding adolescents' reports of maternal behavior) were also considered as factors influencing parenting efficacy. Adolescents' mood states prior to engaging in the argument did not relate to any of the measures of parenting efficacy. Yet, adolescents' mood states were found to influence the adolescents' behavior and feelings of power. Adolescents in more negative mood states tended to behave in a more resistant manner and to feel as if they had more power during the disagreement. Mothers' parenting style was found to have sparse and inconsistent relationships with parenting efficacy. Adolescents who reported the best conflict outcomes had mothers who were able to tailor their actions to the adolescents' mood state. These results are in line with Grusec, Goodnow, and Kuczynski's (2000) claim that it is a parent's understanding of the particular child and situation, rather than the use of a specific parenting style, that is the mark of effective parenting.
Acknowledgements

I'd like to begin by thanking the adolescents who participated in this study and their families. Their willingness to share their personal experiences, thoughts, and feelings made this research possible. Sincere gratitude is extended to my thesis committee, Dr. Joan Grusec, Dr. Karen Dion, and Dr. Rona Abramovitch, for their continued guidance, support, and commitment. I’d like to recognize with appreciation the contributions of Kelly McShane for her assistance with data collection; the many volunteers who helped transcribe the interviews, and Rachel Nobel for her reliability coding. My fellow graduate students in the Grusec lab (Duane, Janis, Silvia, Maayan, Leah, and Tsasha) represent a special set of colleagues and friends who are deserving of many thanks for their sharing of ideas and advice. I’d also like to thank the family members and friends who have supported me through the years. Luckily, I am blessed with too many to mention on an individual basis, but I hope that you all know who you are (mom, dad, Phyllis, the Cipollas, the D’Agostinos, the Vecchiarellis, the Meles, my workmates at HSC). A very special thank-you to my sister Nadia for her encouragement, comic relief, and much appreciated word-processing help. The greatest thank-you is for Angelo D’Agostino; the man who taught me to believe in myself and to never give up. I will forever be grateful for your love and inspiration.
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MOTHER-adoLESCENT CONFLICT:

IS THERE A ROLE FOR ADOLESCENTS' MOOD STATES?

General beliefs and contemporary research suggest that adolescence is a period of life that is difficult (Buchanan et al., 1990)—more difficult in some ways than other periods of life and difficult for adolescents as well as the people around them. This is not a new idea; as early as 1904 G. S. Hall was writing about adolescence as a period of heightened "storm and stress." Of course, one needs to take into account individual differences and cultural variations. Not all adolescents experience storm and stress, but storm and stress is more likely during adolescence than at other ages. Similarly, storm and stress is more typical in Western cultures than in traditional cultures, but it has been argued that storm and stress may increase as globalization increases individualism in minority cultures within North America and abroad (Arnett, 1999).

This idea, that adolescence is difficult, includes three key elements: increased conflict with parents, mood\(^1\) disruptions, and risk-taking behavior. Adolescents have a tendency to be rebellious and to resist adult authority. In particular, adolescence is a time when conflict with parents is especially high. In terms of mood disruptions,

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\(^1\) Unless otherwise stated, the term "mood" is used in this document to reflect a current, temporary state or feeling, and no assumptions are made as to the intensity or specificity of this experience.
adolescents tend to be more volatile emotionally than either children or adults. They experience more extremes of mood and more swings of mood from one extreme to the other. Risk-taking behavior is common in adolescence. Adolescents have higher rates of reckless, norm-breaking, and anti-social behavior than either children or adults. Adolescents are more likely to cause disruptions of the social order and to engage in behavior that carries the potential for harm to themselves and/or the people around them (Arnett, 1999). As adolescents struggle for increased autonomy, the once clearly defined asymmetrical parent-child relationship is challenged. This, in turn, makes the job of parenting during adolescence a unique and demanding experience.

Outline of this Dissertation

This thesis explores the following question: “What would be considered effective parenting in the context of adolescence in a Western society?”. Traditionally, parenting effectiveness has been defined in terms of Baumrind’s styles of parenting (1971). Authoritative parenting, a style characterized by high scores on both the dimensions of warmth/involvement and firmness/consistency, is associated with the most positive child outcomes throughout various developmental stages, including adolescence (Lamborn, Mounts, Steinberg, & Dornbusch, 1991). Recently, researchers (e.g., Grusec & Goodnow, 1994; Grusec, Goodnow, & Kuczynski, 2000) have argued that in order to better understand what is effective parenting we need to expand our scope to look beyond parenting style. One factor they recommend we take
into account is the specific characteristics of the child that is being parented. Given adolescents' increased emotional volatility, it appears that the child's mood state would be an important variable to take into consideration when attempting to evaluate what constitutes effective parenting during this developmental period.

According to Grusec and Goodnow (1994), effective parenting requires that the child be able to perceive the parental messages accurately and that the child is willing to accept the parental message as appropriate and valid. In this model, discipline effectiveness is not determined by the specific technique or style used by the parent. Instead, it is the child who determines if the discipline is effective, given the particular situation. Discipline that the child judges to be appropriate to the given situation is deemed effective. This reformulation requires that parents be flexible in their disciplinary reactions, matching them to the child's perceptions of and reactions to the conflict situation. Given this formulation of effective parenting, it makes intuitive sense that the adolescents' mood state would influence both their perceptions of and motivation to accept parental interventions. Thus, the adolescents' mood states would be an important source of information for parents to take into consideration when deciding on how best to handle a conflict situation. In this model, effective parenting involves sensitivity to, among other things, the child's mood state and cognitions.

This thesis specifically considers the importance of adolescents' mood state as
a variable that influences parenting efficacy. First, researchers' conceptualizations of
the unique features of adolescent development are briefly reviewed, as are the
transformations in the parent-child relationships that occur during this period. Special
attention is given to changes in parent-adolescent conflict interactions. Secondly, a
review of the literature linking different parenting styles to more or less adaptive
adolescent development is presented. Traditional accounts of the proposed
mechanisms thought to underlie the associations between parenting style and
adolescent outcomes are presented. as are more recent reconceptualizations. Particular
emphasis is placed on the Grusec and Goodnow (1994) model of parenting efficacy.
Applying the Grusec and Goodnow model to parenting during the adolescent period
highlights the potentially important role of adolescents' mood states in determining
parenting efficacy. Consequently, a brief review of the literature documenting the
impact of mood on cognitive processes such as memory, attention, and decision-
making is presented as background information as to how mood states can impact on
parent-child relationships. This leads to a discussion of the role of adolescents' attributions as possible mediators of the effects of mood states on parenting efficacy.
Finally, four models predicting parenting efficacy are presented. These models will be
tested using the data collected.

**Defining Adolescence**

Adolescence refers to the period roughly between the ages of 10 and 21 years.
Adolescence begins with the accelerating physical changes accompanying puberty that result in sexual maturity and identity formation, and ends with the liberation from childhood dependency. Adolescents mature through three phases referred to as early, middle, and late adolescence (Comstock, 1994). Ages 10 to 14, which are often used to bracket early adolescence, correspond to the ages of children attending grades 5 to 8 in Canada. Ages 15-18, which bracket middle adolescence, correspond to the ages of children attending high school. Late adolescence extends from high school graduation to entry into young adult status. By this time the individual should have made crucial, but not irreversible, decisions concerning school, romantic relationships, and work, and be fully liberated from parental authority, although not from parental influence.

In a Western society, adolescence brings with it a tension between two competing developmental tasks: increasing conformity to societal expectations, and attaining autonomy from the influence of others. In theories of adolescence, these dual tasks have been dealt with in terms of three constructs: autonomy, identity, and morality (Collins, Gleason, & Sesma, 1997). Autonomy has been regarded as a process of striving to gain freedom from parents and other influences (see Hill & Holmbeck, 1986). Identity has been viewed as a sense of coherence in impressions of the self across time and in current beliefs and commitments (Marcia, 1980). Morality has been regarded as mastery of intrapsychic impulses toward self-gratification and
arousal of empathy towards others, acquisition of appropriate contingencies for and models of appropriate behavior, or achievement of a universal sense of justice or concern for reciprocity (Hoffman, 1980). Traditionally, these concepts have been construed as intraindividual processes. The emphasis on intraindividual processes now is being expanded because of increasing evidence that competencies associated with autonomy, identity, and morality are embedded in extensive social interdependencies. Hill and Holmbeck (1986) proposed that autonomy refers not to freedom from others (e.g., parents), but freedom to carry out actions on one's own behalf while maintaining appropriate connections to significant others. Autonomy and internalization thus have come to be viewed less as independence, in the sense of distancing and separation from others, and more as the result of behavioral regulation arising in the interdependent patterns of interactions with other persons.

Parent-child relationships during childhood and adolescence are marked by both continuity and change (for reviews, see Collins & Russell, 1991). In most parent-adolescent relationships, emotional bonds and patterns of mutual influence are maintained during this transition, but signs of greater individuation appear as well. Feelings of positive regard increase between childhood and adolescence, especially towards mothers; perceptions of reciprocity with and acceptance by parents become more frequent (Youniss & Smollar, 1985); and adolescents' perceptions of self and others increasingly converge with those of parents (Alessandri & Wozniak, 1987). At
Adolescent Mood and Conflict Outcomes

the same time, feelings of acceptance and satisfaction with family life and decision-making are lower in middle adolescence than in childhood or young adulthood; and both parents and adolescents report more expressions of negative mood, more instances of disagreements, and lower expressions of positive mood and feelings of closeness in early and middle adolescence (see review by Steinberg, 1990).

Continuities in emotional bonds makes it possible for parents to continue to influence adolescents despite spending less time together, adolescents’ greater autonomy in some activities and responsibilities, and frequent violations and realignments of interpersonal expectancies during periods of rapid individual change (Collins & Luebker, 1994).

In all human societies, adolescence is the developmental period in which the physical and social status of the child changes to that of adult. Our culture has no rites of passage to demarcate the change in status from child to adult, but has instead a long transitional period between puberty and adulthood that we call adolescence (Baumrind, 1991). The normative adolescence transition includes major role changes in the individual’s position relative to others, a shift in loyalties towards peers if not away from family, and a different mix of entitlements and obligations with the family and larger society. However, developmental progress is not guaranteed. Successful transition, resulting in a more differentiated and integrated level of adaptation in young adulthood, can occur only through the adolescents’ personal commitment to
thoughts and actions that depart from early, more stable and secure patterns; and by
parents and other significant adults accommodating to the changing status of the
child. For example, developmental progress may be impeded by repressive or overly
protective parents, or when adolescents engage in activities such as drug abuse, which
reduces their capability to behave rationally. In any event, the individual changes
occurring within the adolescent may (and indeed should) stimulate disequilibrium and
reorganization of the family system. Family members may scarcely notice these
changes in roles and relationships, or they may be experienced as stressful crises.

**The Impact of Adolescent Development on Parent-Adolescent Conflict**

Each adolescent phase represents successive and progressive biological,
cognitive, and sociobiological changes. This metamorphosis profoundly affects
parent-adolescent relationships and is often associated with increases in parent-
adolescent conflict. This conflict makes adolescence difficult, not just for adolescents
but for their parents as well. Parents tend to perceive adolescence as the most difficult
stage of their children’s development (Buchanan et al., 1990). However, it should be
added that there are substantial individual differences, and there are many parents and
adolescents between whom there is little conflict, even if overall rates of conflict
between parents and children rise in adolescence. Conflict between parents and
adolescents is more likely when the adolescent is experiencing a depressed mood
(Cole & McPherson, 1993), when the adolescent is experiencing other problems such
as substance abuse (Petersen, 1988), and when the adolescent is an early-maturing girl (Buchanan, Eccles. & Becker, 1992).

Even when experiencing relatively high conflict, parents and adolescents tend to report that overall their relationships are good, that they share a wide range of core values, and that they retain a considerable amount of mutual affection and attachment. The conflicts tend to be over mundane issues such as chores, personal appearance, dating, curfews and the like (Smetana, 1988). Even if they disagree on these issues, they tend to agree on more serious issues such as the value of honesty and the importance of education. Some scholars (e.g., Steinberg, 1990) have suggested that conflict between adolescents and their parents is actually beneficial to adolescents’ development because it promotes the development of individuation and autonomy within the context of a warm relationship. This may be true, but high conflict may make adolescence a difficult time for adolescents and their parents even if the conflict seems trivial and ultimately has benefits.

The multitudes of physical, cognitive, and social developmental changes that occur during adolescence converge as adolescents confront their major task, establishing an adult identity. This process of change is complex and multi-faceted. Each of the developmental theories (e.g., attachment theory, psychoanalytic theory, cognitive-developmental theory) has its own perspective on the determinants and significance of the changes occurring. For our purposes, only a brief review of the
developmental changes occurring in the adolescent is necessary. The focus of the review will be to highlight how the adolescent’s developmental changes may impact the parent-adolescent relationship. For the sake of simplicity, changes will be presented as they occur in early, middle, and late adolescence. This stage-like theory of adolescence is employed as a heuristic: it is recognized that this is an artificial and over-simplified representation of the current conceptualization of the process of adolescent development.

**Early Adolescence**

Early adolescence is a confusing time for children. They have one foot in the concrete operations of childhood and the other in more abstract formal operations (Piaget, 1970). This means that, although early adolescents are learning to think logically, abstractions and contradictions about self and others bother them. In general, these advances allow adolescents to envision alternatives to parental views and question parental credibility (Laursen & Collins, 1988). As a result, early adolescents often challenge or reject parental authority.

Early adolescents also begin to develop higher levels of moral reasoning and new role-taking abilities. Morally both boys and girls move to a second level of decision-making which reflects dependence on the acceptance/approval of others (Gilligan, 1982) and a desire to be labeled “good” (Kohlberg, 1969). As a complement, they are just acquiring mutual role-taking abilities, leaving behind self-
reflective role taking (Selman, 1980). At this time, they typically vacillate between their desire to be obedient and their desire to be autonomous (Selman, 1980).

Early adolescents also experience a decline in self-esteem (O’Malley & Bachman, 1983) instigated by social comparisons (Harter, 1990) and puberty (Boxer & Petersen, 1986). The onset of puberty brings about hormonal changes that make the child feel “different.” Unfortunately, parents often overlook these changes, which precludes their ability to respond appropriately to their child. In turn, children are ambivalent toward their parents’ affection, guidance, and directives.

The onset of puberty and the accompanying cognitive changes accelerate adolescents’ struggle for individuation (Mazor & Enright, 1988) and create role confusion for both parent and child. This makes the potential for parent-early adolescent conflict high, and the affective climates relatively negative (Flannery, Montemayor, Eberly, & Torquati, 1993). A recent meta-analysis by Laursen, Coy, and Collins (1998) concluded that, within adolescence, conflict frequency is highest in early adolescence. One naturalistic study of early adolescents’ conflict with parents and siblings reported a rate of 2 conflicts every three days, or 20 per month (Montemayor & Hanson, 1985). During the same time that the number of daily conflicts between parents and their early adolescent children increases (compared with preadolescence), declines occur in the amount of time they spend together and in their reports of emotional closeness (Larson & Richards, 1994). Conflict is especially
frequent and intense between mothers and early adolescent daughters (Collins, 1990).

**Middle Adolescence**

Middle adolescence is a time of transition. Middle adolescents are more comfortable with formal operational thinking than their younger counterparts (Piaget, 1970) and progress to a higher stage of conventional moral reasoning (Kohlberg, 1969). However, they may not use these abilities in all situations. Middle adolescents also move from "mutual role taking," where they had conflict over obedience and autonomy, toward the ability to integrate parents' view, but they are not quite there yet (Selman, 1980). Although perspective-taking abilities are improving, the need for individuation also continues to increase during middle adolescence. As such, there is conflict between recognition of the autonomous self and parental views, with peers being the chief socializing agent (Mazor & Enright, 1982). During middle adolescence the frequency of parent-adolescent conflict decreases, but the intensity of these conflicts peaks (Laursen et al., 1998).

At this phase, adolescents' self-perceptions are more abstract and they understand contradictions among the facets of their self-concept, and their overall self-esteem rises (Harter, 1990). Moreover, middle adolescents are at the pubertal apex. Parents notice the physical changes and expect more mature behavior from their children. Parents also know they should respond differently to their children, but are not quite sure how (Boxer & Petersen, 1986). Middle adolescents do not want to be
seen as immature children who can not understand their parents’ point of view (Laursen & Collins, 1988). Because parents are not accustomed to “listening to reason” and middle adolescents have had little practice articulating reasonable arguments, this phase of role re-negotiation typically involves negative/non-supportive statements (Flannery et al., 1993), with conflicts initiated equally by parents and children (Vuchinich, 1987). In short, middle adolescence is characterized by awkward, but well-intentioned, attempts at role-negotiation and adjustment in the parent-adolescent relationship.

**Late Adolescence**

Like middle adolescents, late adolescents have increased potential for formal operations ability (Piaget, 1970). Moreover, they may have had enough practice with abstract reasoning that they actually appear competent and cooperative during their interactions with their parents. Their newly acquired communication competence could lead adolescents to listen attentively and respond cooperatively, all the while thinking of a way to do what they want to do despite their parents’ concerns.

Advances in role-taking ability parallel these advances in cognitive reasoning. Late adolescents are firmly into the “social-conventional” role-taking stage and compare their parental behavior with societal norms (Selman, 1980). There is less destructive conflict when parents’ behavior reflects the willingness to accept a symmetrical role relationship, which is normative at this stage (Laursen & Collins,
1988). At this time, children can balance their need for autonomy with their need for interdependence (Selman, 1980), which promotes the final stages of role re-negotiation and compromise (Laursen & Collins, 1988). Both parents and adolescents integrate each other's views (Mazor & Enright, 1988).

This increased symmetry resolves many conflicts from previous levels of individuation. Nonetheless, conflict over day to day issues remains common because late adolescents define issues such as cleaning up their room as personal issues, while parents typically view the same issues as within parental jurisdiction (Smetana, 1988). Relatively mature late adolescents are likely to challenge parents who dictate rules or overlook their rights.

**The Impact of Parenting Style on Adolescent Development**

The quality of parent-child exchanges and shared decision-making contribute to the development of adolescents' competencies that are more or less compatible with autonomous, responsible behavior. These competencies include increased role taking skills, advanced ego development and identity exploration. More mature levels of these individual competencies are associated with parent-adolescent relationships marked by behaviors that encourage both individuation (holding and expressing autonomous views, being one's own person) and connectedness (feeling a bond with other family members).

An extensive literature on socialization practices and their effects provides
consistent evidence that parental warmth, inductive and nonpunitive discipline techniques, and consistency in child rearing are each associated with positive developmental outcomes in children (Maccoby & Martin, 1983). Since the early 1970’s, this constellation of parenting practices has come to be known as an “authoritative” parenting style, one of the three prototypic styles of parenting identified by Baumrind (1971). Children who are raised in authoritative homes score higher than their peers from “authoritarian” or “indulgent” homes on a variety of measures of competence, achievement, and social development, self-perceptions, and mental health (Maccoby & Martin, 1983). Several studies have applied Baumrind’s model of parenting styles to explain variations in patterns of adolescent development, including academic achievement, psychosocial development, behavioral problems, and psychological symptoms (e.g., Baumrind, 1991; Lamborn et al., 1991) and these reports find that adolescents, like their younger counterparts, benefit from authoritative parenting.

The threefold parenting style typology based on Baumrind’s framework and expanded upon by Maccoby and Martin (1983) into a fourfold typology can be briefly summarized as follows. In this scheme parents are classified into groups based on the intersection of two dimensions: acceptance/involvement/responsiveness and strictness/supervision/demandingness. In turn, each of the four parenting styles is associated with the tendency to use specific forms of parenting techniques and to
endorse a particular set of values. Authoritarian parents are those who are low on acceptance but high on strictness. Authoritarian parents’ demands on their children are not balanced by their acceptance of demands from their children. Although it is understood that children have needs that parents are obligated to fulfill, authoritarian parents place strict limits on the allowable expression of these needs by their children. Techniques used by authoritarian parents include stating demands in the form of orders and making rules without discussing them in advance, or arriving at them by a negotiation process with their children. Parents attach strong value to the maintenance of their authority, and suppress any efforts their children make to challenge it. When children misbehave, moderately severe punishment techniques (often physical) are likely to be employed.

In contrast, authoritative parents are those who are high on both acceptance and demandingness. Children of authoritative parents are required to be responsive to parental demands, and authoritative parents accept a reciprocal responsibility to be as responsive as possible to their children’s reasonable demands and points of view. Authoritative parents expect mature behavior from their children and set clear standards. When necessary, these parents use commands and sanctions to enforce rules, yet they encourage the child’s independence and individuality. The rights of both parents and children are recognized. Authoritative parents have an increased tendency to use discipline techniques such as inductive reasoning, acknowledgement
Parents labeled as indulgent/permissive by Baumrind are those who take a tolerant, accepting attitude toward the child's impulses, including sexual and aggressive impulses. They use few punishment techniques, avoid asserting authority or imposing restrictions, make few demands for mature behavior (e.g., manners or performing chores), and allow children to make their own rules. Thus, indulgent parents are high on acceptance but low on demandingness.

Neglectful parents, the category of parents added by Maccoby and Martin (1983), are those that are low on both acceptance and demandingness. The neglectful parenting style consists of setting relatively few expectations for the child, having little involvement with the child, and having a rejecting, unresponsive, parent-centered attitude.

Lamborn et al. (1991) compared high school students who perceived their parents to have an authoritative, authoritarian, indulgent or neglectful parenting style on four sets of self-reported outcomes: psychosocial development, school achievement, internalized distress, and problem behavior. They reported numerous differences among adolescents' outcomes as a function of parenting styles. Specifically, adolescents from authoritative homes scored highest, and adolescents from neglectful homes lowest, on the majority of indices of adjustment. Adolescents in both the authoritarian and the indulgent group showed a mixture of positive and
negative outcomes. Adolescents from authoritarian homes scored reasonably well on measures of school achievement and deviance but relatively poorly on measures of self-reliance and self-conceptions. whereas adolescents from indulgent homes scored relatively poorly with respect to school engagement, drug and alcohol abuse, and school misconduct, but relatively well on measures of social competence and self-confidence. In general, adolescents’ perceptions of parenting style were not found to vary as a function of adolescent age, gender, ethnicity, or family background.

Steinberg, Lamborn, Darling, Mounts, and Dornbusch (1994) conducted a 1-year follow-up of the above adolescents to determine whether the observed differences are maintained over time. The results of this short-term follow-up indicated that many of the differences observed in the initial cross-sectional analyses were either maintained or increased over time. As a result, over the 1-year period, the adjustment gap between adolescents from authoritative and neglectful homes widened.

The longitudinal analyses indicated over-time stability in most of the advantages of adolescents being reared in authoritative families with only two exceptions: academic self-conceptions, which improved, and school misconduct, which declined. Hence, Steinberg et al. (1994) concluded that the benefits of authoritative parenting during the middle adolescence years are largely in the maintenance of previous levels of high adjustment, rather than in the continued
development of competence.

A similar pattern of stability was found among adolescents from authoritarian homes, with one important exception. While the disadvantages to adolescent self-confidence associated with authoritarian child rearing were maintained over time, youth from authoritarian homes showed significant increases in internalized distress over the one-year period. Steinberg et al. (1994) suggest that the increased levels of psychological and somatic distress reported by these adolescents are tied to their continued exposure to a home environment that is psychologically overpowering and increasingly developmentally inappropriate.

The adolescents from indulgent homes were found to continue to display a psychological and behavioral profile that is mixed. These adolescents are described as being well adjusted but particularly oriented toward their peers and social activities. Indulgently reared adolescents became more positive over the year in their academic self-conceptions and reported less somatic distress, but at the same time they showed significant declines in school orientation and significant increases in school misconduct.

It is in the case of neglectfully reared adolescents where the clearest evidence of the negative impact of parenting on adolescent adjustment during the high school years was seen. These adolescents showed continued declines, with sharp drops in work orientation and school orientation, and significant increases in delinquency and
alcohol and drug abuse. This pattern suggests that these adolescents are on a downward trajectory characterized by academic disengagement and problem behavior.

The results of the Steinberg et al. (1994) study are important, not only in outlining the impact of parenting style on adolescent development and adjustment, but because its longitudinal nature gives increased credence to the results from the original study where all the measures were based on adolescents’ self-reports. Thus, the longitudinal design provides evidence that the impact of parenting style on adolescents’ outcomes holds even after controlling for initial group differences. The analytic strategies applied in this study provide indirect evidence that authoritative parenting actually precedes—rather than accompanies or even follows from—adolescent adjustment. Because one can not randomly assign adolescents to different parenting styles, this indirect evidence is important. Nonetheless, these results do not rule out the possibility that well-adjusted adolescents also provoke authoritativeness in their parents. The bi-directional view of socialization (e.g., Bell, 1968) would argue that this causal process is also operating. What the results from Steinberg et al.’s (1994) study provide is evidence that the correlation between adolescent adjustment and parenting style is not solely due to the effects that children have on parents. At least some of it is due to the impact that parents have on their children.
Even so, when interpreting these results, we must keep in mind that all of the measures were derived from adolescents' self-reports. There were no independent measures of parenting style or adolescent functioning employed in this study. Thus, the argument can still be made that adolescents who perceive their parents to be authoritative also perceive themselves to be better adjusted. Shared method variance is certainly a limitation of the study, but this does not negate the significance of their results.

Mechanisms Underlying the Impact of Parenting Style on Adolescent Development

These correlational findings leave open the questions of how associations between variations in parenting style and manifestations of internalization and adolescent development come about. Traditionally, the mechanisms proposed to underlie the relative success of authoritative parenting over the other parenting styles in promoting internalization of societal standards have emphasized the cognitive processes induced in the child by these different discipline styles. For example, attribution theorists such as Lepper (1983) argue that authoritative parents are successful because they provide just enough pressure to induce conformity, a condition that fosters internalization by making it necessary for a child to attribute his or her compliance to internal motivation or personal desire. Similarly, authoritarian parents are seen to be less successful in fostering internalization because they apply too much force and thus their children are forced to attribute their own compliance to
external causes rather than to personal motivation. Social learning theorists, on the other hand, argue that what is important to consider when evaluating different forms of discipline is the extent to which they make contingencies clear to the child (e.g., Cheyne & Walters, 1970). According to this view, authoritative parenting is more effective than other forms of discipline because it provides children with the knowledge they need to understand the relationship between their behavior and their parents' reaction to that behavior. With this knowledge in hand, children can then learn what the attributes the parents wish them to possess actually are. Similarly, the constructivist approach to the effectiveness of disciplinary methods (e.g., Applegate, Burke, Burleson, Delia, & Kline, 1985; Mancuso & Handin, 1985) considers authoritative parenting to be more effective because it provides children with information that they can use to change their construction or schema of an event and thus learn more socially acceptable patterns of behavior.

Another traditional approach, while recognizing the importance of cognitive processes, also implicates the affective processes induced in the child by various discipline styles when attempting to understand their relative effectiveness. Perhaps the most detailed account of the combined effects of cognitive and affective processes in the mechanism underlying discipline effectiveness comes from Hoffman (e.g., 1970, 1982). Hoffman proposes that power assertive techniques interfere with children's internalization of societal standards because they arouse anger and hostility.
in the child which make the child resistant to the parents' wishes and unwilling to comply. In addition, power assertive techniques (used primarily by authoritarian parents) keep the source of the message salient and thus makes it less likely that the child will attribute it to the self than if the source were less salient. In contrast, authoritative parenting, particularly that which includes an emphasis on the negative effects of the child's misdeed on others (other-oriented induction), is more effective because it develops the child's empathic capacities and induces negative feelings from which the child cannot escape even when the socialization agent is not present. Cognitively, other-oriented induction includes sufficient material to heighten awareness of wrongdoing, suggests a possible means of reparation for misdeeds, and facilitates accurate generalization to new contexts.

Several other mechanisms have been proposed to underlie the relative effectiveness of different parenting styles. One is that parents' child-rearing behaviors provide models of different patterns of social responsibility and concern for others. Authoritative parents exemplify socially responsible, caring behavior, whereas neglectful parents model self-absorption and low responsibility for the welfare of others (Baumrind, 1991). Another possibility is that the various parenting styles differ in the amount of direct instruction they provide to produce differentially effective skills for autonomous, responsible behavior. Grotevant and Cooper (1986) proposed that parents who encourage both individuation and connectedness advance the
development of capabilities for more socially responsible, competent behavior. In this respect, parent-child relationships may provide continuities between childhood learning and the new demands of adolescence and adulthood that facilitate the integration of past and future roles. A third suggestion is that sensitive and responsive parental treatment of children and adolescents may engender positive emotional bonds that make the values and behaviors of parents more salient and attractive to adolescents. Research findings indicate that adolescents' perceptions of warmth and security in relationships with parents are correlated positively with self-confidence, exploration of issues related to identity, and comfort in interactions with others (Jackson, Dunham, & Kidwell, 1990). These findings imply that the characteristically warm, accepting relationships in authoritative families may increase the likelihood of positive parental influences on adolescents (Darling & Steinberg, 1993). The possibilities outlined here are not mutually exclusive (Collins et al., 1997).

Adolescent socialization is facilitated by certain parental behaviors, but the operative processes must also include dynamic properties of relationships between parent and child that foster the adolescents' desire or willingness to be influenced (Darling & Steinberg, 1993).

The Grusec and Goodnow (1994) Model of Discipline Effectiveness

Grusec and Goodnow (1994) argue that there are problems with both the evidence for the differential effectiveness of particular discipline techniques used by
parents with different parenting styles and with the proposed mechanisms underlying their differential effectiveness. In their reconceptualization of discipline effectiveness they point out a number of problems with the past view of differential effectiveness as a simple function of the particular discipline strategy used, and propose an expanded formulation of the discipline process. Grusec and Goodnow argue that the traditional approaches ignore the impact of a number of different variables on the effects of parenting actions. In particular, they remind us of the importance of taking the characteristics of the child into consideration when attempting to account for differential discipline effectiveness. Bell’s (1968) finding that parental discipline methods were determined by the temperament of the child, with difficult children forcing stronger interventions in the form of power assertion, is cited as evidence. In addition, they dispute the implication of the traditional model that a given parent uses one predominant style of disciplinary intervention. According to this model, authoritarian parents would use the same amount of punishment regardless of the situation, while authoritative parents would always use more reasoning and negotiation. Grusec and Goodnow (1994) present the results of a number of studies that seem to indicate that mothers in fact do not use a single style when dealing with their children’s misbehavior. Instead, they argue that mothers vary their discipline practices according to the nature of the particular social standard that the child has violated (Grusec & Kuczynski, 1980; Trickett & Kuczynski, 1986; Zahn-Waxler &
For example, a combination of power assertion and reasoning is used in response to antisocial acts such as lying and stealing, while reasoning alone is used in response to failure to show concern for others (Grusec, Dix, Mills, 1982) and in response to violations of social conventions (e.g., bad table manners; Trickett & Kuczynski, 1986). Power assertion alone is elicited by high arousal behavior such as rough and tumble play (Trickett & Kuczynski, 1986).

In their reconceptualization of the discipline process, Grusec and Goodnow (1994) offer an expanded formulation of both the relevant factors (beyond the type of discipline used) influencing discipline effectiveness and the processes underlying differential effectiveness. The child is given a new and central focus in both of these domains. Discipline effectiveness is no longer completely determined by parents through their choice of the specific discipline technique to employ. The child, in this new model, is an active and equally important participant in the discipline process. According to Grusec and Goodnow (1994), any discipline situation includes two sets of behaviors—the child’s misdeed and the parent’s response, and two individuals—the child and the parent. It is the variables they see as associated with each of these four components that represent the factors they consider to be crucial when evaluating discipline effectiveness: the nature of the misdeed; the nature of the parental discipline; the nature of the parent administering the discipline; and the characteristics of the child that is to be its recipient.
Variables associated with each of these four categories of relevant factors are presumed to impact on the process of discipline effectiveness via their influence on the child’s information processing capabilities and subsequent internalization. According to the Grusec and Goodnow model, in order for discipline to be effective and internalization to occur a) the child must perceive the parent’s message accurately and see it as appropriate, b) the child must be motivated to comply with the parent’s message, and c) the child must feel that the message has not been imposed but rather has been self-generated. What is a crucial determinant of discipline effectiveness in this model is that the child evaluates the parental discipline as appropriate and accepts it as a legitimate method of regulating his/her behavior. In this model, no one approach of discipline is considered overall to be the most effective. It is the child who determines which discipline is effective given the particular situation. This reformulation requires that parents be flexible in their disciplinary reactions, matching them to the child’s perceptions of and reactions to the conflict situation: Effective parenting involves sensitivity to the child’s emotional state and cognitions.

**Applying the Grusec and Goodnow Model of Discipline Effectiveness to Parenting During Adolescence**

Grusec, Goodnow and Kuczynski (2000) reiterate the arguments presented above and maintain that a significant shift is required to understand the process of socialization and discipline effectiveness. Yet, they find that there has been little
movement away from the traditional models. The Grusec and Goodnow (1994) model of discipline effectiveness remains to be tested empirically. Yet, it seems that this model would be particularly suited for assessing the effectiveness of parental interventions during the adolescent period. As we have seen, adolescence is a period associated with an increased tendency for children to question their parents' authority and reject parental messages. While adolescents' cognitive and social development may assist them in accurately perceiving their parents' messages, their increase in autonomy and the more symmetrical nature of parent-adolescent relationships may decrease their willingness to accept these messages. Already, evidence exists that lends credence to the claim that adolescents use information beyond the specific type of discipline being used in their evaluations of the appropriateness of their parents' discipline interventions. For example, the nature of the misdeed, that is, whether it involves moral, social conventional, or personal issues, is seen to influence children's evaluations of discipline effectiveness, because children are thought to vary their perceptions of the appropriateness of a specific discipline in accordance with the nature of the misdeed (Smetana, 1988).

Smetana, Schlagman, and Adams (1993) have shown that even preschool children distinguish between morality and social convention when asked to evaluate naturally occurring and hypothetical transgressions. The preschool children were found to treat moral transgressions as more serious, more deserving of punishment,
and more wrong (independent of whether or not authority figures had made rules governing these moral issues) than conventional transgression. This differential view of moral and social conventional issues remains throughout childhood; even among adolescents it is agreed that parents should retain authority and the right to exert discipline over moral issues and, to a lesser extent, over conventional issues (Smetana & Asquith, 1994). Where parents and adolescents come to disagree is on which transgressions fall within the conventional domain (Nucci, 1981; Smetana & Berent, 1993). With increasing age, adolescents redefine certain conventional transgressions as transgressions that revolve around personal issues and therefore fall outside the realm of parental authority, whereas parents continue to view these transgressions as conventional issues. When parents and children disagree about the reasons why an act is wrong (i.e., in what domain the misdeed is classified), it has been shown that they are more likely to disagree on what type of discipline, if any, is appropriate and effective (Smetana & Berent, 1993). Thus, as children grow into adolescents, parents who are to be effective disciplinarians need to learn not only what the best form of discipline is in any given situation, but also which domains of their child’s behavior are closed to all forms of discipline.

Another feature of adolescent development that may be important to consider when attempting to understand parent-adolescent conflict and the effectiveness of parenting intervention during this period is the adolescents’ mood states. There is
evidence that suggests that adolescence is a period of emotional volatility. In general, studies that have assessed mood at frequent intervals have found that adolescents report greater extremes of mood and more frequent changes of mood, compared with preadolescents or adults. Also, a number of large longitudinal studies concur that negative mood increases in the transition from preadolescence to adolescence (see Buchanan et al., 1992, for a review). Grusec and Goodnow (1994) include the mood state of the child as one of the critical factors that needs to be explored when studying discipline effectiveness. This may be particularly true during the period of adolescence.

The dissertation presented here examines exactly this question: What is the impact of the adolescents' mood state on the outcomes of mother-adolescent conflict? It will be argued here that the adolescents' mood, at the time of being disciplined, is a crucial factor influencing the child's evaluation and acceptance or rejection of the parental intervention being offered. The literature providing evidence for mood disruptions during adolescence, and the literature documenting the effects of mood on information processing, will be presented here as preliminary evidence for this claim.

Mood Disruptions During Adolescence

The claim of a link between adolescence and extremes of mood (especially negative) is perhaps one of the oldest and most enduring parts of the general view of adolescence as a difficult period. Hall (1904) included emotional volatility as one of
the basic features of the "storm and stress" of adolescence. One of the more interesting lines of research on this topic in recent years has involved studies using the Experience Sampling Method (ESM: e.g., Larson & Richards, 1994). Also known as the "beeper method," this research entails having adolescents carry beepers throughout the day and having them record their thoughts, behavior and moods when they are beeped at random times. This method has provided an unprecedented look into the daily lives of adolescents, including how their moods vary in the course of a day and how these variations compare with the moods recorded by preadolescents and adults using the same method.

The results of this research indicate that there is truth to the notion that adolescence is a time of greater mood disruptions, at least in a Western society. Adolescents report experiencing extremes of mood (positive as well as negative, but especially negative) more often than their parents do (Larson & Richards, 1994). They report feeling self-conscious and embarrassed two to three time more often than their parents and are also more likely to feel awkward, lonely, and ignored. Adolescents also report greater mood disruptions when compared with preadolescents. Larson and Richards (1994) found that the proportion of time experienced as "very happy" declines by 50% during the period between 5th-grade and 9th-grade.

Larson and Richards (1994) saw this increase in mood disruptions as due to cognitive and environmental factors rather than pubertal changes. They noted that
there is little relationship in their data between pubertal stage and mood disruptions. Rather, they claim that adolescents’ newly developed capacities for abstract reasoning allow them to envision hidden and more long-lasting threats to their well being. Larson and Richards also argued that the experience of multiple life changes and personal transitions during adolescence (such as the onset of puberty, changing schools, and beginning to date) contributes to adolescents’ mood disruptions. However, Larson and Richards emphasized that it is not just that adolescents experience potentially stressful events, but how they experience and interpret them, that underlies their mood disruptions. Even in response to the same or similar events, adolescents report more extreme and negative moods than younger children or adults.

In addition to the ESM studies, other studies have found negative moods to be prevalent in adolescence, especially for girls. In their review of adolescent depression, Peterson et al. (1993) found that adolescents have higher rates of depressed mood than either children or adults. Petersen et al. analyzed 14 studies of non-clinical samples of adolescents and concluded that over one third of adolescents at any given time were reporting sufficient symptoms of depression to be classified as experiencing a depressed mood (scoring high enough to be predictive of future depression).

Adolescents vary in the degree to which they experience mood disruptions. A variety of factors have been found to make mood disruptions more likely, including
low popularity with peers, poor school performance, and family problems such as marital discord and parental divorce (Petersen et al., 1993). The more negative life events that adolescents experience, the more likely they are to experience mood disruptions (Brooks-Gunn & Warren, 1989). Keeping in mind individual differences, overall the results of research indicate support for the view that adolescence is more likely than any other age period to be a time of emotional difficulty.

Disruptions in adolescents' mood state are certain to impact on parent-adolescent relationships. Repetti (1996) found evidence that perceived failure experiences at school increased the likelihood of aversive parent-child interactions after school. She examined the short-term changes in mood and behavior following what are common, yet distressing, events for 4th-6th-grade children (preadolescents and early adolescents). The normative stressors investigated were social and academic failure experiences that occur at school, such as being teased by another child or making a mistake in class. Children were found to report increases in both their own and their parents' aversive behavior on evenings when they experienced problems at school. In particular, children described themselves as more demanding and difficult with their parents and described both their mothers and fathers as more negative and disapproving. Repetti found that when children experienced more problems at school (academic and/or social) they reported more depression and anxiety while at school and a spillover of negative mood from school to home. Reports of more failure events
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at school were associated with significant increases in negative mood from morning to evening home mood ratings. In addition, there is a trend in Repetti’s data to suggest that children may be more prone to behave aversively with mothers than with fathers when the children were under stress. Repetti suggests that perhaps children generally make greater efforts to control their behavior and affect when with their fathers and that the mother-child relationship may be more reactive to daily child stressors because children are more inclined to turn to mothers to express their distress when they have been hurt or feel humiliated.

The combined results of the studies reviewed here provide clear evidence for increased mood disruptions during adolescence and the consequent negative impact of these mood disruptions on parent-adolescent conflict.

Effects of Mood on Information Processing

Traditionally, studies in the domains of emotion and cognition were largely independent of one another. The last two decades, however, have brought a growing awareness that feelings and thoughts are strongly interactive in shaping human experience. Significant advances have been made in understanding how mood states influence memory and other cognitive processes (for a review see Ellis & Ashbrook, 1989). For example, numerous experimental studies have demonstrated that negative moods create easier access to negative memories relative to positive memories and, similarly, positive moods create easier access to positive memories (see Blaney, 1986;
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Ellis & Moore, 1999, for reviews). In addition, it has been found that mood enhances the perception and processing of mood congruent material (e.g., Ingram, Smith, & Brehm, 1983), that is, people in negative moods selectively attend to negative aspects of another’s behavior and, consequently, are more likely to respond negatively to the other. On the other hand, people in positive moods predominantly attend to positive behaviors and, as a result, are more likely to respond positively. Positive mood has been shown to improve creative problem solving (e.g., Estrada, Young, & Isen, 1994) and to systematically change the strategies used in decision-making tasks (e.g., Estrada, Isen, & Young, 1997). A brief review of the literature on mood influences on information processing will be presented here.

Mood and memory. Research on the relationship between mood and memory has developed rapidly over the past 20 years. Many of the accounts of the effect of mood on cognitive processes emphasize the role of mood as a cue that facilitates either the encoding (Bower, 1981) or the retrieval of similarly valenced material in memory (see Blaney, 1986; Ellis & Moore, 1999 for reviews). This phenomenon is known as mood-congruent memory. The key notion here is that broad valence categories, such as positive and negative, serve as organizational categories in memory; therefore, the presence of a positive or negative mood makes similar material either more readily encoded or more accessible in memory and thus facilitates memory for such material (Aspinwall, 1998). In mood-congruent encoding,
material is learned better because the affective tone of that material is consistent with an individual's current mood state. Mood-congruent retrieval is defined as increased recall for material that is of the same affective tone as the mood experienced (Blaney, 1986). Although support for mood-congruent encoding has been more reliable, retrieval effects have been frequently obtained (Ellis & Moore, 1999). Blaney (1986) conducted a narrative review of the role of affective states such as elation (positive mood) and depression (negative mood) on what is remembered. Blaney concludes that the support for the phenomenon of mood-congruent memory is “impressive in its size, consistency, and diversity (pg. 229).” A more recent review using meta-analytic techniques conducted by Matt, Vazquez, and Campbell (1992) also concludes that mood-congruent memory is displayed by individuals who are induced to experience negative and positive moods, as well as by individuals who are prone to negative moods naturally due to clinical depression. Similarly, Ellis and Moore (1999) conclude that, in general, mood-congruent effects occur reliably under most mood states, as well as in clinical, subclinical, and induced depression, although mood-congruent memory with clinical anxiety is less clear.

In summary, mood-congruent memory is a robust effect that occurs with most mood states. Given the extreme volatility of adolescents’ mood states, their memory is perhaps more likely to be shaped by their mood state than that of the general population. Adolescents’ encoding and retrieval of mood-congruent material could
substantially shape the way they perceive and evaluate their mothers’ actions and
statements during disagreements. Thus, the influences of adolescents’ mood states on
memory are important to consider when attempting to evaluate parenting
effectiveness using the model presented by Grusec and her colleagues (1994; 2000).

Mood and attention. Research in this area has focused on the informational
properties of mood. Here, mood functions as a source of information that alerts the
individual to safe or unsafe conditions. This information, in turn, has motivational
implications: negative mood prompts people to examine their environments carefully
in order to identify the threat that is creating the negative mood, while a positive
mood tells people that they can relax and reduce attention to their surroundings
because all is well (Aspinwall, 1998). Extensions of these ideas have advanced the
prediction that negative moods motivate people to engage in more extensive,
systematic information processing in order to deal with the potential threats, whereas
positive moods are thought to decrease the motivation to engage in systematic or
careful processing. Instead, positive mood is predicted to prompt the greater use of
heuristic forms of information processing or simply to result in less information
processing of any kind in the absence of specific goals (see Schwarz & Clore, 1983).

Research by Bless et al. (1996) provides evidence to support the notion that
positive moods are associated with heuristic processing strategies (use of general
knowledge structures or scripts), whereas negative moods are associated with
systematic elaboration of information (for an overview, see Clore, Schwarz, & Conway; 1994). They propose that if the situation is characterized as benign, individuals may rely on their general knowledge structures (or scripts), which usually serves them well. In contrast, if a situation is characterized as problematic, relying on one’s usual routine may be maladaptive, and attention to the specifics of the situation is called for. Such a mood-dependent reliance on general knowledge structures versus the data at hand would direct individual’s attention toward the information that is presumably most adequate, given the nature of the situation signaled by their affective states.

In two separate experiments, Bohner, Crow, Erb, and Schwarz (1992) were able to show that positive (as compared to neutral or negative) moods reduced participants’ motivation to systematically process both content information and contextual cues. In the first experiment they demonstrated that, in a field setting, the behaviors of participants who had been induced into a good mood were less likely to reflect differences in message content than the behaviors of neutral mood participants. In this experiment, participants were 78 adult users of a public telephone. During the time allocated for the experiment, any person who found the phone booth empty, and thus did not have wait in line, was included in the study. In order to induce a positive mood, a coin was placed near the coin slot of the phone for half of the participants to find. Participants were approached by a female confederate who asked for permission
to advance in line and use the telephone first, telling the subjects in the 'strong message' condition that she had to contact her boss, who would only be in the office for another few minutes. In the 'weak message condition', the confederate's request was not accompanied by any reason. Each subjects' behavioral reaction was coded as either complying or not complying with the confederate's request. The results of the study revealed that, as predicted, the behavior of subjects in a neutral mood, but not that of subjects in a positive mood, was strongly influenced by message content. For subjects in the neutral mood condition, 92% were found to comply with the confederate’s request when given a strong message, but only 39% complied with the weak message. For subjects in the positive mood condition, the effect of message strength was much less pronounced, with 75% complying with the strong message and 50% complying with the weak message.

The second study was designed to replicate and expand on these findings. In this study, subjects were recruited to participate individually in two seemingly independent experiments. In the alleged 'first study', a positive or negative mood was induced through bogus feedback about test results. While the subjects were waiting for the 'second study' to begin, an interaction with a confederate was staged. The confederate asked subjects to donate money to a beneficial cause and supported this request with either one strong or one weak argument. Simultaneously, the confederate provided a salient context cue that was either strong or weak, namely a list of
previous donors, containing few or many names. Whether or not a subject donated money was recorded. The results indicated that a higher proportion of subjects in a positive mood than of subjects in a negative mood contributed to the collection. This main effect however was qualified by a three-way interaction of mood, content cue, and context cue. The behavior of subjects in a good mood was not affected by either variations in message content, or by variations in the non-content cue. For subjects in a bad mood, on the other hand, both the main effects of argument strength and the consensus cue, as well as their interaction, were found to significantly affect their behavior. Thus, under negative mood, the proportion of donors was greatly reduced when a weak argument was presented in combination with a weak consensus cue, as compared to when the conditions with either a strong argument or a strong cue were presented.

In summary, these findings indicate that how we feel may strongly influence how we react to attempts to persuade us. The reported studies demonstrate that a complex interplay of recipients' mood, message quality, and contextual cues determines persuasive success in everyday settings. The specific quality of the message being delivered may be scrutinized more closely when the recipients of the message are in negative moods than when they are in neutral or positive mood states. In contrast, the information held in general scripts might be more relevant when the recipient is in a positive mood. Applying these ideas to the Grusec and Goodnow
model of discipline effectiveness, this literature would lead one to expect that parent's specific messages and actions may be more salient in determining adolescents' acceptance or rejections of those messages when the adolescent is in a bad mood. Yet, adolescents' general scripts for acceptance/rejection of parental messages may be more predictive of outcomes when the adolescent is in a good mood.

**Mood and decision-making.** The study of mood effects on cognitive processes has gone beyond the domain of memory and attention and has also been considered in the realm of decision-making processes. There is evidence in the adult literature that mood plays a significant role in a variety of judgment and decision-making processes (Deldin & Levin, 1986; Estrada et al., 1997; Forgas, 1989). Research on decision-making in adults suggests that mood impacts decision processes in terms of: 1) decision efficiency, 2) estimates of probability, and 3) whether more objective information or more social information is used to make the decision. Adults in positive, as opposed to neutral or negative moods, make decisions more efficiently, in that they decide faster, discard more irrelevant information and do not repeatedly consider information already considered once (Estrada et al., 1997; Forgas, 1989). Adults in positive, as opposed to neutral or negative moods, are likely to be more optimistic in estimating probabilities (Deldin & Levin, 1986). Finally, adults in positive, as opposed to neutral or negative moods, are more likely to consider
objective information as opposed to more social or interpersonal information (Forgas, 1989) when making decisions. These results were found to apply to both adult males and females. However, these effects may or may not be similar in adolescents because of changing cognitive abilities and differences in affective experience. For example, younger adolescents experience more general negative mood than do children or adults (Larson, Lampman-Petraitis, 1989).

Adolescents' judgements and decisions about the appropriateness of parental interventions are a crucial aspect of the Grusec and Goodnow (1994) model of discipline effectiveness. Thus, it is important to examine the impact of mood on adolescent decision-making processes during disagreements with their parents. Traditionally, researchers interested in adolescent decision-making have typically focused on the changing cognitive abilities of teenagers. Ganzel (1999) was the first to design a study to investigate the impact of mood on adolescents' decision-making processes and to test whether or not findings similar to adults would hold for adolescents. Ganzel asked adolescents of various ages (range 12-18 years) and adults (range 21-46 years) to make a decision about employment by selecting one of four possible part-time jobs. Jobs varied on four categories of social information (parents' opinion, whether friends worked there, supervisor's personality, and reputation of job with peers) and four categories of objective information (access to free merchandise, wages, schedule/hours, and help with future career). Equal number of participants
across all of the age ranges were asked to make this decision while induced to experience a positive, neutral, or negative mood. Having participants watch a 7-minute video clip of a comedy sketch (positive), an instructional film on back pain (neutral), or a documentary on the Vietnam War (negative), was used to induce mood states. There were approximately equal numbers of males and females in each of the conditions.

Ganzel (1999) found that mood impacted on the decision efficiency of female adolescents, but not that of males. Females in negative moods took longer to make a decision (a finding similar to that in adults) and discarded more information (a finding opposite to that in adults) than females in neutral or positive mood states. It is not clear why the decision efficiency of males was unaffected by mood. One possibility is that the males and females reacted differently to the negative mood induction (war video). Females may have responded to this video with a negative mood, as was intended, but males may have reacted with excitement rather than a negative mood. Ganzel (1999) explored the effectiveness of the mood manipulation separately for males and females and concluded that the mood induction technique was successful for both males and females. Ganzel (1999) suggests that one possibility may be that while females are affected more by the valence of mood, males may be impacted more by arousal and recommends that future studies incorporate both the valence and intensity of moods in their mood manipulations.
Estimates of probability were not influenced by mood. Instead, age and gender were found to be the relevant factors in predicting probability estimations. The youngest females, (7th and 8th grade females) were less optimistic about their chances of obtaining their preferred job than the rest of the sample. This may reflect what we know about diminished self-confidence in early adolescent females. Mood state was not found to influence the type of information (social vs. objective) focused on when making the decision. Teens spent equal amounts of time considering both social and objective information categories, whereas adults considered objective information for longer than social information. This may reflect the greater sensitivity of teens than adults to social influence.

These findings suggest that when considering the decision skills of teenagers, as is the case with adults, we need to take into account the role of mood, at least in the case of females. This study investigated the impact of mood on one step of the process—how people evaluate information presented to them. Additional influences of mood state may be revealed, for males as well as females, if one considers more naturalistic decision tasks (like the ones adolescents must make when evaluating and deciding to accept or reject a specific parental message). For example, mood may well affect how adolescents frame their choices, the kinds of alternatives they themselves generate, and the dimensions used to evaluate those alternatives.
Mood and problem-solving. It is now well recognized that positive mood leads to greater cognitive flexibility and facilitates creative problem solving across a broad range of settings (see Ashby, Isen, & Turken, 1999, for a review). These effects have been demonstrated with adults as well as adolescents, and in different types of tasks (results with adolescents will be focused on). Three types of tasks will be reviewed here. First, in word association tasks, positive mood was found to increase adolescents' verbal fluency, and adolescents in the positive mood condition gave more category words and more unusual examples of the category than did adolescents in the neutral mood condition (Greene & Noice, 1988). Secondly, positive mood has been shown to improve performance on several tasks that are used as indicators of creativity or innovative problem solving. In one of these tasks, the candle problem (Duncker, 1945), a person is given a candle, a box of tacks, and a book of matches and is asked to attach the candle to the wall so that it will burn without dripping wax on the table or the floor. To solve the problem, the person can empty the box of tacks, tack the box to the wall, and then use the box as a platform for the candle. Thus, the box must be used in an unusual and creative way in order to complete the task successfully. This involves cognitive flexibility. Adolescents (eighth graders) experiencing positive moods were found to perform significantly better than controls on this task (Greene & Noice, 1988). Finally, in an integrative bargaining task, Carnivale and Isen (1986) found that positive mood increases the likelihood that
people will pursue a problem-solving approach that leads to improved outcomes for both parties. To reach an optimal agreement in such a task, people must make tradeoffs of differing values, see new possibilities, think innovatively, and reason flexibly about how these tradeoffs might be made. This study was done with adults and not adolescents, and one can only assume that the findings would also hold for adolescents.

The literature indicating that positive mood is associated with the promotion of cognitive elaboration and flexibility seems to be in sharp contrast to the literature reviewed in a previous section on mood and attention, suggesting that positive moods are associated with heuristic processing strategies (Bless et al., 1996). Ashby et al. (1999) are careful to point out that positive mood does not improve performance on all tasks or under all conditions. Instead, they point out that in many studies they reviewed, positive mood has been found to increase cognitive flexibility only when the situation is neutral or positive in emotional content, or at least minimally involving and engaging. Ashby and his colleagues suggest that positive mood enables flexible thinking about topics people want or have to think about, even if these may contain some negative content. There is evidence that positive mood can promote attempts to cope with negative events or information, and studies have shown that under conditions of positive mood, people are less defensive and can better focus on needed negative information (Aspinwall, 1998). Ashby et al. conclude that unless the
negative information is useful or important, people in positive moods will most likely not absorb it carefully, which may explain the finding that positive mood increases the tendency to rely on global heuristics. However, when the information is useful or important, positive mood facilitates careful processing of negative as well as positive information.

If Ashby et al. (1999) are correct, then adolescents who are in a positive mood state prior to the initiation of a disagreement with their mothers should be at an advantage for finding creative solutions to the conflict. This, of course, assumes that adolescents do indeed view the negative contents of these disagreements as important. Adolescents entering a disagreement in a positive mood state are predicted to be less defensive and more motivated to pursue outcomes that would be beneficial to both themselves and their mothers. This, in turn, should make the conflict experience less aversive to both parties and may increase the effectiveness of parents' strategies.

Mood and Parent-Child Relationships

The influence of mood on information processing has also been considered, to a limited extent, specifically as it applies to the parent-child interaction literature. For example, psychologists studying the development and maintenance of deviant parent-child interaction patterns (e.g., Belsky, 1984; Dix, 1991; Jouriles, Murphy, & O’Leary, 1989; Patterson, 1982) have also investigated the role of parental mood effects on information processing in determining parenting behavior. These models of
parenting behavior suggest that parents' mood may influence what parents remember about their children's past behaviors and which aspects of a child's current behavior the parent will focus on, thereby influencing how parents think and react to their children's ongoing behavior. Other models focus on the impact of mood on parents' attributions (e.g., Patterson, 1982) or on parents' thresholds for child misbehavior (e.g., Schaugency & Lahey, 1985).

I would like to argue that, similarly to parental mood states, the children's own mood has direct effects on their reactions to discipline. Theoretically, it seems logical that the child's mood would have the same effects on information processing during parent-child conflict interactions as those outlined above. That is, children's mood state should influence 1) what memories are activated during the conflict episode, 2) what aspects of the parent's current behavior the adolescent attends to, 3) their judgement and decision-making processes, and 4) their ability to solve problems creatively. Unfortunately, studies examining the role of children's mood state in their reactions to and evaluations of discipline are scarce.

However, a few studies do exist that provide evidence for the importance of taking the child's mood into consideration when evaluating discipline effectiveness. For example, Lay, Waters, and Park (1989) in a series of two studies illustrated that 4-year-old children exposed to a positive mood induction complied more, and with shorter latencies, to maternal compliance demands than children induced into
negative moods. In a separate study, they showed that maternal responsiveness
spontaneously induces a positive mood in their children. Thus, responsive discipline
techniques, such as those used by authoritative parents, may be more effective in
promoting child compliance because they induce a positive mood. In contrast, it can
be speculated that harsher forms of discipline, such as those used by authoritarian
parents, may be less effective because they create a negative mood state in the child.
The results of the Lay, Waters, and Park (1989) study illustrate the complex nature of
the relations between child’s mood state and discipline effectiveness. Their finding
that children in a positive mood state were more compliant than children in a negative
mood state, although there were no differences in the parental strategies used in the
two conditions, suggests that mood functions to alter children’s reactions to a given
parental request. At the same time, their finding that more responsive forms of
maternal behavior are able to alter children’s mood states implies that we need to take
into account bi-directional effects.

Work conducted by Kochanska and Aksan (1995) provides further evidence
that mother-child mutually positive mood is important to take into consideration when
studying child compliance and internalization. In a study of preschoolers,
motivationally distinct forms of child compliance, mutual positive mood, and
maternal control strategies (observed in 3 control contexts) were examined as
correlates of internalization (assessed using observations of children while alone with
prohibited temptations and maternal ratings). They found that in dyads which frequently shared positive mood, the children were more likely to comply wholeheartedly (i.e., to comply by endorsing and embracing the maternal agenda as their own) with their mothers and to be more “internalized” while alone with the prohibited toys. In addition, their data suggest that mother-child shared positive mood in past control encounters acts as an antecedent and predictor of the child’s future compliance.

In summary, these studies provide preliminary evidence that children experimentally induced into a positive mood state are more compliant (Lay et al., 1989), and that mother-child interactions inherently characterized by mutually positive mood leads to an increase in children’s tendency to comply wholeheartedly with their mother’s requests (Kochanska & Aksan, 1995). It seems that positive child mood is conducive to compliance and renders discipline more effective. Although, to date, these relationships have not been specifically examined with respect to parent-adolescent interactions, it is likely that similar mood effects would be found during this developmental period as well.

Role of attributions as mediators of the effect of mood on discipline effectiveness. The research reviewed above provides evidence that children’s mood states do indeed influence parent-child interactions and the effectiveness of parental interventions. What remain to be explained are the mechanisms underlying the impact
of mood. If the Grusec and Goodnow (1994) model is correct, one would predict that a likely basis for the observed effects of mood on child compliance would be at the level of children's evaluations and acceptance of the maternal discipline techniques. That is, a reason why children are more compliant with maternal demands when in an atmosphere characterized by a positive mood state would be that the children in this state are more likely to evaluate the discipline as appropriate and acceptable.

It is postulated that a large part of whether or not a particular discipline intervention is deemed acceptable by the child depends on the child's estimate of the parent's intention (Loevinger, 1959). It is assumed that even the most gentle and theoretically effective discipline technique would be rendered ineffective if the child interprets the parent's actions as expressing malicious intent. For example, parents who attempt to reason with their children with the intention of avoiding power assertion, but their children attribute intentions of interference and continuous fault-finding, would not be expected to be any more successful at promoting compliance and internalization than parents who had resorted to the use of a theoretically less effective form of discipline.

The detrimental effects of children's negative attributions about their parent's behavior is demonstrated by the work of MacKinnon-Lewis (e.g., MacKinnon-Lewis, Lamb, Arbuckle, Baradaran, & Villing, 1992; MacKinnon-Lewis et al., 1994). These studies examined the relation between maternal and filial attributions and the
aggressiveness of their interactions in 104 mothers and their 7-9-year-old sons. Mothers were asked to make attributions about their children's intention in six hypothetical accounts of mother-child interactions in which the outcomes for the mothers were clearly negative, but the child's intent was unclear. Similarly, children were asked to make attributions about their mother's intentions in response to eight stories depicting interactions between a boy and his mother in which the outcomes for the boy were negative but the mother's intentions were ambiguous. They found that both maternal and child attributions were significantly related to their coercive interactions. The most aggressive dyads were those in which both mothers and sons perceived hostile intent in the other. However, it is important to note that children's attributions about their parents' behavior made a unique contribution to the prediction of the child's coerciveness, even after controlling for maternal coerciveness towards the child.

Similarly, a study conducted by Grace, Kelley, and McCain (1993) provides evidence that negative attributions made by mothers and teenagers (7th-12th-grade) are related to mother-adolescent conflict. Participants in their study included 115 mothers and 122 adolescents. Participants completed standardized measures of parent-adolescent conflict and the Mother-Adolescent Attribution Questionnaire (MAAQ). The MAAQ, a measure designed for use in the reported study, is a modified version of the Marital Attribution Questionnaire (MASQ; Fincham, Beach, & Nelson, 1987).
The MAAQ presents eight hypothetical conflict situations about teenagers' curfew, chores, homework, leisure activities, appearance, choice of friends, time spent with friends, and spending money. There are two forms of the MAAQ, one for adolescents, which assesses the beliefs about the causes of negative mother behaviors, and a corresponding instrument for mothers, which assess attributions about the negative teenage behaviors in the vignettes. For example, teenagers respond to the item "My mother set my curfew too early." The results revealed that parent-adolescent conflict correlated with mothers' and teenagers' negative attributions. Focusing on the adolescent, conflict was positively correlated with the belief that the mother's negative behavior was intentional, selfishly motivated, and blameworthy. These negative (dispositional) attributions for the mothers' intentions were associated with greater retaliation and conflict escalation.

When explaining the behaviors of others, there is a tendency for people to underestimate the impact of situational forces and overestimate the role of dispositional factors. This is known as the fundamental attribution error (FAE). There is evidence to indicate that when judging the behaviors of others, judges seem prepared to discount even highly salient situational factors and tend to disregard external, situational constraints (e.g., Gilbert & Malone, 1995). As we have seen, holding people personally accountable for their actions (rather than recognizing the impact of situational constraints on their actions) has serious implications for conflict.
escalation (Grace et al., 1993). Thus, it is important to understand why and when people are most likely to commit the FAE.

Why does the FAE occur? Cognitive processing strategies seem to play a major role in the commission of the FAE (Gilbert & Malone, 1995). All things being equal, observers tend to pay selective attention to the most conspicuous, accessible, and easily processed information in the focus of their attention—the actor—and often fail to adequately process less salient, yet critically important situational information (Taylor & Fiske, 1975). This may suggest a two-step process in attributions: Judges first assume dispositions, a natural “unit relation” between the actor and his or her behavior, and may only correct for situational pressures subsequently, if at all (Gilbert, 1991). If the capacity or motivation to systematically process information is somewhat impaired, the adjustment for external constraints may be compromised, leading to the FAE. Processing situational information that qualifies internal causality requires a more systematic processing approach and may not always be undertaken (Gilbert & Malone, 1995).

When is the FAE most likely to occur? If it is true that likelihood of committing the fundamental attribution error increases as level of information processing decreases, it is likely that people's mood state can influence the tendency to make the FAE. Forgas (1998) presents evidence that indicates that transient moods do have a marked influence on people’s tendency to commit the FAE. In the first of a
series of 3 experiments, he showed that happy persons were more likely to form dispositional inferences and less likely to systematically process all the stimulus details. This led people in a happy mood to make dispositional attributions for a character’s actions, even when they were provided with information indicating that the characters’ actions had been coerced and were not freely chosen. People in happy moods were more likely to commit the FAE, because they did not recognize and give due weight to external causes, especially when the actor’s behavior was highly salient and captivating. In the second experiment he was able to replicate this finding in a realistic field setting using unobtrusive procedures. In the final experiment, he demonstrated that these findings were not due to different arousal states, and further established that positive mood reduced and negative mood improved memory performance, consistent with the predicted processing consequences of good mood (heuristic processing) and bad mood (systematic processing) and their effects on the FAE. Using an analysis of confidence ratings, Forgas (1998) revealed that people were unaware of their attributional shortcomings, suggesting that mood effects on processing and inferences occurred at an unconscious level. These results are consistent with the memory and attention literature reviewed in a previous section (see above).

The information reviewed with respect to the FAE, would lead one to predict that adolescents in a good mood prior to engaging in a conflict episode with their
mothers would be more likely to commit the FAE and interpret mothers’ behaviors as more dispositional (intentional and blameworthy). This, in turn, would increase the likelihood of conflict escalation and decrease the overall discipline effectiveness. It is important to note that two competing predictions have been made with respect to the influence of positive mood on the outcomes of mother-adolescent conflict. The prediction based on the FAE literature is in stark contrast to the prediction made based on the literature indicating that positive mood facilitates creative problem solving and motivates people to find mutually beneficial resolutions to conflict. It is unclear which of these two literatures is more relevant to the domain of mother-adolescent conflict and discipline effectiveness. This is an empirical question that remains to be answered.

In summary, the research reviewed examining the influence of mood on parent-child interactions suggests that there is some evidence for: 1) the direct impact of the children’s mood state on discipline effectiveness (e.g., Lay et al., 1989); 2) the direct impact of negative child attributions on conflict escalation and decreased discipline effectiveness (Grace et al., 1993) and 3) the direct impact of mood on the attribution process (Forgas, 1998). Thus, it seems plausible that attributions may mediate the otherwise direct effect of mood state on discipline effectiveness alluded to in the literature. The role of adolescents’ attributions for their mothers’ behavior as mediators will be examined in this study.
Mood and Mother-Adolescent Conflict: The Present Research

Simply put, parenting during the adolescent period is challenging, especially for mothers who continue to be primarily responsible for negotiating their children’s day to day behavior (Laursen et al., 1998). For most families, early adolescence brings with it increases in the frequency of parent-adolescent conflict and adolescent emotional volatility. Adolescents’ negative experiences at school are found to cause disruptions in their moods that have spill-over effects in the home environment and increase the likelihood of parent-adolescent conflict (Repetti, 1996). This climate makes it difficult for parents to know how to parent effectively. Traditionally, effective parenting has been simply determined as a function of parenting style. Evidence has been presented above to show that an authoritative parenting style is the most effective and results in an array of positive child outcomes. Yet, more contemporary approaches, such as those presented by Grusec and her colleagues (Grusec & Goodnow, 1994; Grusec et al., 2000), argue for expanding our view of discipline effectiveness to include a host of new variables. Research has been reviewed that suggests that adolescents’ mood state would be a crucial variable to consider when evaluating parenting efficacy during this developmental period. According to the Grusec and Goodnow model, only parents with the ability to tailor their parenting strategies to the adolescents’ emotional and cognitive states (sensitive parenting in the situation) would be successful in having adolescents accept their
parenting interventions, and thus render their parenting effective. The dissertation research presented here is an exploratory study examining the relative importance of authoritative parenting style, adolescent mood state, and sensitive parenting in the situation as determinants of perceived parenting efficacy during adolescence.

This study posed methodological challenges for two reasons: 1) because day-to-day conflicts arise spontaneously and these conflicts are unlikely to manifest themselves naturally in laboratory settings; and 2) because we were interested in examining the impact of adolescents' extreme mood states on the conflict process. In order to do this in the laboratory successfully we would have had to design a procedure to elicit an argument between the adolescent and his or her parent, in addition to manipulating the adolescent’s mood state prior to the initiation of the disagreement. These two things combined made studying actual parent-adolescent conflicts impractical for many reasons. First of all, ethical concerns are raised when one considers purposely eliciting conflict and/or inducing a negative mood state. To ask adolescents to experience a negative mood state prior to having them initiate a conflict with their mothers seemed to increase the burden to participants beyond ethical limits. Secondly, there is much literature highlighting the difficulties that arise when attempting to induce mood states experimentally (see Martin, 1990; Parrott, 1991, for reviews). Experimentally induced mood states are often short-lived and difficult to sustain for the time needed to collect the research data. In addition, as we
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saw in Ganzel's (1999) study, adolescent male and females may respond differently to mood induction techniques. Therefore, it was decided that for this exploratory study we would not attempt to experimentally induce mood states.

Instead, adolescents were interviewed about disagreements they had had with their mothers in the recent past under a variety of mood conditions. This choice of retrospective self-report methodology can be supported by a number of findings from the literature. For example, Comstock (1994) argues that there is an extremely high correlation between specific self-reports of behavior and actual behavior under certain recall circumstances. Comstock (1994) argues that strong relationships between accounts and actual behavior are expected when participants are provided with detailed instructions designed to stimulate memory processes and asked to script specific accounts of conflictual interactions with their parents. These recommendations were followed in this study and incorporated into the interview protocol. In addition, Gonzales. Cauce, and Mason (1996) provide evidence that when parent and adolescent perceptions of parent-child conflict differ, adolescents' reports are more consistent with independent observations than parents' reports. Irrespective of the relative merits of self-reports, it is important to remember that what is crucial in determining parenting efficacy in Grusec and Goodnow's (1994) model is adolescents' perception of the parental message and their willingness to accept it. Within this framework, adolescents' perceptions of the disagreement are what matter,
whether or not these are an accurate representation of what happened. We are most interested in the adolescents’ subjective reality. Adolescents’ accounts of their own and their mothers’ actions during the conflict episode served as the basis for all the data collected in this study. Nevertheless, we recognize that the retrospective self-report methodology employed places constraints on any claims that can be made from the findings of this study.

Early adolescents were interviewed about the every-day disagreements they had with their mothers. Adolescents reported on arguments that were initiated when they were in a neutral, bad, or good mood. Data from these interviews were used to examine differences in the content and process of mother-adolescent conflict as a function of the mood states the adolescents were in prior to the initiation of the arguments with their mothers. More specifically, we examined the impact of adolescents’ mood states on: 1) the adolescents’ and mothers’ behavior during the arguments; 2) adolescents’ attributions for their mothers’ intentions and assignment of blame; 3) adolescents’ goals during the disagreement; 4) adolescents’ feelings of control relative to the mother during the disagreement; and 5) adolescents’ perceptions of how effectively their mother handled the disagreement. Below is provided the rationale for looking at each of these variables and the hypothesized relationship with mood states.
Behavior. The impact of adolescents' moods on their own and their mothers' reported behavior during the disagreement was examined, because a bad mood was expected to prime adolescents to focus on negative aspects of the disagreement and to act more harshly towards their mothers. Adolescents who act harshly and with resistance towards their mothers were predicted to be more likely to promote conflict escalation and thus elicit harsher behavior on the parts of their mothers. This conflict escalation was predicted to decrease the likelihood that the adolescents would perceive their mothers' behaviors as appropriate and acceptable, thus rendering the mothers' attempts less effective.

In contrast, a good mood was predicted to direct adolescents' attention to focus on positive aspects of the disagreement and to motivate them to find more creative solutions to the conflict with mutually satisfying outcomes. It is predicted that this motivation would be reflected in the adolescents' behaviors and, in turn, the mothers' behaviors.

Adolescents' behavior during bad and good mood arguments will be compared to determine if indeed a bad mood is more likely to elicit more resistant adolescent behavior (between group analysis). Mothers' behaviors in good and bad mood arguments will also be compared, in order to determine if the adolescents' preexisting mood states influence the manner in which mothers react to their children (between group analysis). In addition, adolescents' and mothers' behaviors in the
emotionally laden\(^2\) arguments (good and bad mood arguments) will be compared to their behaviors during the neutral arguments to see how conflicts occurring under more extreme mood states compare to routine everyday arguments (within group analysis). Examining correlation patterns will allow us to determine if mothers' and adolescents' behaviors during the argument are in fact interrelated, and if mothers' and adolescents' behaviors are predictive of the conflict outcomes.

**Attributions.** The literature reviewed above indicates that children's attributions for their mothers' behaviors are important in understanding the process of conflict escalation and decreased discipline effectiveness (Grace et al., 1993). In addition, evidence was presented that mood state may directly impact on the attribution process (Forgas, 1998). Thus, we decided to pay close attention to attributions in this study. In order for discipline to be rendered effective according to the Grusec and Goodnow (1994) model adopted here, adolescents must perceive the mothers' strategies as acceptable and appropriate. It is unlikely that maternal behavior that is perceived by the adolescent to be attributable to hostile intent could ever be considered appropriate and acceptable. Adolescents' attributions for their mothers' intention and assignment of blame were conceptualized as mediator variables in this study.

Adolescents engaging in arguments with their mothers when already in a bad

\(^2\) The term 'emotionally laden' will be used throughout this document to distinguish between the bad and good mood arguments (as a group) and the neutral arguments.
mood were predicted to make more hostile attributions for their mothers' intentions and blame their mothers more for the disagreement than adolescents in a neutral mood state prior to the disagreement. No specific predictions were made as to how the attributions of adolescents in good moods would compare to those of adolescents in a neutral or bad mood (see contradictory effects of good moods reported above). Irrespective of mood state, adolescents who made more hostile attributions for their mothers' intentions and assigned their mothers more blame were expected to have more negative conflict outcomes as compared to adolescents who made more benign attributions.

In addition to comparing adolescents' attribution patterns in neutral, bad, and good mood arguments, correlational analyses will be conducted to explore the mediating role of attributions.

**Goals.** A number of studies have explored the kinds of social goals adolescents have in conflict interactions with peers. For example, Jarvinen and Nicholls (1996) identified a variety of goals that adolescents have in peer relationships, including intimacy, nurturance, dominance, leadership, popularity and avoidance. They found that affiliative goals were related to satisfaction in peer relationships and to beliefs that considerations of others' feelings led to social success. In contrast, they found that dominance goals were negatively related to satisfaction with peer relationships and positively related to beliefs that being tough
led to social success. Lochman, Wayland, and White (1993) examined the social goals of aggressive and nonaggressive adolescent boys in hypothetical peer disputes. Aggressive adolescents were more likely to report dominance goals, which were related to low levels of prosocial behavior and peer rejection. Conversely, nonaggressive boys were more likely to report affiliation goals. In general, these studies suggest that goals are motivational aspects of adolescents' behavior that relate to a variety of conflict outcomes.

Despite the attention given to goals in the area of adolescents' peer relationships, very little attention has been devoted to the study of adolescents' goals in parent-child interactions. Limited attention has been given to parents' goals in the socialization literature (e.g., Hastings & Grusec, 1998; Dix, 1992; Kuczynski, 1984), but to the best of my knowledge no published work has focused specifically on adolescents' goals in parent-child interactions.

Unpublished work (Liiva, 1999; Lundell, 2000) provides some information on adolescents' goals in parent-adolescent conflict situations. In this study, 30 late adolescents were interviewed about their goals during specific disagreements with their mothers and were asked to rate their levels of anger and satisfaction with the conflict outcomes. Six types of adolescent goals were identified: autonomy, dominance, instrumental, relationship, emotional needs fulfillment, and avoidance. Relationship goals represent a desire to take the mothers' feelings and concerns into
consideration and find a mutual satisfying outcome to the conflict. Relationship goals were found to relate to lower levels of adolescents’ anger and higher levels of satisfaction with the outcome of the disagreement. Conversely, dominance goals represent a desire to assert control over the mother’s actions, feelings or thinking, and these goals were related to higher levels of adolescents’ anger and lower levels of satisfaction with the outcome of the disagreement. These results suggest that adolescents’ goals may be an important variable to take into consideration when evaluating the outcomes of parent-adolescent conflict.

Adolescents’ goals were included in this study for exploratory purposes only. There is insufficient published research that allows us to make specific predictions as to how adolescents’ mood states may have an impact on their goals in conflict situations with their mothers. Yet, intuitively, it seems plausible that adolescents in a bad mood prior to engaging in a disagreement with their mothers would be more likely to adopt a more self-centered goal (such as a dominance goal) than a goal that requires the adolescent to take the mother’s perspective into consideration (such as a relationship goal). In contrast, a good mood may make it easier for the adolescent to find a mutual satisfying resolution to the conflict and thus foster the adoption of a relationship-centered goal.

Adolescent goals will be analyzed in a similar fashion as the other variables in this study. That is, a between groups analysis will be conducted to compare the goals
that adolescents report when talking about arguments initiated when experiencing a bad mood, to those reported by adolescents interviewed about arguments that were preceded by a good mood. A within-group analysis will be conducted to compare the goals reported by adolescents during neutral arguments to those that they report in the emotionally laden arguments (good and bad moods). Finally, a correlational analysis will be conducted to explore relationships between adolescents’ goals and the other measured variables. Correlation patterns will be explored separately for neutral and emotionally laden arguments.

Feelings of relative control. One of the key developmental tasks of adolescence is achieving autonomy, that is, gaining the freedom to carry out actions on one’s own behalf while maintaining appropriate connections to significant others such as parents (Hill & Holmbeck, 1986). In order to secure this autonomy, the once asymmetrical parent-child relationship needs to become more balanced. In the context of mother-adolescent conflict, adolescents’ perceptions of how willing their mothers are to accept a more symmetrical role relationship may be reflected in their feelings of relative control during the disagreement. Adolescents in this study were asked to rate how much power and control they perceived themselves to have over what was happening in the disagreement. In addition, they were asked to rate how much power and control they perceived their mothers to have. The difference between these two ratings was calculated to determine adolescents’ feelings of relative control.
It was predicted that adolescents who perceived themselves to be dominated by their mothers during the disagreement (i.e., low feelings of relative control) would be less likely to view their mothers’ behaviors as appropriate and acceptable and this would be associated with less optimal conflict outcomes. It was predicted that this relationship would hold regardless of whether adolescents were in a neutral, bad, or good mood argument prior to the initiation of the disagreement. However, the adolescents’ mood states may influence how likely it is that adolescents would allow their mothers to dominate them. Adolescents in a bad mood prior to the disagreement are expected to attempt to exert more control over the disagreement and to be less likely to allow their mothers to dominate them.

Feelings of relative control will be included as a variable in all between group, within group, and correlational analyses.

Perceptions of effectiveness of the mothers’ handling of the disagreement. Adolescents’ perceptions of parenting efficacy are the dependent variables of interest in this study. Multiple measures were used to assess parenting efficacy including: how the adolescents were feeling at the end of the disagreement; adolescents’ evaluations of how well their mothers understood them; how fair adolescents perceived their mothers’ behavior to be; how satisfied adolescents were with the outcome of the disagreement; and how long it took before the adolescents felt like things returned to normal between them and their mothers. These measures were intended to assess how
appropriate or acceptable the adolescents perceived the mothers’ handling of the situation to be.

Mood was hypothesized to have direct and indirect effects on these outcomes. It was predicted that adolescents in a bad mood would be more likely to perceive all forms of maternal intervention as less appropriate and acceptable, whereas adolescents in a good mood would generally be more receptive to all maternal interventions (except in the case of extremely harsh maternal interventions). Mood was predicted to indirectly affect the outcomes by influencing adolescents’ behaviors, attributions, goals, and feelings of relative control in the manner outlined above.

Outcomes of the bad and good mood arguments will be compared, as will be the outcomes of the neutral and emotionally laden arguments, to determine if adolescents’ mood states directly influence the outcomes. To explore possible indirect effects of mood on adolescents’ perceptions of how effectively the mother handled the situation, two different models to be tested were postulated. The first model tests the mediational role of attributions. This model presumes that aroused mood states influence the conflict process by altering the adolescents’ attributional processes (model 1). Extreme mood states, particularly bad moods, are predicted to increase the tendency for adolescents to make negative attributions for the mothers’ intentions and to blame the mother more for the argument. In turn, negative attributions and more blaming of the mother were predicted to be associated with more negative conflict
outcomes and less parenting efficacy. The second model tests whether mood has an indirect effect on the conflict outcomes by shaping the adolescents' behaviors, goals, and feelings of relative control during the disagreement (model 2). The impact of these variables will be explored individually. This model predicts that extremely negative mood states would be associated with more resistant adolescent behavior, an increase in adolescents' self-centered goals, and an increased sense of relative control. Resistant behavior and self-centered goals were predicted to impact negatively on the conflict outcomes, whereas adolescents' feelings of empowerment were predicted to improve conflict outcomes.

**Mother-Adolescent Conflict: Looking Beyond the Impact of Mood**

The primary focus of this research is to explore the impact of adolescents' mood states on the processes and outcomes of mother-adolescent conflicts. However, in addition to this, we explored the ability of two competing models to explain the data collected and predict parenting efficacy. This first of these competing models, in line with a more traditional approach, places adolescents' perceptions of their mothers' parenting style as the key determinant of parenting efficacy. This model postulates that it is adolescents' perceptions of their parents' parenting style, and not adolescents' mood states, that predicts adolescents' perceptions of their mothers' handling of the situation (model 3). It was predicted that adolescents who perceive their mothers to have an authoritative parenting style would have more positive
conflict outcomes than adolescents who perceive their parents to have any other type of parenting style. Direct and indirect effects of parenting style on the outcomes will be explored. Indirect effects will be explored in terms of how authoritative parenting influences adolescents' behavior, attributions, assignment of blame, goals, and feelings of relative control. Authoritative parents are highly accepting and demanding of their children, accept a reciprocal responsibility to be responsive to their children's demands, and encourage the child's independence and individuality (Maccoby & Martin, 1983). Thus, it is predicted that adolescents who perceive their mothers to be authoritative would behave less harshly, make more benign attributions for their mothers' intentions, blame their mothers less for the disagreement, have more relationship-centered goals, and have higher feelings of relative control, thereby leading to more positive conflict outcomes.

The final model to be tested places mothers' specific behavior during the conflict in question at the heart of parenting efficacy. This model, in line with Grusec and Goodnow's (1994) approach, predicts that it is the mothers' ability to take their adolescents' point of views into consideration and to sensitively tailor their strategies accordingly that will determine the adolescents' perceptions of and reactions to the mothers' handling of the situation (model 4). Again, direct and indirect effects of mothers' specific actions during the disagreement on the conflict outcomes will be explored. Sensitive mothers who are able to take their adolescents' mood state and
point of view into consideration are expected to have better behaved adolescents, who view their mothers' interventions as being well-intentioned and less blameworthy, adopt a less self-centered goal, and feel an increased sense of relative control. This in turn is expected to increase their adolescents' willingness to accept their interventions as appropriate and fair, rendering the parents' attempts effective.

In summary, four potential models predicting conflict outcomes have been proposed. Two of these models view adolescents' mood state as a key determinant of conflict outcomes, one places adolescents' perceptions of their mothers as having an authoritative parenting style at the forefront, and the final model proposes that mothers' sensitive parenting during the disagreement is the key. These four models are not mutually exclusive. There is great overlap among the variables in each of the models. The difference between these models is in terms of what variable is placed at the first step of the model. Each of these models will be explored separately for the neutral and emotionally laden arguments. It is expected that a continuum of arousal will be represented within the neutral arguments, allowing us to explore how more normative fluctuations in mood may impact on the conflict process and outcomes. The determination of which of these models best fits the data collected will offer insight into the factors determining adolescents' perceptions of parenting efficacy.
Method

Participants

Sixty-one early adolescents (30 female and 31 male), ranging in age from 11.5 to 14.5 years (mean age = 12.82 years, SD = 0.93), participated in the study. Adolescents came from predominantly middle-class families with a variety of ethnic backgrounds (Central European N=18, United Kingdom N=17, Canadian N=8, American N=6, Asian N=5, South American N=4, Jamaican N=1, South African N=1, Middle East N=1), but all adolescents were born in Canada and had lived in Canada for the majority of their lives. All the adolescents were currently attending school in Toronto (20 in grade 6, 23 in grade 7, 12 in grade 8, and 6 were interviewed during the summer before beginning grade 9). The majority of adolescents lived in intact families with both their biological parents (N=53), 6 adolescents came from divorced families where the biological parents shared custody, and 2 adolescents lived only with their biological mother. Thirty-seven adolescents were first-borns or only children, while 24 adolescents had older siblings.

Procedure

Potential participants were recruited from a central database maintained by the Child Study Center at the University of Toronto. The researcher was supplied with a list of 120 families who had a child between the ages of 11.5-14.5 years. It was possible to contact only 82 (68%) of these families with the phone numbers that were
listed in the database. Of these 82 families contacted, 61 (74%) agreed to participate.

Families were contacted by telephone and the study was described first to the parent and then, if the parent consented, to the potential adolescent participant. All parents agreed to have the study described to their adolescent child. Parents and adolescents were informed that the study was being conducted by a psychology Ph.D. student at the University of Toronto.

The study was described to the families as an investigation of the everyday disagreements that adolescents have with their mothers. Families were told that we were interested in the adolescents’ perspective, since most of the research thus far had focused on the parental perspective. They were also told that we were focusing on disagreements with mothers rather than fathers, because the literature suggests that mothers are more frequently involved in disagreements with their adolescents over minor everyday issues than are fathers. The families were informed that the study involved a one-time meeting with the researcher where the adolescents would be interviewed about some recent disagreements they had had with their mother and asked to fill in some questionnaires. They were told that the study would take approximately 2 hours and that participation was completely voluntary. In order to minimize the burden to the participants, the researcher offered to conduct the study in the participants’ homes rather than have them travel to the university. Only 7 participants decided to come to the university.
Parents provided consent for their adolescents' participation and the adolescents themselves were asked to assent to their participation (a copy of both the parental consent form and adolescent assent form has been provided in the Appendix). Prior to being interviewed, the adolescents were asked to provide some background demographic information and to fill in a questionnaire measuring their perceptions of their mothers' parenting style. Adolescents were interviewed about two recent disagreements they had had with their mothers. The first disagreement reported was one that was preceded by a neutral mood state; the second was one preceded by an aroused mood state. Half the participants (randomly assigned) reported on arguments that were preceded by a bad mood, and the other half on arguments preceded by a good mood. Adolescents were asked to rate their mood states just prior to the initiation of the disagreement, right after the beginning of the disagreement, and at the end of the argument, using a visual analogue scale, and to answer some questions using 7-point Likert scales. At the end of the interview, adolescents were encouraged to ask any questions they might have had about the study.

All the interviews were audiotaped and transcribed per verbatim. A scheme was devised to code the interview transcripts. Adolescents' neutral and emotionally laden interviews were separated to form two independent interviews.

**Measures**

All measures are contained in the Appendix.
Demographics

Adolescents were asked their date of birth, age, gender, and grade in school. Ethnic background was obtained by asking the adolescent how long they had lived in Canada and to provide information about where they themselves, their parents, and their grandparents had been born. Family composition and birth order were assessed by asking adolescents if they were currently living with both of their biological parents and to indicate the number of younger and/or older siblings they had. Adolescents were also asked to provide information about their mothers’ and fathers’ highest level of education and their parents’ current occupation. This information was used as an indicator of socio-economic status.

Mothers’ Parenting Style

The Index of Parenting Style (Lamborn et al., 1991) was used to measure adolescents’ perceptions of their mothers’ general parenting style. This questionnaire consists of 19 items that comprise two subscales: acceptance/involvement and strictness/supervision. This questionnaire uses Maccoby and Martin’s (1983) framework, in which family groups are defined by responsiveness (comparable to “acceptance/involvement”) and demandingness (comparable to “strictness/supervision”).

The acceptance/involvement scale measures the extent to which the adolescents perceive their mothers as loving, responsive, or involved (sample items:
"I can count on my mother to help me out if I have some kind of problem"; "When my mother wants me to do something, she explains why"; consists of items #1-10; \( \alpha = .72 \); Lamborn et al., 1991). The strictness/supervision scale assesses parental monitoring and supervision of the adolescent (sample items: "How much does your mother try to know where you go at night?"; "My mother knows exactly where I am most afternoons after school."); consists of items 11-19; \( \alpha = .76 \); Lamborn et al.). For each of these scales, several items are in a true/false format, while others are Likert-scaled: in the formation of the composite indices for acceptance and strictness, items were weighted to adjust for differences in scaling. Scores for each item ranged from 0 to 1. Item scores were averaged such that scores on the involvement and strictness scales also ranged from 0 to 1.

Scores on the perceived acceptance/involvement and strictness/supervision dimensions were used to assign families to one of four groups: authoritative, authoritarian, indulgent, or neglectful. The four perceived parenting categories were defined by computing a median split on each dimension and examining the two variables simultaneously (in line with the procedure used by Lamborn et al., 1991). Authoritative families were those who scored above the median on both perceived acceptance/involvement and strictness/supervision, whereas neglectful families were those scoring below the median on both variables. Authoritarian families were below the median on perceived involvement but above the median on perceived strictness.
Indulgent families were above the median on perceived involvement but below the
median on perceived strictness.

Adolescent Interview Protocol

The same interview protocol was used for both the "neutral" and "emotionally
laden" disagreements. All participants were asked to begin by talking about the most
recent time they were in a neutral mood and then ended up having an argument with
their mother about something they said or did. A neutral mood was defined as the
mood that you would usually be in if you were having a routine day, that is, not a
particularly good day or particularly bad day. After completing the interview for the
neutral mood argument, half the participants discussed a good mood argument and the
other half discussed a bad mood argument. The instruction for the emotionally
aroused arguments added one stipulation: the parents could not be responsible for the
child's mood. This stipulation was added to ensure that the adolescents' mood state
prior to the disagreement with the mother was not confounded with the mothers'
actions. The instructions for the emotionally laden arguments were as follows:

"Was there ever a time when you were in a really good/bad mood for some
reason and then you ended up having an argument with your mother about something
you said or did? Let's begin by talking about the most recent time that happened.
Before we start, I'd like to make sure that the reason you were in a really good/bad
mood before having the disagreement had nothing to do with your parents. Maybe you
were in a really good/bad mood because of something that happened at school, or
with your friends, it could be any reason at all as long as the reason you were in a
really good/bad mood before the disagreement had nothing to do with your parents."

Adolescents were given as much time as necessary to provide an example of
an appropriate disagreement for discussion. The adolescents were also asked to indicate when the disagreement occurred. Once a disagreement had been identified, the interview began. The interview was designed to tap the adolescents’ thoughts and feelings at various points of the disagreement. The adolescents were asked to relive the disagreement they were describing in their heads and to answer all questions the way they would have answered them at the time the disagreement was actually happening. They were told that we were interested in finding out what they were thinking and feeling when the argument was actually taking place, not how they were currently feeling or thinking about it. Throughout the interview the adolescent was prompted to think back to the time of the argument and answer the questions the way she or he would have at the time of the disagreement.

During the interview, adolescents were asked to provide a variety of types of responses. Some questions were answered solely by verbal responses, others required the adolescents to provide a response on a 7-point Likert scale, and others required the adolescents to rate their mood state using a visual analogue scale. Each of these types of measures will be discussed separately below. The full interview protocol can be found in the Appendix (section C).

**Measuring Mood State**

The adolescents were asked to rate their mood state on a visual analogue scale. The scale consisted of a 152mm dashed line with only the two ends marked. The left-
most end of the scale was labeled "extremely bad" and the right-most end of the scale was labeled "extremely good". The midpoint of the scale was not marked. The adolescents were asked to indicate how they were feeling by putting a single vertical mark along the visual analogue scale. The adolescents' mood state was measured in terms of the distance (in millimeters) from the left of the scale. The greater the distance, the better the adolescents' mood state. The adolescents also provided a verbal label for their mood state. A visual analogue scale with minimal labels was used to measure the adolescents' mood states because it was believed to be the best way to reduce response bias and demand characteristics.

The adolescents rated their mood states using the same visual analogue scale on 7 different occasions. Prior to beginning the neutral mood interview, they were asked to practice using the scale, by rating "how you are feeling right now". They then rated their mood state at 3 different points for both the neutral mood argument and for the emotionally laden disagreement. For each disagreement, they rated how they were feeling that day "right before you had the disagreement with your mother (base mood)", "just after the beginning of the disagreement with your mother (start mood)", and "right after the disagreement with your mother ended (end mood)".

**Likert Scale Responses**

Adolescents were asked to respond to six questions using a 7-point Likert scale. These questions are listed below in the order that they were presented. Each
question was preceded by the phrase “Think back to the time of the argument, could you rate on this scale...”:

a) how well you think your mom UNDERSTOOD you at the end of the argument?
   (1= “Did not understand me at all”, 7= “Understood me completely”)

b) who you think is more to BLAME for this disagreement? (1= “All mom’s fault”,
   4= “Equal Blame”, 7= “All my fault”)

c) how FAIR you thought the way your mother handled the disagreement was? (1 =
   “Completely unfair”, 7 = “Completely fair”)

d) how SATISFIED you were with the conclusion of the argument immediately after
   the disagreement ended? (1 = “Completely unsatisfied”, 7 = “Completely
   satisfied”)

e) how much influence and CONTROL you think YOU had over what was
   happening throughout the argument? (1= “No influence whatsoever”, 7=
   “Complete control over the argument”)

f) how much influence and CONTROL you think YOUR MOTHER had over what
   was happening throughout the argument? (1= “No influence whatsoever”, 7=
   “Complete control over the argument”)

Verbal Responses

Adolescents answered a number of questions using verbal responses only.

These verbal responses were audiotaped, transcribed per verbatim, and coded
according to a coding scheme devised by the author. Interviews were coded in a random order, with the restriction that the two arguments reported on by the same adolescent could not be coded sequentially. This was done to decrease the potential for information from the report of one argument to bias the coding of the second argument provided by the same adolescent. The coding scheme was developed from inspection of the responses in the adolescents' interviews. The author coded all of the verbal responses and a research assistant coded transcripts from 20 participants (33%) for reliability purposes. The coding scheme will be explained below. The coding of each construct measured using adolescents' verbal responses will be described individually.

Content of the disagreement. The adolescents' verbal descriptions of the argument were used to code for the content of the disagreement. Disagreement topics were coded using a modified version of Smetana's (1989) disagreement coding scheme. There were 10 possible content categories including chores, physical appearance, personality/behavioral style, homework/academic issues, interpersonal relations, regulation of interpersonal relations, bedtime/curfew, health and hygiene, regulation of activities, and finances. (See Appendix section G (a) for a description of each content category.) Reliability for the content coding was calculated using percent agreement. Overall, the two coders were found to agree on the specific content category 90% of the time. The percent agreements for each of the specific categories
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are: chores (100%); physical appearance (not available, this code was not used in the subset of transcripts coded for reliability purposes; it was only used twice in the whole study); personality/behavioral style (100%); homework/academic issues (89%); interpersonal relations (75%); regulation of interpersonal relations (86%); bedtime/curfew (100%); health and hygiene (100%); regulation of activities (80%); and finances (100%). Content of disagreement was coded solely for descriptive purposes. There were no specific predictions made as to the influence of mood states on the content of disagreements.

Initiation of the disagreement. Adolescents' responses to the question "Think back to the time of the argument, what would you say started the disagreement?" were used to code for the initiation of the disagreement. There were three possible initiation categories: child opposes mother's agenda, mother opposes child's permission initiations, and mother opposes child's agenda. Permission requests were distinguished from other adolescent agendas because they seemed qualitatively different. The descriptions for each of these three types of initiations are provided below.

Child Opposes Mother's Agenda = Disagreement begins when the child is 1) unwilling to accept the mother's request, suggestion, or point of view; 2) child breaks a family rule or agreement; and 3) illustrates his/her opposition in either a direct or indirect manner. (e.g., child refuses to do homework when the mother asks him to, child defies parents and attends a party during a period when she was 'grounded')

Mother Opposes Child's Permission Initiation = Disagreement begins when
the mother is opposed to a permission request made by the child. 
(e.g., child is denied permission to have more than 20 guests at her party, 
child is denied permission to take the subway downtown to go shopping with 
friends)

Mother Opposes Child's Agenda = Disagreement begins when the mother is 
opposed to the child's agenda, suggestion, point of view, assertion, or 
behavior. The opposition can be made in either a direct or indirect manner. 
(e.g., mom is upset that child is watching TV on a sunny summer day, mom 
does not agree with the child's choice of dress for a party)

Reliability for the initiation coding was calculated using percent agreement. 
Overall, the two coders were found to agree on the specific initiation category 85% of 
the time. The reliabilities for each of the three categories are as follows: child opposes 
mother's agenda (84%); mother opposes child's permission initiations (100%); and 
mother opposes child's agenda (80%). Again, the initiation of disagreement was 
coded solely for descriptive purposes. While no specific predictions were made as to 
the impact of mood on who initiated the argument, it was of interest to explore if 
differential initiation patterns emerged.

Adolescents' and mothers' behaviors during the disagreement. Adolescents' 
specific responses to the question “Think back to the time of the argument, what 
effectively happened over the course of the disagreement? Try to remember the best you 
can, what each of you (adolescent and mother) said and did during the disagreement” 
were used, in conjunction with any other pertinent information revealed in the 
transcripts, to code for the mothers' and adolescents' behavior during the
disagreement. The mothers’ and adolescents’ behaviors were coded using 7-point Likert scales.

**Mothers’ behaviors.** The coders’ rating of the mothers’ behavior (as reported by the adolescent) represents the readers’ own assessment of the mothers’ behavior and might or might not be similar to the adolescents’ subjective evaluation of the mothers’ behavior. For example, one adolescent describes his mother’s behavior as being completely unfair (“oh what I thought then was it’s just, she is, she’s being completely unfair) and that his mother was not at all recognizing of his point of view (“Because neither of us then was looking at the entire picture. Like I was looking at what happened to me, and she was looking just at what I did. She didn’t really know the whole story.”). Yet, in the coders’ opinion, the mother handled the situation in a manner that was indicative that she was taking the child’s point of view into consideration and modifying her strategies to match her child’s perceptions, earning her the best possible score (7) for maternal behavior. The coder rated only the mothers’ reported behavior independent of the outcome of the disagreement. In essence, the coder was looking for evidence that the mothers were being sensitive to the adolescents and tailoring their strategies to match the adolescents’ states. (See Appendix section G(c) for full instructions on how to code the mothers’ behavior.) Below are the descriptions of maternal behaviors associated with a rating of 1, 4 and 7:
1= Mother uses excessively harsh/intrusive strategies and/or promotes conflict escalation. There is no evidence that the mother is taking the child’s mood state or point of view into consideration, there is no evidence that she is using the child’s reactions to shape her choice of strategies. Severity of the strategies do not seem match the content of the disagreement.

4= Mother is not excessively harsh, but there is no evidence that she is taking the child’s mood state, point of view, and/or reactions into consideration and there is no evidence that the mother is willing to compromise. Alternatively, a rating of 4 can be given when the mother uses a combination of harsh and sensitive strategies that seem to balance each other out.

7= Mother makes her comments and requests in a gentle manner, she is clearly considerate of the child and/or is sensitive to the child’s mood state and reactions to her behavior, there is evidence that the mother is trying to understand the child’s point of view, and/or the mother acknowledges positive aspects of the child’s behavior/personality, and there is evidence that the mother is willing to compromise with the child in an appropriate manner, however the establishment of a compromise is not necessary for this rating.

Reliability for coding of the mothers’ behavior was calculated using percent agreement, where agreement was defined as the coders giving a rating that was within one point of each other (e.g., rating of 2 from coder A and rating of 3 from coder B would be considered an agreement). Reliability for coding of the mothers’ behavior was found to be 82%.

Adolescents’ behaviors. The adolescents’ behavior during the disagreement was coded in a similar manner. The coders’ rating of the adolescents’ behavior was the readers’ assessment of how difficult the adolescents’ behavior was during the argument. Adolescents were not asked to comment on their own behavior, nor were
they asked to indicate how they thought their mothers perceived their behavior.

Nonetheless, adolescents' often spontaneously made comments about their own behavior (e.g., "I made a big fuss. I knew I was not making it easy for her, but I was angry and I was not going to let it go."). Adolescents were less likely to comment on what they believed their mothers' perceptions of their behaviors were, yet this type of information was present in a minority of the transcripts. Neither of these types of comments was taken into consideration when coding for the adolescents' behavior.

The coder rated only the adolescents' reported behavior, irrespective of the adolescents' interpretation of their behavior and/or the outcome of the disagreement.

In essence, the coder was looking for evidence that the adolescent was open to the mothers' point of view and was not being completely hostile or intrusive. (See Appendix section G (d) for complete instructions). Below are the descriptions of the adolescent behaviors that are associated with ratings of 1, 4, and 7:

1 = child is completely hostile/rude and/or promotes conflict escalation, there is no indication that the child is willing to take the mother's perspective into account, this may be evidenced by the child's attempts to ignore the parent and/or to be controlling of the parent, the child's strategies do not seem to match the content of the disagreement, the child is unable to take any responsibility for their role in the argument.

4 = child is not excessively hostile/rude towards the mother, yet there is no evidence that the child is taking the mother's feelings, point of view, and/or reactions into consideration and there is no evidence that the child is willing to compromise. Alternatively, a rating of 4 can be given when the child uses a combination of hostile and sensitive measures that seem to balance each other out. Please indicate on the coding form if the child receives this rating because
they seem to be unable to confront the parent.

7 = child makes his/her comments and requests in a gentle manner, the child is open to considering the mother’s perspective and/or is sensitive to the mother’s feelings, it is clear that the child is trying to understand the mother’s point of view and that the child recognizes his/her role in the disagreement, and/or there is evidence that the child is willing to compromise with the mother in an appropriate manner, however establishment of a compromise is not necessary for this rating.

Reliability for coding of the adolescents’ behavior during the disagreement was calculated using percent agreement, where agreement was defined as the coders giving a rating that was within one point of each other. Reliability for the coding of the adolescents’ behavior was 77%.

Conflict resolution. Adolescents’ responses to the question “so what would you say marked the end of the disagreement?” were used to code for the conflict resolution strategy that was used. There were 7 possible conflict resolution categories: unresolved/standoff, unresolved/passive, child submission/no acceptance, child submission/with acceptance, maternal submission/no acceptance, maternal submission/with acceptance, and compromise. Please see the Appendix (section G (e)) for complete definitions and examples of each of these codes. Reliability for conflict resolution strategy was calculated using percent agreement. Overall, the coders were found to agree on the specific conflict resolution category only 64% of the time. The specific reliabilities for each conflict resolution strategy were as
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follows: unresolved/standoff (50%), unresolved/passive (not available; this code category was not used in any of the disagreements coded for reliability purposes), child submission/no acceptance (83%), child submission/with acceptance (67%), maternal submission/no acceptance (75%), maternal submission/with acceptance (40%), and compromise (50%). Given that sufficient reliability could not be established on the coding of the conflict resolution category, this measure was dropped from all analyses. It may be that it was impossible to establish adequate reliability for this code because there was no question asking specifically for what strategies were used to end the disagreement.

Attributions. Adolescents' responses to the following three questions were used to code for the adolescents' attributions for their mothers' motivation and behavior: “Think back to the time of the argument.... a) why do you think your mother handled the situation in the way that she did?; b) what did you think your mother's intentions were?; and c) what did you think your mother was trying to accomplish?” The adolescents' attributions for their mothers' motivation and behavior were rated using a 7-point Likert scale. Please see the Appendix (section G (f)) for complete instructions on how to rate the adolescents' attributions. Below are the descriptions of attributions associated with ratings of 1, 4, and 7:

1 = child is only able to make negative attributions for the mother's motivation. all the reasons identified indicate that the child thinks the mother was acting in a self-serving manner and/or not in the interest of the child, the child may or may not think the mother was deliberately trying to hurt him/her,
but it is obvious that the child thinks that the mother was not thinking about him/her.

4 = the child can identify sensible reasons motivating the mother’s behavior, the parent may or may not benefit from the situation, but there is no indication that the child thinks that the mother was acting in a self-serving manner, nor is there any evidence that the child thinks that the mother had his/her best interest at heart. The mother may be seen as simply being task focused.

7 = it is clear that the child sees the mother as acting in accordance with what she believes is in the child’s best interest, if there is any benefit to the mother from the situation it is perceived to be secondary to the potential benefits to the child, the mother’s motivations are seen to be purely benevolent.

Reliability for coding of the adolescents’ attributions for their mothers’ motivation and behavior was calculated using percent agreement, where agreement was defined as the coders giving a rating that was within one point of each other. Reliability was found to be 92%.

**Goals.** Adolescents’ responses to the following three questions were used to code for the adolescents’ goals during the disagreement: “Think back to the time of the argument… a) what did you think was the central issue in this conflict?; b) what was the message you were trying to get across to your mother during the argument?; c) what were your goals during the disagreement, what were you trying to get accomplished?” There were six possible goal categories: relationship (these goals are not exclusively self focused; the focus may be the relationship or be entirely mother-oriented), emotional support (desire for the mother to fill an emotional need), autonomy (expression of independence), dominance (desire to control or change the
mother's actions, feelings, or thoughts), instrumental (desire to obtain the concrete end result over which the disagreement erupted), and avoidance goals (desire to avoid or halt any further interaction and/or confrontation with the mother). (See Appendix section G (g) for more detailed descriptions and examples of each goal category.) For each of the two disagreements discussed in the interview, each goal reported by the adolescent was assigned one of the six goal categories. It was possible that one disagreement contained more than one goal category, but not more than one instance of the same goal category was assigned to the same disagreement. Reliability for the goal coding was calculated using percent agreement. Overall, the coders agreed on the specific goal category 83% of the time. The specific reliabilities for each goal category are as follows: relationship (83%); emotional support (63%); autonomy (100%); dominance (80%); instrumental (100%); and avoidance (89%).

Time to return to normal. Adolescents' responses to the question "Think back to the time of the argument, how long would you say it took before the disagreement blew over and things went back to normal between you and your mom?" were used to code for the impact of the disagreement on the relationship between the adolescents and their mothers. Impact of the disagreement, measured in units of time, was rated on a 7-point Likert Scale. (See Appendix section G (h) for complete instructions on how to code for impact time) Below are the times associated with ratings of 1, 4, and 7:
1= almost immediately, less than 30 minutes

4= up to 24 hours

7= more than a week

Reliability for the coding of the amount of impact of the disagreement on the relationship between the adolescents and their mothers was calculated using percent agreement. Unlike the other Likert scales, here only exact matches on the ratings were counted as an agreement. The reliability for coding of impact measured in terms of time was found to be 87%.
Results

Descriptive Data

Participants reported 59 neutral arguments (two participants reported only an emotionally laden argument), 29 bad mood arguments and 31 good mood arguments (one participant reported only a neutral argument). Males reported 30 neutral arguments, 14 bad mood arguments and 16 good mood arguments. Females reported 29 neutral arguments, 15 bad mood arguments and 15 good mood arguments. The randomization process was conducted across the sample as a whole and was not gender-specific; consequently we did not end up with an equal number of good and bad mood arguments within each gender. The means and standard deviations for neutral, bad and good mood arguments on all of the quantitative variables measured in the study are displayed in table 1. Descriptive data for categorical variables including content of the disagreement and initiation of the disagreement will be discussed in the text only. Between group and within group analyses will be presented in a subsequent section, thus differences between neutral, bad, and good mood arguments with respect to properties of the conflict episodes and conflict outcomes will not be discussed in this section. The means and standard deviations for these variables are presented here for descriptive purposes only.
Table 1

Descriptive Statistics for Neutral, Bad, and Good Mood Arguments

<table>
<thead>
<tr>
<th></th>
<th>Neutral</th>
<th>Bad</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>X= 12.83</td>
<td>X= 12.88</td>
<td>X= 12.80</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>0.93</td>
<td>0.79</td>
<td>1.05</td>
</tr>
<tr>
<td><strong>Number of days since the</strong></td>
<td>X= 9.08</td>
<td>X= 24.10</td>
<td>X= 36.61</td>
</tr>
<tr>
<td><strong>argument</strong></td>
<td>SD=13.48</td>
<td>SD=25.83</td>
<td>SD=37.28</td>
</tr>
<tr>
<td><strong>Mood Prior to Initiation of</strong></td>
<td>X= 92.42</td>
<td>X= 37.07</td>
<td>X= 130.23</td>
</tr>
<tr>
<td><strong>the</strong></td>
<td>SD=23.61</td>
<td>SD=21.12</td>
<td>SD=17.88</td>
</tr>
<tr>
<td><strong>Argument (Base Mood)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mood After Initiation of the</strong></td>
<td>X= 49.51</td>
<td>X= 36.90</td>
<td>X= 55.16</td>
</tr>
<tr>
<td><strong>Argument (Start Mood)</strong></td>
<td>SD=21.29</td>
<td>SD=20.79</td>
<td>SD=24.89</td>
</tr>
<tr>
<td><strong>Mothers’ Behaviors During the</strong></td>
<td>X= 4.17</td>
<td>X= 4.07</td>
<td>X= 4.33</td>
</tr>
<tr>
<td><strong>Disagreement</strong></td>
<td>SD=1.76</td>
<td>SD=1.62</td>
<td>SD=1.69</td>
</tr>
<tr>
<td><strong>Adolescents’ Behaviors During</strong></td>
<td>X= 4.52</td>
<td>X= 3.66</td>
<td>X= 4.93</td>
</tr>
<tr>
<td><strong>the Disagreement</strong></td>
<td>SD=1.42</td>
<td>SD=1.67</td>
<td>SD=1.48</td>
</tr>
<tr>
<td><strong>Attributions for Mother’s</strong></td>
<td>X= 3.98</td>
<td>X= 4.28</td>
<td>X= 4.83</td>
</tr>
<tr>
<td><strong>Intentions</strong></td>
<td>SD=1.44</td>
<td>SD=1.71</td>
<td>SD=1.70</td>
</tr>
<tr>
<td><strong>Who the Adolescent Blames</strong></td>
<td>X= 3.98</td>
<td>X= 3.86</td>
<td>X= 4.39</td>
</tr>
<tr>
<td><strong>Proportion of Positive Goals</strong></td>
<td>X= 0.20</td>
<td>X= 0.35</td>
<td>X= 0.34</td>
</tr>
<tr>
<td></td>
<td>SD=0.34</td>
<td>SD=0.43</td>
<td>SD=0.43</td>
</tr>
<tr>
<td><strong>Adolescents’ Control relative to</strong></td>
<td>X= -1.47</td>
<td>X= -0.45</td>
<td>X= -2.10</td>
</tr>
<tr>
<td><strong>the Mother’s Control (Power)</strong></td>
<td>SD= 2.01</td>
<td>SD= 2.65</td>
<td>SD= 2.23</td>
</tr>
<tr>
<td><strong>Mood at the conclusion of the</strong></td>
<td>X= 65.94</td>
<td>X= 60.45</td>
<td>X= 68.26</td>
</tr>
<tr>
<td><strong>Argument (End Mood)</strong></td>
<td>SD=32.88</td>
<td>SD=31.45</td>
<td>SD=42.42</td>
</tr>
<tr>
<td><strong>Evaluations</strong></td>
<td>X= 4.32</td>
<td>X= 4.20</td>
<td>X= 4.43</td>
</tr>
<tr>
<td>(fair, satisfied, understood)</td>
<td>SD=1.28</td>
<td>SD=1.24</td>
<td>SD=1.37</td>
</tr>
<tr>
<td><strong>Time taken for things to return</strong></td>
<td>X= 1.91</td>
<td>X= 2.59</td>
<td>X= 3.28</td>
</tr>
<tr>
<td><strong>to normal</strong></td>
<td>SD=1.39</td>
<td>SD=2.03</td>
<td>SD=2.07</td>
</tr>
</tbody>
</table>
Age. The age range (11.5-14.5 years) sampled in this study was conceptualized to reflect one cohort of early adolescents. Nonetheless, the mean ages of adolescents' reporting on neutral (12.83 years), bad (12.88 years) and good (12.80 years) mood arguments were compared to ensure that there were no systematic variations in age as a function of mood state. No significant differences were found, thus age was dropped from all further analyses.

Number of days since the argument. Adolescents were asked to indicate how long ago the arguments they were reporting took place. It was found that, on average, the neutral arguments had occurred 9 days prior to the interview (X=9.08, S.D.=13.48), the bad mood arguments had occurred 24 days prior to the interview (X=24.10, SD=25.83), and that the good mood arguments had occurred 37 days prior to the interview (X=36.61, SD=37.28). Paired t-tests confirmed that both the bad mood (t(28)=3.47, p<.01) and the good mood (t(28)=4.18, p<.01) arguments were less recent events than the neutral mood arguments. Bad and good mood arguments were not found to differ significantly in terms of how recently these arguments had occurred (independent t-test with equal variances not assumed, t(54)=1.52, p=.14). One bad mood argument was discarded from all analyses (including those reported above) because it had occurred over a year prior to the interview. Anecdotally, it is interesting to note that although the emotionally laden arguments occurred further in
the past than the neutral mood arguments, the transcripts of these interviews were no less rich in detail.

Analyses were conducted to examine gender differences in how long ago the arguments being reported occurred. It is interesting to note that for the neutral arguments, females reported on arguments that occurred more recently ($X = 5.64$ days ago, $SD = 5.66$) than the arguments that males ($X = 12.4$ days ago, $SD = 17.60$) reported on ($F(1, 57) = 3.90, p < .05$). For the bad mood arguments, no gender differences were found ($F(1, 27) = 0.541, p = 0.47$). On average, in the bad mood condition, males reported on arguments that occurred 27.79 days ago ($SD = 32.66$) and females reported on arguments that occurred 20.67 days ago ($SD = 17.82$). Similarly, no gender effects were found for the good mood arguments with respect to how long ago the arguments took place ($F(1, 29) = 3.57, p = 0.07$). In this condition, females reported on arguments that occurred, on average, 24.07 days ago ($SD = 29.81$) and males reported on arguments that occurred an average of 48.38 days ago ($SD = 40.56$).

Content of disagreement. All arguments reported were coded for content of disagreement. The distribution of disagreement topics for the neutral, bad and good mood arguments can be found in table 2. For the neutral arguments, chores represented the most frequent topic of conflict and comprised 33% of the total disagreements. In the bad mood arguments, the three most frequent categories were
Table 2

Distribution of Content of Disagreement by Mood State (Percentage of Total)

<table>
<thead>
<tr>
<th>Argument Content</th>
<th>Neutral Mood Arguments</th>
<th>Bad Mood Arguments</th>
<th>Good Mood Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chores</td>
<td>32.8</td>
<td>13.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>1.7</td>
<td>0</td>
<td>3.3</td>
</tr>
<tr>
<td>Personality/Behavioral Style</td>
<td>6.9</td>
<td>17.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Homework/Academic Issues</td>
<td>13.8</td>
<td>17.2</td>
<td>13.3</td>
</tr>
<tr>
<td>Interpersonal Relations</td>
<td>3.4</td>
<td>17.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Regulation of Interpersonal Relations</td>
<td>13.8</td>
<td>10.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Bedtime/Sleep/Curfew</td>
<td>6.9</td>
<td>3.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Health and Hygiene</td>
<td>5.2</td>
<td>0</td>
<td>3.3</td>
</tr>
<tr>
<td>Regulation of Activities</td>
<td>13.8</td>
<td>13.8</td>
<td>16.7</td>
</tr>
<tr>
<td>Finances</td>
<td>1.7</td>
<td>6.9</td>
<td>3.3</td>
</tr>
</tbody>
</table>

personality and behavioral style, academic issues, and interpersonal relations, each representing 17% of the arguments reported. For the good mood arguments, regulation of interpersonal relationships was the most frequent disagreement topic, representing 33% of the total arguments reported. Considering only these five most frequent categories, analyses were done to compare the distribution of the content codes as a function of mood states. Chi-square analyses were conducted to test if the
distribution of content codes differed between bad and good mood arguments. Results indicated that there was a trend ($\chi^2(4) = 8.32, p = .08, n = 41$) towards a significant difference in the overall distribution of contents. This trend was most likely a result of the difference between the number of arguments about regulation of interpersonal activities in good ($n = 10$) and bad mood arguments ($n = 3$). McNemar tests were used to test within group differences when comparing the distribution of the content codes for neutral arguments to that for the emotionally laden arguments. No differences were found when neutral arguments were compared to either bad ($p = 0.58, n = 16$) or good ($p = .73, n = 13$) mood arguments.

Chi-square analyses were conducted to test for gender effects on the distribution of content codes (using all the possible codes) for the neutral and emotionally laden arguments. No gender effects were found for the neutral ($\chi^2(9) = 10.83, p = .16$), bad ($\chi^2(7) = 10.51, p = .16$), or good ($\chi^2(9) = 11.16, p = .27$) mood arguments.

(Note: Due to low expected frequencies. Fisher's exact tests and the Likelihood Ratio were also calculated in all of the analyses conducted for content codes. Conclusions were consistent across all analyses.)

Initiation of the disagreement. All arguments reported were also coded for whether the disagreement was initiated as a result of the adolescents' opposing the mothers' agenda, the mothers' opposing the adolescents' permission request, or the
mothers’ opposition to the adolescents’ agenda. The distribution of disagreement initiations for the neutral, bad and good mood arguments can be found in table 3.

Table 3

Distributions of Type of Initiation by Mood State (Percentage of Total)

<table>
<thead>
<tr>
<th>Initiation Category</th>
<th>Neutral Mood Arguments</th>
<th>Bad Mood Arguments</th>
<th>Good Mood Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents Opposing</td>
<td>62</td>
<td>38</td>
<td>30</td>
</tr>
<tr>
<td>Mothers’ Agenda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers Opposing</td>
<td>16</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Permission Requests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers Opposing</td>
<td>22</td>
<td>52</td>
<td>40</td>
</tr>
<tr>
<td>Adolescents’ Agenda</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Neutral arguments were most often initiated by the adolescents opposing the mothers’ agenda, whereas both bad mood and good mood arguments were most often initiated as a result of the mothers opposing the adolescents’ agenda. Arguments initiated by mothers opposing the adolescents’ permission requests were relatively rare in the neutral and bad mood arguments, but represented a considerable number of the total good mood arguments. Chi-square analyses indicated that there was no difference in the distribution of initiation codes between the good and bad mood arguments ($\chi^2(2) = 3.52, p = .17$). Similarly, no significant differences were found
when the neutral arguments were compared to the bad mood arguments. However, McNemar tests revealed a significant difference between the distribution of initiation codes when neutral arguments were compared to good mood arguments ($p = .001$).

Gender was not found to influence how the arguments were initiated. The pattern of initiation codes was similar for boys and girls in the neutral ($\chi^2(2) = 1.74, p = .42$), bad ($\chi^2(2) = 0.46, p = .80$), and good ($\chi^2(2) = 1.32, p = .52$) mood arguments.

(Note: Due to low expected frequencies, Fisher's exact tests and the Likelihood Ratio were also calculated. Conclusions were consistent across all analyses.)

**Data Reduction**

The number of variables to be considered in the analyses was reduced by using only overall scale scores (rather than using individual subscale scores) and combining intercorrelated measures. Thus, for the Index of Mothers' Style questionnaire, the mothers’ classification as Authoritative, Authoritarian, Neglectful, or Indulgent was the measure of interest and not their individual scores on the acceptance/involvement and strictness/supervision subscales. In the sample, 22 mothers were classified as Authoritative, 10 mothers were classified as Authoritarian, 11 mothers were classified as Neglectful, and 9 mothers were classified as Indulgent (9 adolescents did not fill out the questionnaire). Given the disproportionate number of Authoritative mothers, and the fact that Authoritative parenting seems to be the standard of comparison in much of the parenting literature, it was decided to reduce this measure one step
further and compare Authoritative mothers to all of the other mothers. A binary variable was created in which authoritative mothers received a value of one and all other mothers received a value of zero. This variable was labeled “AUTHORITATIVENESS” and used in the analysis.

Intercorrelations were calculated amongst the adolescents’ six Likert scale responses (UNDERSTOOD, BLAME, FAIR, SATISFY, CHILD CONTROL, and MOTHER CONTROL) within the neutral and emotionally laden arguments. The correlation matrix for the neutral arguments is displayed in table 4 and the correlation matrix for the emotionally laden arguments is displayed in table 5. The Pearson correlation matrices suggested that a number of measures could be combined.

Adolescents’ ratings of feeling understood, fairness of the mothers’ actions, and their satisfaction at the end of the disagreement were all interrelated in both the neutral and emotionally laden arguments. Ratings on these three scales were averaged to form one overall measure labeled “EVALUATION,” which was used in the analysis in place of the three individual measures.
### Table 4

**Intercorrelations of Likert Rating Scales for Neutral Arguments**

<table>
<thead>
<tr>
<th></th>
<th>Understood</th>
<th>Blame</th>
<th>Fair</th>
<th>Satisfy</th>
<th>Child Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understood</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blame</td>
<td>.18</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>.47**</td>
<td>.51**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfy</td>
<td>.30*</td>
<td>.11</td>
<td>.30*</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Child Control</td>
<td>.26</td>
<td>-.04</td>
<td>.23</td>
<td>.37**</td>
<td>--</td>
</tr>
<tr>
<td>Mother Control</td>
<td>-.21</td>
<td>.02</td>
<td>-.28*</td>
<td>-.09</td>
<td>-.26*</td>
</tr>
</tbody>
</table>

N = 59. *p < .05. **p < .01.

### Table 5

**Intercorrelations of Likert Rating Scales for Emotionally Laden Arguments**

<table>
<thead>
<tr>
<th></th>
<th>Understood</th>
<th>Blame</th>
<th>Fair</th>
<th>Satisfy</th>
<th>Child Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understood</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blame</td>
<td>.15</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>.36**</td>
<td>.41**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfy</td>
<td>.42**</td>
<td>.31*</td>
<td>.67**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Child Control</td>
<td>.25*</td>
<td>-.05</td>
<td>.26*</td>
<td>.29*</td>
<td>--</td>
</tr>
<tr>
<td>Mother Control</td>
<td>-.28*</td>
<td>.27*</td>
<td>-.09</td>
<td>-.09</td>
<td>-.47**</td>
</tr>
</tbody>
</table>

N = 59. *p < .05. **p < .01.
Adolescents’ ratings of how much control they felt they were having in the argument were found to be negatively correlated with their ratings of how much control they felt their mothers were having in the argument within both the neutral ($r = -0.25, p<.05$) and the emotionally laden ($r = -0.47, p<.01$) arguments. A measure of the adolescents’ relative control over the argument was obtained by subtracting the adolescents’ rating of their mothers’ control from their ratings of their own control. This measure was labeled “POWER” and used in the analysis in place of the two individual measures.

The final measure that was subjected to data reduction was the coding of the adolescents’ goals. The frequencies of each of the six goal categories in the neutral, good and bad mood arguments are displayed in table 6. For ease of data analysis, and because of the low frequencies of some of the goal categories, this categorical goal coding was transformed into a continuous measure. This was done by calculating the proportion of the total goals reported for each argument that were “positive” goals. Relationship and emotional support goals were defined as “positive” goals since these were the only two goal categories in which the adolescents were interested in reconciling theirs and their mothers’ perspectives. The participants’ proportion of positive goals score was used in all data analyses.
Table 6

Goal Frequencies for Neutral, Bad Mood and Good Mood Arguments

<table>
<thead>
<tr>
<th>Goal Type</th>
<th>Neutral</th>
<th>Bad Mood</th>
<th>Good Mood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship</td>
<td>6</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>12</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Autonomy</td>
<td>6</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Dominance</td>
<td>11</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Instrumental</td>
<td>39</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Avoidance</td>
<td>10</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Between Group Analyses

Authoritative parenting. Randomization was used in order to decide which adolescents would be asked to report on bad versus good mood arguments. In addition, adolescents were asked to rate their perceptions of their mothers' parenting style prior to discussing any of the disagreements. Nonetheless, a test was conducted to confirm that a confound had not occurred between authoritative parenting style and the type of emotionally laden argument that the adolescent had been asked to report on. It is important to establish that adolescents' perceptions of their mothers' parenting style were not influencing, or being influenced by, the type of argument they were reporting on. A Pearson Chi-Square was calculated to test whether there was an association between authoritative parenting and type of emotionally laden argument that was reported on. The results ($\chi^2(1)=0.47, p=.49; n=51$; recall 9
adolescents did not fill in the Index of Mothers' Style questionnaire) indicated that adolescents reporting on bad and good mood arguments did not differ in terms of whether or not they perceived their mothers to be authoritative. Twelve adolescents reporting bad mood arguments and 10 adolescents reporting good mood arguments perceived their mothers to be authoritative.

Chi-square analyses were also conducted to test for gender differences in adolescents' perceptions of their mothers' authoritative parenting style. No significant differences were found ($\chi^2(1)=1.85, p=.17$). Thirteen females and 9 males perceived their mothers to have an authoritative parenting style.

As an aside, gender differences were also explored for the other parenting styles. Even though for the purpose of our analysis, adolescents perceiving their mothers to have an authoritative parenting style were compared to all other mothers. Five females and five males rated their mothers as having an authoritarian parenting style. Six females and five males perceived their mothers as having a neglectful parenting style. An interesting pattern was revealed when comparing adolescents' perceptions of their mothers as having an indulgent parenting style. Eight males but only one female perceived their mother to be indulgent. This is an interesting finding, even though it does not have direct relevance to our analyses.

Mood ratings. It was important to ascertain that adolescents asked to report on arguments that were preceded by a bad mood actually differed from adolescents asked
to report on arguments preceded by a good mood in their mood ratings. A 2 (Mood) * 2 (gender) MANOVA was conducted on adolescents' ratings of how they were feeling prior to the argument (base mood) and their ratings of how they were feeling right after the initiation of the argument (start mood). The MANOVA indicated that the two groups differed significantly in their mood ratings (Wilk's $\lambda = 0.130$, $F(2, 55) = 184.45$, $p<.0005$). The univariate tests showed that, as expected, adolescents asked to report on bad mood arguments had lower base mood ($F(1, 56) = 370.87$, $p<.0005$) and start mood ($F(1, 56) = 9.13$, $p<.005$) ratings. The means and standard deviations for the base and start mood ratings of adolescents reporting on bad and good mood arguments can be found in table 7.

Table 7
Means and Standard Deviations for Mood Ratings Prior to and at the Start of the Argument for Bad and Good Mood Arguments

<table>
<thead>
<tr>
<th>Mood Rating</th>
<th>Bad Mood</th>
<th>Good Mood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Mood (Prior to Argument)</td>
<td>$X = 37.07$</td>
<td>$X = 130.23$</td>
</tr>
<tr>
<td></td>
<td>$SD = 21.12$</td>
<td>$SD = 17.88$</td>
</tr>
<tr>
<td>Start Mood (Just after the initiation of the argument)</td>
<td>$X = 36.90$</td>
<td>$X = 55.16$</td>
</tr>
<tr>
<td></td>
<td>$SD = 20.79$</td>
<td>$SD = 24.89$</td>
</tr>
</tbody>
</table>
There was no gender main effect on adolescents' base and start mood ratings, but the gender by mood interaction was found to be statistically significant (Wilk's $\lambda = 0.862$, $F(2, 55) = 4.42, p<.05$). The univariate tests showed that the group by gender interaction was significant for how the adolescents reported feeling prior to the initiation of the disagreement ($F(1,56) = 6.82, p<.05$), but not for how they felt just after the beginning of the disagreement ($F(1,56) = 0.53, p=.47$). Prior to the disagreement, males consistently report more extreme mood states than the females. For the bad mood arguments, males' average mood rating ($X= 29.43, SD= 5.01$) was approximately 15 points more negative than the females' average mood rating ($X= 44.20, SD= 4.84$) and for the good mood arguments, males' average mood rating ($X= 135.31, SD= 4.68$) was approximately 11 points more positive than the females' average mood ($X= 124.80, SD= 4.84$).

Properties of the conflict episode. Table 8 displays the means and standard deviations for the bad and good mood arguments for each of the following 6 variables: the mothers' behavior in the arguments; the adolescents' behavior in the arguments; who the adolescents blamed for the arguments; the adolescents' attributions for their mothers' behavior; the adolescents' goals during the argument; and the adolescents' feelings of control relative to the mothers in the argument. These variables are conceptualized as representing the "properties" of the conflict.
Table 8

Means and Standard Deviations for Properties of the Conflict Episode for Bad and Good Mood Arguments

<table>
<thead>
<tr>
<th></th>
<th>Bad Mood</th>
<th>Good Mood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' Behaviors</td>
<td>X = 4.07</td>
<td>X = 4.33</td>
</tr>
<tr>
<td></td>
<td>SD = 1.62</td>
<td>SD = 1.69</td>
</tr>
<tr>
<td>Adolescents' Behaviors</td>
<td>X = 3.66</td>
<td>X = 4.93</td>
</tr>
<tr>
<td></td>
<td>SD = 1.67</td>
<td>SD = 1.48</td>
</tr>
<tr>
<td>Blame</td>
<td>X = 3.86</td>
<td>X = 4.39</td>
</tr>
<tr>
<td></td>
<td>SD = 1.66</td>
<td>SD = 1.54</td>
</tr>
<tr>
<td>Attributions</td>
<td>X = 4.28</td>
<td>X = 4.83</td>
</tr>
<tr>
<td></td>
<td>SD = 1.71</td>
<td>SD = 1.70</td>
</tr>
<tr>
<td>Positive Goals</td>
<td>X = 0.35</td>
<td>X = 0.34</td>
</tr>
<tr>
<td></td>
<td>SD = 0.43</td>
<td>SD = 0.43</td>
</tr>
<tr>
<td>Power</td>
<td>X = -0.45</td>
<td>X = -2.10</td>
</tr>
<tr>
<td></td>
<td>SD = 2.65</td>
<td>SD = 2.23</td>
</tr>
</tbody>
</table>

A 2 (mood) * 2 (gender) MANOVA was conducted to test for differences between bad and good mood arguments in terms of these specific properties. The MANOVA and corresponding univariate tests can be found in table 9. The results of the MANOVA indicate that bad and good mood arguments differ significantly in terms of the overall properties of the conflict episode (Wilk's $\lambda = 0.67$, $F(6, 48) = 3.86$, $p<.005$).
Table 9

MANOVA and Corresponding Univariate Test for Properties of the Conflict

### Episode

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilk's Lambda</th>
<th>$F$ Value</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.04</td>
<td>175.73</td>
<td>6</td>
<td>48</td>
<td>0.00</td>
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<tr>
<td>Mood</td>
<td>0.67</td>
<td>3.86</td>
<td>6</td>
<td>48</td>
<td>0.00</td>
</tr>
<tr>
<td>Gender</td>
<td>0.97</td>
<td>0.23</td>
<td>6</td>
<td>48</td>
<td>0.96</td>
</tr>
<tr>
<td>Mood * Gender</td>
<td>0.93</td>
<td>0.56</td>
<td>6</td>
<td>48</td>
<td>0.76</td>
</tr>
</tbody>
</table>

### Univariate Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$ Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>Mothers' Behaviors</td>
<td>1.44</td>
<td>1</td>
<td>1.44</td>
<td>0.52</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>Adolescents' Behaviors</td>
<td>24.22</td>
<td>1</td>
<td>24.22</td>
<td>9.37</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Blame</td>
<td>4.66</td>
<td>1</td>
<td>4.66</td>
<td>1.76</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Attributions</td>
<td>4.80</td>
<td>1</td>
<td>4.80</td>
<td>1.60</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>Goals</td>
<td>0.00087</td>
<td>1</td>
<td>0.00087</td>
<td>0.00</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>Power</td>
<td>47.42</td>
<td>1</td>
<td>47.42</td>
<td>7.84</td>
<td>0.01</td>
</tr>
<tr>
<td>Error</td>
<td>Mothers' Behaviors</td>
<td>147.16</td>
<td>53</td>
<td>2.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adolescents' Behaviors</td>
<td>136.99</td>
<td>53</td>
<td>2.58</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Blame</td>
<td>140.52</td>
<td>53</td>
<td>2.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attributions</td>
<td>159.61</td>
<td>53</td>
<td>3.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goals</td>
<td>9.94</td>
<td>53</td>
<td>0.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power</td>
<td>320.52</td>
<td>53</td>
<td>6.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The univariate tests showed that bad and good arguments differed on two of the six measures: adolescents' behavior during the argument (F(1,53)=9.37, p<.005) and the adolescents' feelings of control relative to the mothers (F(1,53)=7.84, p<.01). Adolescents reporting bad mood arguments were rated as behaving more harshly and reported feeling more in control relative to their mothers as compared to adolescents discussing good mood arguments. No significant main or interactive effects of gender were revealed.

Outcome measures. A 2 (mood) * 2 (gender) MANOVA was conducted comparing bad and good mood arguments on the three outcome measures: adolescents' mood ratings at the end of the argument (END MOOD); adolescents' combined evaluation score (EVALUATION; average of understood, fair and satisfied Likert scales); and the amount of time it took before the adolescents felt that things went back to normal between them and their mothers (TIME). The results of the MANOVA indicate that there were no significant differences in the outcomes of good and bad mood arguments (Wilk's λ = 0.94, F(3, 52) = 1.01, p=.39). Again, no significant main or interactive gender effects were revealed. The means and standard deviations for each outcome variable for good and bad mood arguments can be found in table 10.
Table 10
Means and Standard Deviations for Each Outcome Variable for Bad and Good Mood Arguments

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Bad Mood Arguments</th>
<th>Good Mood Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>End Mood</td>
<td>X = 60.45</td>
<td>X = 68.26</td>
</tr>
<tr>
<td></td>
<td>SD = 31.45</td>
<td>SD = 42.42</td>
</tr>
<tr>
<td>Evaluation</td>
<td>X = 4.20</td>
<td>X = 4.43</td>
</tr>
<tr>
<td></td>
<td>SD = 1.24</td>
<td>SD = 1.37</td>
</tr>
<tr>
<td>Time</td>
<td>X = 2.59</td>
<td>X = 3.28</td>
</tr>
<tr>
<td></td>
<td>SD = 2.03</td>
<td>SD = 2.07</td>
</tr>
</tbody>
</table>

Within Group Differences
Paired samples t-tests were used to compare the neutral arguments to the emotionally laden arguments with respect to mood ratings, properties of the conflict episodes, and outcomes. Neutral arguments were compared to both the bad and good mood arguments using two separate paired t-tests.

Mood ratings. As seen above, bad and good mood arguments differed from each other in terms of the adolescents' mood ratings prior to (base mood), and just after, the initiation (start mood) of the argument. It is important to determine that adolescents' moods prior to the neutral arguments were in fact different than their moods prior to the emotionally laden argument they were interviewed about. It is also interesting to examine how adolescents' reports of how they were feeling after the
Adolescent Mood and Conflict Outcomes

initiation of the neutral argument compares to their reports of their moods once the emotionally laden argument had been initiated (start mood). The results of the paired t-tests indicated that the base mood ratings for the neutral arguments (X= 92.42, SD= 23.61) were significantly greater than the base mood ratings for the bad mood arguments (t (28)= 8.51, p< .001), and significantly lower than the base mood ratings for the good mood arguments (t (28)= 7.30, p< .001). Adolescents’ ratings of how they were feeling just after the initiation of the neutral arguments (X= 49.51, SD= 21.29) were not significantly different from the start mood ratings for the bad mood (t (28)= 1.81, p> .05) or good mood (t (28)= 1.62, p> .10) arguments. It appears that once the argument has been initiated, the adolescents end up feeling similarly despite their very different base mood states. This is true even though, as a group, adolescents reporting on bad mood arguments reported feeling worse after the initiation of the disagreement than did the group of adolescents reporting on good mood arguments (see between group differences in start mood reported above). However, on an individual basis, adolescents report feeling similarly aroused after the initiation of the neutral and emotionally laden arguments they report on. Thus, in all further analyses, only base mood ratings will be used to test the impact of adolescents’ mood state on the conflict episode.

**Properties of the conflict episode.** The individual paired t-tests comparing neutral arguments to bad and good mood arguments on each of the following
variables: the mothers' behavior in the arguments; the adolescents' behavior in the arguments; who the adolescents blamed for the arguments; the adolescents' attributions for their mothers' behavior; the adolescents' goals during the argument; and the adolescents' feelings of control relative to the mothers in the argument can be found in Table 11 and 12 respectively.

Table 11

Paired t-Test Comparisons for Neutral versus Bad Mood Arguments' Conflict

Properties

<table>
<thead>
<tr>
<th>Neutral versus Bad Mood Comparisons</th>
<th>Mean Difference</th>
<th>t</th>
<th>Df</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' Behaviors</td>
<td>0.07</td>
<td>0.17</td>
<td>28</td>
<td>0.87</td>
</tr>
<tr>
<td>Adolescents' Behaviors</td>
<td>0.83</td>
<td>2.57</td>
<td>28</td>
<td>0.02*</td>
</tr>
<tr>
<td>Blame</td>
<td>-0.07</td>
<td>-0.21</td>
<td>28</td>
<td>0.84</td>
</tr>
<tr>
<td>Attributions</td>
<td>-0.62</td>
<td>-1.61</td>
<td>28</td>
<td>0.12</td>
</tr>
<tr>
<td>Goals</td>
<td>-0.08</td>
<td>-1.09</td>
<td>27</td>
<td>0.28</td>
</tr>
<tr>
<td>Power</td>
<td>-0.97</td>
<td>-1.56</td>
<td>28</td>
<td>0.13</td>
</tr>
</tbody>
</table>

*p < 0.05

Neutral and bad mood arguments were found to differ only in terms of the adolescents' behavior during the conflict episode. Adolescents were found to behave more harshly during bad mood arguments (X = 3.66, SD = 1.67) than during neutral arguments (X = 4.48, SD = 1.45). Neutral and good mood arguments were found to differ only with respect to the adolescents' goals during the disagreement with their
mothers. Adolescents were found to have a greater proportion of positive goals when reporting on good mood arguments ($X = 0.35$, $SD = 0.44$) than when reporting on neutral arguments ($X = 0.10$, $SD = 0.28$).

Table 12
Paired t-Test Comparisons for Neutral vs Good Mood Arguments’ Conflict Properties

<table>
<thead>
<tr>
<th>Neutral versus Good Mood Comparisons</th>
<th>Mean Difference</th>
<th>$t$</th>
<th>Df</th>
<th>Significance (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers’ Behaviors</td>
<td>-0.11</td>
<td>-0.26</td>
<td>27</td>
<td>0.80</td>
</tr>
<tr>
<td>Adolescents’ Behaviors</td>
<td>-0.43</td>
<td>-1.34</td>
<td>27</td>
<td>0.19</td>
</tr>
<tr>
<td>Blame</td>
<td>-0.17</td>
<td>-0.60</td>
<td>28</td>
<td>0.55</td>
</tr>
<tr>
<td>Attributions</td>
<td>-0.57</td>
<td>-1.61</td>
<td>27</td>
<td>0.12</td>
</tr>
<tr>
<td>Goals</td>
<td>-0.25</td>
<td>-2.18</td>
<td>26</td>
<td>0.04*</td>
</tr>
<tr>
<td>Power</td>
<td>0.55</td>
<td>1.18</td>
<td>28</td>
<td>0.25</td>
</tr>
</tbody>
</table>

*p < 0.05

Outcome measures. The individual paired t-tests comparing neutral arguments to bad and good mood arguments on the three outcome measures (end mood, evaluation, time) can be found in tables 13 and 14 respectively.
Neutral and bad mood arguments were not found to differ significantly on any of the three outcome measures. Neutral and good mood arguments were found to differ significantly only in terms of the amount of time that adolescents reported it took before things went back to normal between them and their mothers. Adolescents indicated that it took longer for things to go back to normal following good mood arguments ($X = 3.16, SD = 2.03$) than neutral arguments ($X = 1.76, SD = 1.30$).
Model Testing

Each of the models to be tested contains mediator variables. Mediator variables are variables that represent the generative mechanism through which the focal independent variable is able to influence the dependent variables of interest (Baron & Kenny, 1986). In general, a given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion. The basic causal chain involved in mediation can be outlined using three variables: the independent variable, the mediator variable, and the outcome variable. This model assumes a three-variable system such that there are two causal paths feeding into the outcome variable: the direct impact of the independent variable (Path c) and the impact of the mediator (Path b). There is also a path from the independent variable to the mediator (Path a).

A variable functions as a mediator when it meets the following conditions: a) variations in the level of the independent variable significantly account for variations in the mediator variable (i.e., path a: this criterion will be considered satisfied if there is a significant correlation between the independent and mediator variables), b) variations in the mediator significantly account for variations in the dependent variable (i.e., path b; this condition will be considered satisfied if there is a significant correlation between the mediator and the outcome variables), and c) when Paths a and b are controlled, a previously significant relation between the independent and
dependent variables is significantly reduced (i.e., Path c is weakened; this condition will be considered satisfied when the partial correlation between the independent and outcome variable (controlling for the mediator variable) is not statistically significant).

The relevant correlations were calculated to test the four models that were postulated in the introduction. Unless otherwise stated, the correlations reported are Pearson Bivariate Correlations with their associated 2-tailed significance levels. The full correlation matrices for the emotionally laden and neutral arguments can be found in tables 15 and 16 respectively.

Each model was tested twice, once for the emotional laden arguments and a second time for the neutral arguments. The models were not tested separately for the good and bad mood arguments. Instead, in order to capture the full range of mood states, bad and good mood arguments were considered as a single group. This approach allowed us to consider the full continuum of emotionally laden arguments in a single analysis.

The four models will be tested in the order that they were presented in the introduction. The different models test the impact of three different predictor variables: 1) adolescents’ mood state prior to the disagreement (BASE MOOD), 2) an authoritative parenting style (AUTHORITATIVE), and 3) the mothers’ specific actions during the disagreement (MOTHERS’ BEHAVIOR) on three different
<table>
<thead>
<tr>
<th>50</th>
<th>50</th>
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<th>50</th>
<th>50</th>
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</tbody>
</table>

**Table 15**

Adolescent Mood and Conflict Outcomes
Table 16

Correlation Matrix for Neutral Arguments

<table>
<thead>
<tr>
<th></th>
<th>Authoritative Mood</th>
<th>Base Behavior</th>
<th>Adolescents' Behavior</th>
<th>Blame</th>
<th>Attributions</th>
<th>Goals</th>
<th>Power</th>
<th>End Mood</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritative</td>
<td>r</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base Mood</td>
<td>r -0.06</td>
<td>n 50</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Mothers' Behavior</td>
<td>r -0.09</td>
<td>n 49</td>
<td></td>
<td></td>
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<tr>
<td>Adolescents' Behavior</td>
<td>r 0.27</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blame</td>
<td>r -0.11</td>
<td>n 50</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Attributions</td>
<td>r 0.10</td>
<td>n 49</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goals</td>
<td>r 0.10</td>
<td>n 49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>r 0.07</td>
<td>n 50</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>End Mood</td>
<td>r 0.18</td>
<td>n 50</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>r 0.03</td>
<td>n 50</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>r 0.28*</td>
<td>n 47</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05, ** p<.01
Adolescent Mood and Conflict Outcomes

Conflict outcomes: 1) how the adolescent was feeling at the end of the disagreement (END MOOD), 2) adolescents' perceptions of how the mother handled the disagreement (EVALUATIONS), and 3) how long it took for things to go back to normal between the adolescent and their mother following the disagreement (TIME). Adolescents' behaviors during the disagreement (ADOLESCENTS' BEHAVIOR), attributions for their mothers' intentions (ATTRIBUTIONS), assignment of blame (BLAME), goals, and feelings of relative control (POWER) were tested as possible mediators.

In order to test each of the models, the following procedure will be followed. First of all, a verbal explanation and a pictorial representation of the model will be presented. Each model will be tested first using the emotionally laden arguments, and a second time using the neutral argument. The results will be discussed in terms of the statistical significance of: 1) direct relationships between the independent variable of interest and the conflict outcomes; 2) relationships between the independent variable and the potential mediator variables; and 3) relationships between potential mediator variables and conflict outcomes. Based on all of these results, the appropriateness of the mediational model will be assessed. If the necessary criteria are met (as outlined above), partial correlations will be used to test the ability of the mediator variable to significantly reduce the associations between the independent variable and the conflict outcomes. These results will be used to assess the relative merits of the direct effects.
and mediational models proposed.

Model 1: Adolescents' mood states influence conflict outcomes through the mediation of adolescents' attributions. This model proposes that being in a negative mood state would influence the conflict process by altering the adolescents' attributional processes, and thereby increasing the tendency for adolescents to make negative attributions for the mothers' intentions and to blame the mother more for the argument. In turn, negative attributions and more blaming of the mother were predicted to be associated with more negative outcomes. This model may be particularly suited to the extreme mood states associated with the emotionally laden arguments, but it was also tested using the neutral arguments to see if more normative variations in mood produced similar results. Please refer to figure 1 for an illustration of the test of this model using the emotionally laden arguments and to figure 2 for a test of this model using the neutral arguments.

The adolescents' mood ratings prior to the initiation of the emotionally laden arguments (BASE MOOD) were not found to be predictive of any of the conflict outcomes. In addition, these mood ratings were found to be unrelated to the adolescents' attributions or to whom the adolescents blamed for the argument. Thus, the data failed to support both the mediational model and the direct effect model of aroused mood states on conflict outcomes. The only interesting significant association
that was revealed through the testing of this model is the positive relationship between who the adolescent blames for the argument and the adolescents’ evaluations of the conflict episode (i.e., how well they were understood, how fair their mothers were, and how satisfied they were with the outcome). The more the adolescents blamed themselves, rather than their mothers, for the argument, the more likely they were to make positive evaluations for how their mother handled the conflict.

When this model was tested using the neutral arguments, again it was found that the adolescents’ mood ratings prior to the initiation of the argument were not directly related to any of the conflict outcomes. Similarly, BASE MOOD ratings were not found to be related to adolescents’ attributions for their mothers’ intentions or to their assignment of blame. Thus, neither the criteria for the direct effects model, nor the mediational model, were met. However, in contrast to the emotionally laden arguments, a number of significant relationships were found between adolescents’ attributions and the conflict outcomes. When discussing neutral arguments, adolescents who made more benign attributions for their mothers’ intentions reported feeling better at the end of the disagreement, evaluated their mothers’ handling of the situation more positively, and indicated that it took less time for things to go back to normal following the disagreement.
Figure 1. Influence of adolescents’ mood states prior to the initiation of the disagreement on the outcomes of emotionally laden arguments. Direct effects of base mood states and the potential mediating role of attributions and assignment of blame are illustrated.
Figure 2. Influence of adolescents' mood states prior to the initiation of the disagreement on the outcomes of neutral arguments. Direct effects of base mood states and the potential mediating role of attributions and assignment of blame are illustrated.
In addition, adolescents who blamed themselves more for the disagreement had more positive evaluations for their mothers' handling of the disagreement. These results are in line with the predicted impact of adolescents' attributions and assignment of blame on conflict outcomes.

**Model 2: Adolescents' mood state influences conflict outcomes through the mediation of adolescents' behavior, goals, and/or feelings of power.** This model suggests that extremely negative mood states impact on the conflict process by influencing adolescents' behavior, goals, and/or feelings of relative control (POWER) during the disagreements. It was predicted that extremely negative mood states would be associated with more resistant adolescent behavior, more self-centered goals, and an increased sense of POWER (since the adolescents would be more self-focused and insistent in getting their own way). Resistant adolescent behaviors and self-centered goals were predicted to impact negatively on conflict outcomes, whereas increased feelings of power were hypothesized to be associated with more positive outcomes. This model is displayed in figure 3 for the emotionally laden arguments and in figure 4 for the neutral arguments.

We already know from model 1 that adolescents' mood ratings prior to engaging in the neutral and emotionally laden arguments with their mothers are not predictive of the outcomes of the conflict episode. Thus, the data do not meet the criteria to test the role of adolescents' behavior, goals, and feelings of power as
mediators. Instead, the test of this model will allow us to examine whether adolescents' behaviors, goals, and feelings of power have any direct effects on the conflict outcomes.

When this model was tested using the emotionally laden arguments, the results indicated that adolescents' mood ratings prior to engaging in the disagreements with their mothers were significantly positively correlated with adolescents' behavior during the disagreement and significantly negatively correlated with the adolescents' feelings of power during the disagreements. The less positive the adolescents' base mood state was (i.e., the worse their mood was) the more resistantly they were rated as behaving towards their mothers and the more power the adolescents perceived they had relative to their mothers during the disagreement. Adolescents' feelings of power were, in turn, found to be predictive of 2 of the 3 outcome measures. Adolescents who reported greater feelings of power also reported more positive evaluations (i.e., understood, fair, satisfied) for the conflict episode and shorter time periods for things to return to normal between them and their mothers. The adolescents' feelings of power were not statistically significantly related to their mood ratings at the end of the disagreement. Thus, there is evidence to suggest that adolescents' feelings of power may have a direct effect on some conflict outcomes for emotionally laden arguments.
Figure 3. Influence of adolescents' mood states prior to the initiation of the disagreement on the outcomes of emotionally laden arguments through the potential mediating effects of adolescents' behaviors, goals, and feelings of relative control (power) during the argument.
When this model was tested using the neutral arguments, only direct relationships between adolescents' behaviors, goals, feelings of power and the conflict outcomes can be investigated since the criteria for the mediational model were not met. Adolescents' behaviors during the disagreement were significantly positively related to EVALUATIONS. Adolescents who, based on their self-reports, were rated as behaving more positively during the disagreement evaluated their mothers' handling of the situation more positively. Adolescents' goals were positively related to TIME. Contrary to predictions, adolescents who reported having more positive goals during the disagreement reported longer time periods before things went back to normal between them and their mothers. Adolescents' feelings of power were found to be predictive of 2 of the 3 outcomes for the neutral arguments. In this case, increased feelings of power were predictive of more positive end mood ratings and more positive evaluations for the conflict episode. In contrast to the emotionally laden arguments, adolescents’ feelings of power in the neutral arguments were not predictive of how long adolescents reported that it took before things went back to normal with their mothers.
Through the potential mediational effects of adolescents' behaviors, goals, and feelings of relative control (power) during the research.

Figure 4: Influence of adolescents' mood within prior to initiation of the intervention on the outcomes of neural responses.

Adolescents' Reactions of

---

Time
Evaluations
End Mood

---

Power

---

6.04
4.08
0.28

---

6.19

---

Basic Mood

---

0.8

---

0.03

---

Adolescents' Goals

---

Time
Evaluations
End Mood

---

4.32
1.22
1.0

---

Adolescents' Behaviors

---

Time
Evaluations
End Mood

---

1.18
0.37
0.25

Adolescent Mood and Control Outcomes (28)
Model 3: Authoritative parenting leads to positive outcomes. This model postulates that, regardless of the adolescents' mood state, adolescents' who perceived their mothers to have an authoritative parenting style would be better behaved, make more positive attributions for their mothers' intentions, blame their mothers less, have more positive goals, and an increased sense of power during the disagreement. In turn, this should lead to more positive conflict outcomes. Please refer to figures 5 and 6 for a test of this model using reports of emotionally laden arguments, and to figures 7 and 8 for a test of this model using reports of neutral arguments.

When the role of authoritative parenting style was tested using adolescents' reports of emotionally laden arguments, the results indicated that authoritative parenting was directly related to only one of the three outcome measures: TIME. As predicted, adolescents who perceived their mothers to have an authoritative parenting style reported that it took less time for things to go back to normal following the disagreement. Authoritative parenting was not found to be directly related to how the adolescents were feeling at the end of the disagreement or to their perceptions of how their mothers handled the situation. Authoritative parenting was found to be significantly related to only one of the possible mediator variables: ATTRIBUTIONS.
Figure 5: Direct influence of authoritative parenting style on the outcomes of emotionally laden arguments.

- 0.31*
- 0.21
- 0.06

Time
Evaluations
End Mood

Authoritative Parenting

Adolescent Mood and Conflict Outcomes 130
Figure 6. Influence of authoritative parenting style on the outcomes of emotionally laden arguments through the potential mediating roles of adolescents' behaviors, attributions, blame, goals, and feelings of power during the disagreement.
However, this relationship was in the opposite direction than expected. Adolescents' who perceived their mothers to have an authoritative parenting style made less positive attributions for their mothers' behaviors during the disagreement. Adolescents' attributions were not found to be significantly related to any of the outcome measures. Thus, the data failed to support the mediational role of adolescents' attributions in explaining the relationship between their perceptions of their mothers as having an authoritative parenting style and conflict outcome.

When this model was tested using neutral arguments, again it was found that authoritative parenting was directly related to only one of the outcome measures: TIME. However, in contrast to the emotionally laden arguments, this association was in the opposite direction than predicted. Adolescents who perceived their mothers to have an authoritative parenting style reported longer time periods before things went back to normal in their relationships with their mothers following a neutral argument. When exploring possible indirect effects of perceived authoritative parenting on conflict outcomes using the neutral arguments, it was found that authoritative parenting was not significantly related to any of the possible mediators in the model. The data failed to meet the criteria for a mediational model, and thus were not tested further.
Figure 7. Direct influence of authoritative parenting style on the outcomes of neutral arguments.

- Authoritative Parenting
- Time
- Evaluations
- End Mood

Coefficients:
0.28*
0.03
0.18
Figure 8. Influence of authoritative parenting style on the outcomes of neutral arguments through the potential mediating roles of adolescents' behaviors, attributions, blame, goals, and feelings of power during the disagreement.
Model 4: Mothers’ sensitive parenting in the situation leads to positive outcomes. This model postulates that what leads to positive outcomes is the mothers’ ability to take their children’s points of view into consideration and to sensitively tailor their strategies to match the adolescents’ current states. Sensitive mothers who are able to take their adolescents’ mood states and point of view into consideration are expected to have better behaved adolescents, who view their mothers’ interventions as being well-intentioned and less blameworthy, adopt less self-centered goals, and feel an increased sense of relative control. This in turn is expected to lead to more positive conflict outcomes. This model was applied to both the emotionally laden arguments (see figures 9 and 10) and the neutral arguments (see figures 11 and 12).

When the model was tested using the data from the emotionally laden arguments, it was found that mothers’ behaviors during the arguments were predictive of only one of the postulated mediator variables: adolescents’ attributions. However, as we have already seen, adolescents’ attributions for their mothers’ intentions were not predictive of the conflict outcomes. Thus, the data did not meet the criteria to test the role of adolescents’ attributions as a mediator. Instead, the direct effect of mothers’ sensitive behavior on the outcomes of the conflict episode was explored.
Figure 9: Direct influence of mother's sensitive parenting in the situation on the outcomes of emotionally laden arguments.
Figure 10. Influence of mother’s sensitive parenting in the situation on the outcomes of emotionally laden arguments through the potential mediating roles of adolescents’ behaviors, attributions, blame, goals, and feelings of power during the disagreement.
The results indicated that mothers who were coded as behaving sensitively during the emotionally laden arguments, based on their adolescents' reports, had adolescents who made more positive evaluations of the conflict process (i.e., more understood, fair, satisfied) and reported decreased time that was required before things went back to normal in the relationship. Maternal behavior, as rated by the coder, was not found to be significantly associated with adolescents' mood ratings at the end of the emotionally laden arguments. These results support a model suggesting that mothers' perceived ability to act sensitively in the emotionally laden situation is directly related to more positive outcomes.

When this model was tested using data from the neutral arguments, mothers' coded behaviors were found to be significantly related to all three of the outcome measures. As predicted, mothers who were believed to be able to take their adolescents' point of view into consideration and to sensitively tailor their actions to match their adolescents' current states had adolescents who had more positive mood ratings at the end of the disagreement, more positive evaluations for the conflict process and shorter reported time periods before things went back to normal. Mothers' perceived sensitive behaviors were also very highly predictive of adolescents' behaviors during the disagreement, their attributions for the mothers' intentions, their assignment of blame, and their goals.
Figure 1. Direct influence of mothers' sensitive parenting in the situation on the outcomes of neutralargments.

- Time
- Evaluations
- End Mood

 Mothers' Behaviors

**.05
**.00
**.00
**.11
Figure 12. Influence of mother’s sensitive parenting in the situation on the outcomes of neutral arguments through the potential mediating roles of adolescents’ behaviors, attributions, blame, goals, and feelings of power during the disagreement.
Mothers who were rated by coders to behave more sensitively had adolescents who were perceived to behave better, made more positive attributions, blamed themselves more for the argument, and had fewer positive goals. In turn, each of these variables was related to at least one of the outcome measures and thus met the criteria for acting as a mediator in the model. However, only adolescents' attributions were related to all three of the outcome measures. Positive adolescent attributions for their mothers' behavior and intentions were related to more positive mood ratings at the end of the argument, more positive evaluations for the conflict process, and shorter time periods to return to normal. Thus, only the mediational role of adolescents' attributions was tested. Partial correlations were calculated between mothers' behavior and the outcome measures, controlling for adolescents' attributions. This partial correlation matrix is displayed in table 17. In all but one instance, the relationships between mothers' coded behaviors and the outcome measures were not significantly reduced when controlling for the potential mediator variables. Only the relationship between mothers' behaviors and adolescents' end mood ratings became nonsignificant when controlling for adolescents' attributions. Thus, it seems that overall, the direct effects model is more appropriate than the mediational model for this set of data. These results suggest that mothers' perceived ability to behave sensitively in the situation is the best predictor of positive outcomes for neutral arguments.
Table 17

Matrix of Partial Correlations testing the Mediation Role of Adolescents’

Attributions in the Relationship Between Mothers’ Sensitive Parenting and Conflict

Outcomes for Neutral Arguments (Controlling for Attributions)

<table>
<thead>
<tr>
<th>Conflict Outcome</th>
<th>Correlation with Mothers’ Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>End Mood</td>
<td>r = .16</td>
</tr>
<tr>
<td>Evaluations</td>
<td>r = .43**</td>
</tr>
<tr>
<td>Time</td>
<td>r = -.42**</td>
</tr>
</tbody>
</table>

n=53. **p<.01
Discussion

The primary aim of this exploratory study was to investigate the impact of adolescents' mood states on the processes and outcomes of mother-adolescent conflicts. Although it was expected that adolescents' mood states would be a key variable influencing adolescents' perceptions of the outcomes of these conflicts, we also explored the influence of other factors on the adolescents' perceptions of their mothers' parenting efficacy. These included adolescents' perceptions of their mothers' parenting style and the mothers' ability to sensitively tailor their actions to the adolescents' state during the conflict. From adolescents' reports of conflicts that were preceded by neutral, negative and positive mood states, we discovered that, contrary to prediction, the mood state the adolescent was experiencing prior to engaging in the argument was not, directly or indirectly, related to the reported outcomes of these conflicts. Authoritative parenting was found to have inconsistent and sparse relationships with conflict outcomes. Mothers' sensitive parenting in the situation as rated by coders based on adolescents' descriptions was found to be the best predictor of parenting efficacy.

The discussion presented here will begin with a summary of what we have learned about the associations between adolescents' perceptions of parenting efficacy and: a) adolescents' mood states prior to the initiation of the disagreement, b) their perceptions of their mothers' general parenting style, and c) their mothers' estimated
ability to tailor their actions in the argument to their adolescents’ current state. These results will be interpreted with respect to current ideas in the parenting literature such as Grusec and Goodnow’s (1994) reconceptualization of the discipline process and the notion of bidirectionality (e.g., Kuczynski, Marshall, & Schell, 1997; Lollis & Kuczynski, 1997).

The potential mediating effects of a number of factors were considered in this study. Although the data failed to support the mediational role of these factors, a number of interesting associations with these factors and the conflict outcomes were observed. These will be highlighted in the following section of the discussion. Particular attention will be given to factors such as adolescents’ gender, attributions, and their feelings of relative control during the disagreement (power).

The discussion will then turn to the implications of the results of this study for the literature examining the effects of mood on information processing (i.e., memory, attention, problem solving). These results and their implications will be discussed, keeping in mind the limitations of the current study. The discussion will end with a consideration of future directions for this line of research.

The Influence of Adolescents’ Mood States, Mothers’ Authoritative Parenting Style, and Mothers’ Sensitive Parenting in the Situation on the Process and Outcomes of Mother-Adolescent Conflicts

Adolescents’ mood states just prior to the arguments with their mothers were
not related to adolescents' reports of how they felt at the end of the disagreement, how well their mothers handled the conflict episode, or how long it took for things to return to normal between them and their mothers. Arguments initiated when the adolescents were experiencing neutral, bad, and good mood states were comparable in terms of these outcomes. In fact, just after the initiation of the argument, all adolescents reported experiencing similar mood states, despite the large differences in their moods prior to the initiation of the conflict episodes with their mothers. Thus, the process of engaging in an argument with their mother makes adolescents feel the same no matter what mood they were in just before the conflict episode. This may be one of the reasons why adolescents' mood states prior to the conflict were not found to make a significant impact on the conflict outcomes.

Nonetheless, adolescents' mood states prior to the initiation of the arguments with their mothers do seem to influence how adolescents behave during the disagreements. As expected, adolescents were perceived to behave more harshly and resistantly towards their mothers when reporting on arguments that were initiated when the adolescents were experiencing bad moods. This was true when the adolescents' behaviors during the bad mood arguments were compared to those of adolescents reporting on good mood arguments (between group analysis) and to the adolescents' own behaviors during the neutral mood arguments (within group analysis). Yet, these adolescents did not report more negative outcomes for conflicts
that were initiated when the adolescent was in a bad mood.

This pattern of results is counterintuitive. It was expected that adolescents in bad moods prior to the argument would behave more negatively towards their mothers, promoting conflict escalation, and thus, eliciting harsher behavior on the part of their mothers. Instead, it was found that on average, mothers behaved similarly towards their adolescents regardless of what mood the adolescents reported they were experiencing prior to the disagreement. Thus, mothers were not found to respond to the harsher adolescent behaviors displayed in the "bad mood" arguments with harsher parenting techniques, thereby avoiding the increased potential for conflict escalation.

However, it is interesting to note that adolescents and mothers seem to be influencing each other’s behaviors during arguments that were initiated when the adolescents were in a neutral mood. Adolescents’ and mothers’ behaviors, as coded by the researcher, were significantly positively correlated for the neutral arguments. During the neutral arguments, adolescents and mothers seemed to be responding to each other with similar behavioral styles. This was not the case for the emotionally laden arguments. When using adolescents’ reports of bad and good mood arguments, mothers’ behaviors were found to be unrelated to the adolescents’ behaviors during the disagreement. This would suggest that perhaps mothers were being careful not to respond to the adolescents’ harsher behaviors during the bad mood arguments with a similar style.
The patterns of relationships discovered between mothers' and adolescents' behaviors during the disagreement are in line with our finding that the best predictor of conflict outcomes was the mothers' ability to sensitively tailor their actions to the adolescents' state during the conflict episode. Regardless of mood state, mothers who were rated by the researcher as being able to take their adolescents' perspective into consideration, and tailor their strategies accordingly, had adolescents who made more positive evaluations for their mothers' handling of the conflict episode and reported that it took less time for things to return to normal with their mothers. It is important to note that adolescents' perceptions of their mothers' parenting style were not related to the mothers' abilities to behave sensitively. Mothers who were perceived by their adolescents to have an authoritative parenting style were not coded as behaving more sensitively by the researcher.

Authoritative parenting was found to be sparsely and inconsistently related to adolescents' perceptions of parenting efficacy in this study. Authoritative parenting was predictive of only one of the three conflict outcomes: adolescents' reports of how long it took for things to return to normal between them and their mothers after the disagreement. As predicted, adolescents who perceived their mothers to have an authoritative parenting style reported shorter times for things to return to normal for the emotionally laden arguments. Contrary to prediction, adolescents who perceived their mothers to be authoritative reported longer times for things to return to normal
when reporting on neutral arguments. It is unclear why this should be the case. It is possible that this is just a chance finding, and one that needs to be replicated.

Authoritative parenting was found to be significantly correlated with the attributions adolescents' made for their mothers' intentions and behaviors when reporting on the emotionally laden arguments. Adolescents who perceived their mothers to be authoritative tended to make more negative attributions. Again, this is contrary to our predictions. It was expected that adolescents who perceived their mothers to be authoritative would make more benign attributions for their intentions and behaviors when discussing neutral and emotionally laden arguments. Given the counterintuitive nature of many of the findings involving authoritative parenting, all of the relationships with authoritative parenting need to be interpreted with caution.

Taken together, these results are in line with Grusec and her colleagues' reconceptualization of the literature on parenting efficacy (e.g., Grusec & Goodnow, 1994; Grusec et al., 2000). According to this new model, effective parenting is not simply a result of having an authoritative parenting style. Instead, effective parenting is parenting that the child is willing to accept as appropriate and valid. This reformulation requires that parents be flexible in their actions, matching them to the child's perceptions of and reactions to, the conflict situation. As we have seen, parents who were perceived by the researcher to be able to take their child’s perspective into consideration and tailor their strategies accordingly were the ones
who had adolescents that reported the best conflict outcomes.

Another contemporary trend in the understanding of parent-child relations has been to shift the focus from a unidirectional to a bidirectional perspective on parent-child relations (e.g., Kuczynski et al., 1997; Lollis & Kuczynski, 1997). The notion of bidirectionality, first introduced by Bell (1968), incorporates multiple assumptions, which taken together, have profound implications for the relative role of parents and children in the process of socialization. In a bidirectional perspective, socialization is considered to be an ongoing process where both parents and children play an active role. With this in mind, it is interesting to comment on the relative association of adolescents’ and mothers’ behaviors with adolescents’ perceptions of parenting efficacy. In this study, adolescents’ behaviors during the disagreement were related to conflict outcomes in only one instance. For the neutral arguments only, adolescents’ behaviors during the disagreement were related to their evaluations of how well their mothers handled the conflict episode. Adolescents who were rated as behaving more positively during the neutral arguments were found to report more positive evaluations for their mothers’ handling of the situation. It is important to note that this association is lost when a partial correlation is calculated, controlling for the mothers’ behavior during the disagreement ($r = .08, n = 53, p = .57$). Thus, our data would seem to suggest that mothers’ behaviors are much more important than the adolescents’ behaviors. This conclusion would be more in line with a unidirectional
perspective rather than a bidirectional perspective. Yet, we need to keep in mind that
our measure of mothers’ behaviors, based on the adolescents’ reports, has an implicit
bidirectional component. Mothers’ behaviors, as coded in this study, represent the
researchers’ estimation of the mothers’ ability to take their adolescents’ perspectives
into consideration and tailor their strategies accordingly. Thus, what seems to be
important in achieving positive conflict outcomes is the ability of the mother to adapt
to their adolescent’s changing behaviors and perspectives.

The Influence of Adolescents’ Attributions, Feelings of Relative Control (power), and
Gender on the Process and Outcomes of Mother-Adolescent Conflicts

Attributions. Adolescents’ attributions for their mothers’ behaviors and
intentions were predicted to act as important mediators of the effect of adolescents’
mood state on the conflict outcomes. Given that no direct effects were found between
mood states and outcomes, the mediational properties of attributions could not be
tested in this case. The only place where attributions could be considered as a
potential mediator was in the model assessing the relationship between mothers’
behavior during the disagreement and conflict outcomes of the neutral arguments.
Mothers who were coded as behaving more sensitively were found to have
adolescents who made more benign attributions for their mothers’ behaviors and
intentions. This was true for the neutral and emotionally laden arguments. However,
adolescents’ attributions were related to conflict outcomes only for the neutral
arguments. Adolescents who made more benign attributions also reported feeling better at the end of the disagreement, made more positive evaluations for their mothers' handling of the situation, and reported needing less time before things went back to normal with their mothers. These relationships are in the predicted direction. In the end, the results of the partial correlation analysis lead us to conclude that the direct effect model was a more parsimonious explanation of the relationships between mothers’ sensitive behavior in the situation and conflict outcomes than the mediational model. Yet, what is interesting is the lack of associations between adolescents’ attributions and conflict outcomes for the emotionally laden arguments.

Why should adolescents’ attribution not make a difference on their perceptions of parenting efficacy in the emotionally laden arguments? It was expected that the adolescents’ evaluations of parenting efficacy would be directly related to the attributions they made for their mothers’ intentions for all disagreements. It is a long-held belief that a large part of whether or not a particular discipline intervention is deemed acceptable by the child depends on the child’s estimate of the parent’s intention (Loevinger, 1959). The results based on adolescents’ reports of arguments that were initiated when the adolescent was in a neutral mood state supported this claim, but those based on reports of arguments preceded by bad and good moods did not. It is unclear why this should be the case.

The work of MacKinnon-Lewis and her colleagues (e.g., MacKinnon-Lewis
et al., 1992; 1994) and that of Grace et al. (1993) provide further evidence that children's and adolescents' negative attributions for their mothers' intentions are associated with greater coerciveness, retaliation, and conflict escalation towards their mothers. Again, our results for the neutral arguments support this claim, whereas those based on the emotionally laden arguments do not. For the neutral arguments, adolescents' attributions for their mothers' intentions were found to be significantly and positively related to the researchers' rating of the adolescents' behavior during the disagreement. That is, adolescents who made less positive attributions were rated as behaving less positively towards their mothers. For the emotionally laden arguments, no association was found between adolescents' attributions and their behavior during the disagreement. These differences in the patterns of association between adolescents' attributions, their behaviors during the disagreement and conflict outcomes for the neutral and emotionally laden arguments were unexpected and cannot be explained by the data collected in this study.

**Power.** Adolescents' feelings of relative control (power) over what was happening during the conflict episode with their mothers were associated with positive conflict outcomes for both the neutral and emotionally laden arguments. When discussing disagreements preceded by a neutral mood state, adolescents who reported greater feelings of relative control also reported feeling better at the end of the disagreement and made more positive evaluations of their mothers' handling of
the situation. When discussing arguments preceded by bad or good moods, adolescents reporting an increased sense of power evaluated their mothers’ handling of the situation more positively and reported needing less time for things to go back to normal between them and their mothers. Although the pattern of influence is slightly different, it is clear that adolescents appreciate being made to feel less dominated by their mothers during the conflict episodes. It is interesting to note that adolescents discussing “bad mood” arguments reported significantly greater feelings of power than adolescents reporting on “good mood” arguments. This finding is in line with the fact that adolescents were found to behave most resistantly towards their mothers during arguments that were initiated when the adolescent was in a bad mood. It seems that adolescents are less likely to allow their mothers to dominate them when they are in a bad mood. The importance of adolescents’ feelings of relative control, irrespective of mood states, is consistent with the fact that one of the key developmental tasks of adolescence is achieving autonomy. In order for adolescents to achieve this autonomy, the once asymmetrical mother-child relationship needs to become more balanced.

Gender. Gender differences were explored in this study, but very few were found. An interesting exception was the observed effect of gender on how long ago the arguments that the adolescents were reporting on had occurred. For the neutral arguments, females reported on arguments that had occurred more recently than males
did. The test for gender effects was not significant for the emotionally laden arguments. This is likely due to the large variability observed in the number of days ago that the arguments had occurred. This large variability, while decreasing the likelihood of achieving statistical significance, is interesting and likely reflects the large variability in the frequency of mother-adolescent conflict across families, or the variability in the adolescents' experiences of extreme mood states. Nonetheless, a similar trend was evident for arguments preceded by bad and good moods as was observed for the neutral arguments. Females consistently reported on arguments that had occurred in the more recent past than did males. Based on these results, one may speculate that adolescent females may be engaging in arguments with their mothers more often than adolescent males. The popular belief is that mothers and daughters experience more difficulties during adolescence than do mothers and sons. Yet, the existing literature presents inconclusive results with respect to gender differences in conflict frequency and intensity of mother-adolescent dyads. An alternative explanation for this pattern of results may be that mother-adolescent conflict is more salient for female adolescents than it is for male adolescents, and thus females may have better memories for these episodes than males. Gender differences in adolescents' perceptions and recall of mother-adolescent conflict interactions need to be explored further.
Implications of the Results of this Study for the Mood and Information Processing Literature

In summary, the results of this study indicate that sensitive parenting in the situation is the best predictor of adolescents’ perceptions of parenting efficacy and not adolescents’ mood states or their perceptions of their mothers’ parenting style. Adolescents’ mood states were not found to influence their perceptions of conflict outcomes or how mothers behaved towards their adolescents during the argument. What adolescents’ mood states do seem to influence is how they behave towards their mothers during the argument and how much power adolescents feel they have over what is happening during the argument. In line with our predictions, adolescents in a bad mood prior to the argument behaved more harshly and reported greater feelings of relative control. Yet, many of the other hypothesized effects of mood on the process and outcomes of adolescents’ conflicts with their mothers were not supported by the results of this study. Adolescents’ retrieval of emotionally laden arguments from memory, as compared to the retrieval of neutral arguments, did not seem to shape the way they perceived or evaluated their mothers’ actions and statements during the disagreement.

In addition, adolescents’ mood states prior to initiation of the disagreement did not seem to influence how much attention was directed to scrutinizing the specific quality of the message their mothers were attempting to deliver during the
disagreement. Based on the literature suggesting that a negative mood state prompts individuals to examine their environment more carefully than individuals in a good mood (Aspinwall, 1998), it was expected that parents' specific actions might be more salient in determining adolescents' perception of parenting efficacy when the adolescent was in a bad mood. An extension of this hypothesis was that adolescents' general perception of their parents' parenting style may be more predictive of their perceptions of parenting efficacy when the adolescent was in a neutral or a good mood prior to the initiation of the disagreement. In order to test this hypothesis, separate correlation matrices were calculated for the neutral, bad and good mood arguments. The pattern of correlations observed were similar to those obtained when the emotionally laden arguments were combined to form a single group (i.e., those reported in the results section). The results of our analysis failed to support this hypothesis. There were no differences in the pattern of significant associations observed of mothers' sensitive parenting in the situation and an authoritative parenting style with the conflict outcomes as a function of adolescents' mood state prior to the disagreement. Mothers' sensitive parenting in the situation was consistently the best predictor of adolescents' perceptions of parenting efficacy for the three mood states.

Considerable literature was reviewed documenting the positive effects of a good mood state on creative problem solving (see Ashby et al., 1999, for a review).
and increased child compliance with maternal requests (Kochanska & Aksan, 1995; Lay et al., 1989). This work led to the prediction that adolescents in a good mood prior to the initiation to the disagreement with their mothers would have more positive conflict outcomes. Again, the data failed to support this hypothesis. Adolescents in neutral, bad, and good moods prior to the disagreement did not differ in terms of reported outcomes.

It is unclear why mood seemed to have such a limited influence on adolescents' information processing in this study. The literature examining mood effects on memory, attention, and problem solving presents consistent and robust findings. This work has primarily been done with adult participants, yet there is a growing literature showing similar effects for adolescents (e.g.,, Ganzel, 1999; Grace et al., 1993). Still, more work is required to ensure that mood is affecting information processing in adolescents in the same manner that adults are affected. Another reason why mood may have had such limited impact on the results of this study is that most of the work documenting the influence of mood on cognitive functioning is based on automatic processes, that is, processes that are primarily internally driven and not dependent on external input (Eich & Metcalfe, 1989). Autobiographical recall is typically considered an automatic process. Yet, in this study adolescents were asked to translate their memories into concrete ratings on visual analogue scales and Likert scales. The process of operationalizing the constructs being recalled may have
changed the process from an automatic one to a data-driven one, thus, making it less likely to exhibit mood-related effects.

Limitations of the Current Study

The results of this exploratory study need to be interpreted keeping in mind a number of limitations. First of all, all of the data come from adolescents’ self-reports of arguments that occurred in the past. This methodology is associated with a number of drawbacks, including the potential for demand characteristics and recall bias in shaping adolescents’ responses. Yet, the lack of observed mood effects makes the issues of shared method variance less troubling. If adolescents were being influenced by demand characteristics, many more significant relationships between mood states and conflict outcomes would be expected. It is difficult to attribute a lack of findings to the problems associated with shared method variance. However, the lack of findings may be indicative of other limitations related to the self-report methodology used in the study. Perhaps we did not ask adolescents the correct questions, or did not ask the questions in the correct manner, in order to obtain the information required to illustrate the impact of adolescents’ mood states on the mother-adolescent conflict process and outcomes. Using a variety of methods to measure the constructs of interest may have yielded more fruitful results.

The second limitation of this study that needs to be considered is the validity of using adolescents’ perceptions as a measure of reality. Not having multiple
informants and direct observations of mother-adolescent conflict, we are limited to interpreting associations between adolescents' perception of reality without being able to assess the accuracy of their representations. However, the methodology employed was purposely chosen with these limitations in mind. The fact that this was a new area of study, and the ethical and methodological problems associated with experimentally inducing negative mood states and eliciting conflict behavior, made relying on adolescents' reports the method of choice. In addition, adolescents' perceptions of the processes and outcomes of mother-adolescent disagreements are legitimate areas of study in their own right. For the adolescent, their subjective perceptions may be more meaningful than researchers' operational definitions of what is occurring during these conflict episodes. In my opinion, associations among adolescents' perceptions are at least as important to understand as the more factual, more tangible aspects of parent-child interactions.

The results of this study are limited in their generalizability to early adolescents from primarily middle class, Caucasian families. Early adolescents were selected for this study because this is when the literature suggests that the frequency of parent-adolescent conflict is at its peak (Laursen et al., 1998). It would be interesting to examine the impact of adolescents' mood states on conflict outcomes with older adolescents in future studies. Also, it is interesting to speculate whether we would have found more mood effects if we had had a more diverse sample in terms of
families’ levels of functioning. The current sample was a convenience sample drawn from a list of families that had agreed to be part of a research subject pool at the University of Toronto. These were not families who were particularly troubled by making the transition to adolescence. It is possible that the conflict process in families where the adolescents expressed more severe extremes of emotions, and/or where there were external factors limiting mothers’ abilities to be accommodating to the changes occurring in the adolescent, may be more influenced by the adolescents’ mood states. This remains an empirical question to be addressed in future studies.

**Future Directions**

The lack of significant effects of mood may suggest the conclusion that adolescents’ mood states prior to the initiation of a disagreement with their mother have no influence on the process or outcome of that conflict episode. However, I would like to argue that this conclusion might be premature. An interesting finding of this study was that all adolescents reported similar mood states right after the initiation of the disagreement with their mothers. It seems that the process of engaging in a disagreement with their mothers leads to the same mood states, no matter what the adolescents were feeling like prior to the disagreement. This is a finding that needs to be replicated and investigated further. Obviously, adolescents in neutral, bad, and good moods prior to the initiation of the disagreement are arriving at the similar mood states they experience after the initiation of the disagreement by very
different processes. Perhaps future studies should focus not on the adolescents’ mood state prior to the disagreement per se, but on the changes in mood states experienced as a result of engaging in a disagreement with their mother. It is possible that the nature and magnitude of this change may be related to the process and outcomes of the conflict episode.

Another finding that leads me to be hesitant to conclude that adolescents’ mood states prior to the initiation of the disagreement are irrelevant, is that in a number of instances different patterns of associations were found for the neutral as compared to the emotionally laden arguments. Three examples of this include: a) the association found between adolescents’ and mothers’ behaviors in the disagreement for neutral arguments, but not for emotionally laden arguments; b) the association between adolescents’ attributions and conflict outcomes for the neutral, but not the emotionally laden arguments; and c) the association between adolescents’ attributions and the adolescents’ behavior during the disagreement for the neutral arguments, but not for the emotionally laden arguments. In all three instances, the observed associations are in the predicted direction and are in line with established findings in the literature. It is unclear why these theoretically supported associations fail to be significant for the emotionally laden arguments. It appears that there is something qualitatively different about these underlying processes for neutral and emotionally laden arguments. While we are unable to determine what is responsible for these
differences in this study, future studies should be directed at replicating these findings and understanding these differences.

It is clear from the results of this study that the mothers’ abilities to take their adolescents’ state into consideration and tailor their strategies accordingly (based on adolescents’ reports of mothers’ behavior) are important in achieving positive conflict outcomes. Future studies should be aimed at replicating this finding using multiple methods of assessing mothers’ ability to be sensitive in the situation. Adolescents’ reports, mothers’ reports, and direct observation should all be used in the same study if possible. The use of multiple measures for this construct will allow us to determine if the mothers’ actual behavior in the situation, the adolescents’ perceptions of their mothers’ behavior, or both, are important in determining adolescents’ perceptions of parenting efficacy. In addition, future studies should be aimed at determining the factors influencing the mothers’ ability to tailor their actions to the adolescents’ perspective.

A final construct that seems worthy of further investigation is the notion of power, that is, adolescents’ feelings of relative control in the disagreement. Adolescents’ feelings of relative control were found to be directly related to the conflict outcomes for both the neutral and emotionally laden arguments. This is not surprising, given the saliency of autonomy during the developmental period of adolescence. Future studies of conflict during adolescence could benefit from explicitly addressing this construct.
References


Grusec, J. E., & Kuczynski, L. (1980). Direction of effects in socialization: A
comparison of the parent vs. the child’s behavior as determinants of disciplinary techniques. Developmental Psychology, 16, 1-9.


Adolescent Mood and Conflict Outcomes


process. Eugene, OR: Castalia.


Appendix

A. Consent Forms
B. Demographics Form
C. Index of Mother's Style Questionnaire
D. Interview Protocol
E. Response Booklet
F. Interviewer's Comments
G. Coding Scheme
H. Coding Forms
A. Consent Forms

Adolescent Assent Form

We are interested in understanding adolescents’ conflicts with their mothers. This study will be asking adolescents to tell us about some of the recent arguments they have had with their mothers. If you agree to participate, you will be asked to tell us about two recent arguments that may have come up in different situations and to try to remember what you were thinking and feeling as they were happening. Much of the research on parent-adolescent conflict has focused on parents’ perspectives. There is little or no information available about the adolescents’ perceptions. It is our belief that if we are to further our knowledge about the processes underlying parent-adolescent conflict we need to expand our focus to include the adolescent’s perspective. It seemed to us that the best way to begin was by conducting interviews with adolescents about their experiences. In order to ensure accuracy in the recording of responses the interviews will be audiotaped. You are being invited to take part in this study.

Please understand that your participation is completely voluntary and that you can withdraw from the study at any time you wish. As well, you may refuse to answer any particular question for whatever reason. Several steps will be taken to ensure the confidentiality of your responses. None of the information you give will be discussed with your parents. Your name will not appear on any of the responses you provide and it will not be recorded on tape. The audiotapes of the interviews will be erased once all the data analysis has been completed. Neither your name nor any other identifying information will appear in any report that arises from the research. Please be aware that in the unlikely event that there is information revealed in the interview that leads the researcher to be concerned about possible child abuse, the researcher has an obligation to disclose and will disclose that information to a child welfare authority.

If you are willing to participate in the study, please sign this form. In addition to your willingness to participate we will need your parent’s permission to include you in the study. A similar parental consent form will be provided for you to have your parents sign if you are interested. You may read the form your parents will be asked to sign.

Date

Name of Participant

Signature of Participant
Parental Consent Form

I am a Ph.D. student in the Department of Psychology at the University of Toronto. My dissertation research is aimed at gaining an understanding of parent-adolescent conflict. I am inviting your adolescent child to participate in a research study, with your permission.

If your son/daughter is a participant, he/she will be asked to tell us about two recent arguments that he/she has had with his/her mother. Your child will be asked about his/her thoughts and feelings during the disagreement. Much of the research on parent-adolescent conflict has focused on parents’ perspectives. There is little or no information available about the adolescents’ perceptions. It is my belief that if our knowledge about the processes underlying parent-adolescent conflict is to be furthered, the focus needs to be expanded to include the adolescent’s perspective. It seemed that the best way to begin was by conducting interviews with adolescents about their experiences. In order to ensure the accuracy in the recording of the responses the interviews will be audiotaped.

Please understand that your child’s participation is completely voluntary and that he/she can withdraw from the study at any time. As well, your child may refuse to answer any particular question for whatever reason. Several steps will be taken to ensure the confidentiality of your child’s responses. None of the information your child provides will be discussed with you as his/her parents or with anyone other than the researchers. Your child’s name will not appear on any of his/her responses and it will not be recorded on tape. The audiotapes of the interviews will be erased once all the data analysis has been completed. Neither your child’s name nor any other identifying information will appear in any report that arises from the research. Please be aware that in the unlikely event that there is information revealed in the interview that leads the researcher to be concerned about possible child abuse, the researcher has an obligation to disclose and will disclose that information to a child welfare authority.

If you are willing to allow your child to participate in this study, please sign this form. In addition to your consent to have your child participate we will need your child to be willing to participate in the study. Your child will be asked to sign a similar form to indicate his/her voluntary participation. If you wish, you may read the form your child will be asked to sign.

Date

Child’s Name

Name of Parent/Guardian

Signature of Parent/Guardian
B. Demographics Form

Subject:____________________

Age:____________________  Birth Date:____________________

Gender:__________________  Grade in School:________________

Where were you born?______________________________

Where were your parents born?______________________

Where were your grandparents born?________________

How long have you lived in Canada?________________

Please Circle All The People You Are Currently Living With:

Mother -- biological or adoptive or step-mother (how long________)

Father -- biological or adoptive or step-father (how long________)

older brother yes or no (how many_______)

older sister yes or no (how many_______)

younger brother yes or no (how many_______)

younger sister yes or no (how many_______)

other __________________________________________

Mother's Highest Level of Education__________________________

Mother’s Occupation______________________________________

Father’s Highest Level of Education__________________________

Father’s Occupation______________________________________
C. Index of Mother's Style

Subject: ________

In this questionnaire I will be asking you a number of questions about the way your mother usually does things. When you are answering the questions, keep in mind your mother's typical style and her general behavior. Think specifically how your mother acts towards you. For each question, just circle the phrase indicating the “best” response for you.

1. I can count on my mother to help me out if I have some kind of problem.
   Usually True  Usually False

2. My mother keeps pushing me to do my best in whatever I do.
   Usually True  Usually False

3. My mother keeps pushing me to think independently.
   Usually true  Usually False

4. My mother helps me with my schoolwork if there is something I don't understand.
   Usually True  Usually False

5. When my mother wants me to do something, she explains why.
   Usually True  Usually False

6. When you get a poor grade in school, how often does your mother encourage you to try harder?
   Never  Sometimes  Usually

7. When you get a good grade in school, how often does your mother praise you?
   Never  Sometimes  Usually

8. How much does your mother really know who your friends are?
   Doesn't know  Knows a little  Knows a lot

9. How often does your mother spend time just talking to you?
   Almost every day  A few times a week  A few times a month  Almost never

10. How often do you and your mother do something fun together?
    Almost every day  A few times a week  A few times a month  Almost never
11. In a typical week, what is the latest you can stay out on SCHOOL NIGHTS?
Not allowed out, before 8:00, 8:00 to 8:59, 9:00 to 9:59, 10:00 to 10:59, 11:00 or later. As late as I want

12. In a typical week, what is the latest you can stay out on FRIDAY OR SATURDAY NIGHT?
Not allowed out, before 9:00, 9:00 to 10:59, 11:00 to 11:59, 12:00 to 1:59, After 2:00. As late as I want

13. My mother knows exactly where I am most afternoons after school?
Yes No

14. How much does your mother TRY to know where you go at night?
Don't try Tries a little Tries a lot

15. How much does your mother TRY to know what you do with your free time?
Don't try Tries a little Tries a lot

16. How much does your mother TRY to know where you are most afternoons after school?
Don't try Tries a little Tries a lot

17. How much does your mother REALLY know where you go at night?
Don't know Knows a little Knows a lot

18. How much does your mother REALLY know what you do with your free time?
Don't know Knows a little Knows a lot

19. How much does your mother REALLY know where you are most afternoons after school?
Don't know Knows a little Knows a lot
D. Interview Protocol

INTRODUCTION:

During this interview, I am going to be asking you a number of different questions about a recent argument you had with your mother. I will be stopping you at different points to ask you about your thoughts and feelings at different stages of the argument. While I may have to interrupt you at certain points, I promise you will get a chance to tell me all that you want to about this particular disagreement. It is important that during the interview you try to remember the argument and the thoughts and feelings you were having as the argument was actually taking place. I need you to answer the questions as if you were answering them at the time of the argument. I will also be stopping you at different points to ask you to fill out a number of rating scales. It is important to realize that there are no right or wrong answers to any of the questions I will be asking you. I am just interested in your personal thoughts and feelings. I’m going to show you the rating scales now so that you will be familiar with them once we start. This will also give you a sense of the type of questions that I will be asking you.

SHOW THEM RATING SCALES AND GET THEM TO RATE CURRENT MOOD AS AN EXAMPLE.
PARENT-ADOLESCENT CONFLICT INTERVIEW:

MOOD PRIOR TO CONFLICT:
Let's begin by talking about the most recent time that you were in a NEUTRAL MOOD and then ended up having an argument with your mother about something YOU SAID OR DID. What I mean by a "NEUTRAL MOOD" is the mood that you would usually be in if you were having a routine day, that is not a particularly good day or a particularly bad day. Try to remember the most recent time that happened.

OR

Was there ever a time when you were in a REALLY GOOD MOOD for some reason and then you ended up having an argument with your mother about something YOU SAID OR DID?

Yes or No

Let's begin by talking about the most recent time that happened. Before we start, I'd like to make sure that the reason you were in a REALLY GOOD MOOD before having the disagreement had nothing to do with your parents. Maybe you were in a REALLY GOOD MOOD because of something that happened at school, or with your friends. It could be any reason at all as long as the reason that you were in a GOOD mood had nothing to do with your parents.

OR

Was there ever a time when you were in a REALLY BAD MOOD for some reason and then ended up having an argument with your mother about something YOU SAID OR DID?

Yes or No

Let's begin by talking about the most recent time that happened. Before we start, I'd like to make sure that the reason you were in a REALLY BAD MOOD before having the disagreement had nothing to do with your parents. Maybe you were in a REALLY BAD MOOD because of something that happened at school, or with your friends, it could be any reason at all as long as the reason that you were in a BAD mood had nothing to do with your parents.

PICKING OF ARGUMENT:
O.K., do you think you can remember a recent argument you had with your mother that fits the description of the situation I asked you about? THAT IS (REPEAT SCENARIO CRITERIA)
Take your time to think and let me know when you have found one.

I'm going to ask you to focus on that disagreement and try to remember it as best as you can. Try to remember exactly what was said and done by you and your Mother. More importantly, try to remember what you were thinking and feeling while you were having the disagreement. I'm asking you to almost RELIVE the disagreement in your head if you can. I am interested in finding out what you were thinking and feeling AT THE TIME THE ARGUMENT WAS ACTUALLY TAKING PLACE, NOT HOW YOU ARE FEELING AND THINKING ABOUT IT NOW. In fact, I realize that the way you may be feeling or thinking about the disagreement now that some time has passed might be very different from what you were thinking and feeling as the disagreement was actually happening. That does not matter for this interview. Throughout this interview I will be asking you a number of different questions, and in all of them I am interested in your responses AT THE TIME THE ARGUMENT WAS ACTUALLY HAPPENING, NOT NOW. DOES THIS MAKE SENSE? JUST TRY AND RELIVE THE ARGUMENT IN YOUR HEAD.

Do you have any questions before we start?

* I guess the first thing I need to know is when did you have this disagreement with your mother? **How many days ago was that?**

**DESCRIPTION OF EVENTS LEADING UP TO ARGUMENT:**

* Tell me about what happened that day before the argument with your mother started that put you in a GOOD/ BAD/ NEUTRAL MOOD.

* If you had to label the mood you were in that day BEFORE the disagreement started, what would you say you were feeling? (i.e., excited, happy, proud/ angry, sad, frustrated/ average, O.K., normal)

* Another way of describing how you were feeling that day is to rate your mood state along a continuum from EXTREMELY BAD to EXTREMELY GOOD. Could you please indicate on this scale how you were feeling that day RIGHT BEFORE you had the disagreement with your mother? It is important that you try to remember what your mood was like BEFORE the disagreement happened.

**DESCRIPTION OF BEGINNING OF DISAGREEMENT:**

* Now, I'd like you to please tell me a little bit about the disagreement with your mother? **THINK BACK TO THE TIME OF THE ARGUMENT:** What would you say STARTED the disagreement?
Before you tell me more about the disagreement, I'd like to ASK YOU TO THINK BACK TO THE TIME OF THE ARGUMENT AND TRY TO REMEMBER HOW YOU WERE FEELING JUST AFTER THE ARGUMENT STARTED. WAS YOUR MOOD ANY DIFFERENT JUST AFTER THE BEGINNING OF THE DISAGREEMENT COMPARED TO BEFORE THE START OF THE ARGUMENT?

* THINK BACK TO THE TIME OF THE ARGUMENT: Could you please indicate on this scale how you were feeling RIGHT AFTER the disagreement with your mother STARTED. It is important that you try and remember what your mood was like JUST AFTER THE BEGINNING OF THE ARGUMENT.

RATE MOOD ON CONTINUUM FROM EXTREMELY BAD TO EXTREMELY GOOD

* If you had to LABEL the mood you were in what would you call it? WHY were you feeling this way?

DESCRIPTION OF DISAGREEMENT, IT'S ENDING, AND THE ASSOCIATED MOOD CHANGES:

* Now I'd like you to tell me about the rest of the disagreement? THINK BACK TO THE TIME OF THE ARGUMENT: What exactly happened over the course of the disagreement? Try to remember the best that you can, what each of you SAID and DID during the disagreement.

* So what would you say marked the END of this disagreement?

* AGAIN I'D LIKE TO ASK YOU TO TRY TO REMEMBER HOW YOU WERE FEELING AT THIS PARTICULAR POINT, THAT IS RIGHT AT THE END OF THE DISAGREEMENT. WAS YOUR MOOD ANY DIFFERENT IMMEDIATELY AFTER THE END OF THE DISAGREEMENT COMPARE TO YOUR MOOD AT THE START OF THE DISAGREEMENT? YES OR NO

* THINK BACK TO THE TIME OF THE ARGUMENT: Could you please indicate on this scale how you were feeling RIGHT AFTER the disagreement with your mother ENDED. It is important that you try and remember what your mood was like IMMEDIATELY AFTER HAVING THE DISAGREEMENT with your mother.

RATE MOOD ON CONTINUUM FROM EXTREMELY BAD TO EXTREMELY GOOD
*LABEL AND EXPLAIN WHY were you feeling this way.

* THINK BACK TO THE TIME OF THE ARGUMENT: How well did you think your mother understood your point of view at the end of the disagreement? Could you mark on this scale from “did not understand me at all” to “completely understood”, how well you thought your mother understood you at the end of the argument?

* Did your Mother’s understanding of your point of view at the end of the argument make a difference in any way?

RECAP PATTERN IN REPORTED MOOD CHANGES THEN ASK:

* Do you think that you could determine at which point in the disagreement that your mood changed? What was it in response to?

* THINK BACK TO THE TIME OF THE ARGUMENT: How do you think this mood change affected the WAY YOU and YOUR MOTHER ACTED during the course of the disagreement?

* Please explain to me WHY you feel this way about the role that your mood played in determining the course of the disagreement. How did your mood influence what was said or done by both you and your Mother AT DIFFERENT POINTS OF THE ARGUMENT?

ATTRIBUTIONS:

Up to this point, we have been talking about what happened during the disagreement and the feelings you were having at different times during the argument. Now, what I would like to do is to ask you some questions about the different THOUGHTS that may have gone through your head during the argument.

Again, I’d like you to try to remember and RELIVE the ideas that were going through your head WHILE the argument was happening. I WANT TO KNOW WHAT YOU WERE THINKING WHILE YOU WERE HAVING THE DISAGREEMENT. I REALIZE THAT YOU MAY THINK DIFFERENTLY ABOUT THINGS NOW, BUT IT IS IMPORTANT THAT YOU TELL ME WHAT YOU WERE THINKING, AS BEST AS YOU CAN, WHILE YOU WERE ACTUALLY HAVING THE DISAGREEMENT.
FOR THIS PART, I'M NOT GOING TO ASK YOU SEPARATELY FOR YOUR IDEAS BEFORE, DURING, AND AT THE END OF THE ARGUMENT LIKE I DID WITH THE FEELINGS. INSTEAD, I AM INTERESTED IN KNOWING ABOUT YOUR IDEAS THROUGHOUT THE ARGUMENT. SO PLEASE TELL ME ABOUT ANY THOUGHTS THAT WENT THROUGH YOUR HEAD NO MATTER WHEN DURING THE ARGUMENT YOU HAD THEM. O.K.?

* THINK BACK TO THE TIME OF THE ARGUMENT: WHY did you think your mother handled this situation in the way that she did?

* THINK BACK TO THE TIME OF THE ARGUMENT: What did you think your mother’s INTENTIONS were?

* What did you think your mother was trying to accomplish? WHY DO YOU THINK THAT?

* THINK BACK TO THE TIME OF THE ARGUMENT: Would you have said that the reason your mother acted the way that she did during the disagreement was because that is just the way that she is, or would you have said there was something special about this situation that made your mother act the way that she did? Was your mother’s typical nature (that is, just the way she is) or the situation more important in determining the way your mother acted during the disagreement?

* EXPLAIN TO ME WHY YOU THINK THIS.

* THINK BACK TO THE TIME OF THE ARGUMENT: Could you mark on this scale, where one end is “all your fault” and the other end is “all your mother’s fault”, and the middle is “equally to blame”, who YOU would have said at the time of the argument was more to BLAME for this disagreement?

* WHY would you say this?

CONFLICT ISSUES AND GOALS:

* THINK BACK TO THE TIME OF THE ARGUMENT: What did YOU think was the CENTRAL ISSUE in this conflict?

* What was the message you were trying to get across to your mother?
* What were YOUR GOALS DURING THE DISAGREEMENT? What were YOU trying to get accomplished?

* Why were these your goals?

**CONFLICT PROCESS EVALUATION:**

Now, I want you to THINK BACK TO THE ARGUMENT WITH YOUR MOTHER AS A WHOLE and tell me HOW YOU FELT ABOUT THE WAY YOUR MOTHER BEHAVED OVERALL DURING THE DISAGREEMENT.

* THINK BACK TO THE TIME OF THE ARGUMENT: Could you mark on this scale, from "completely unfair" to "completely fair", how FAIR you thought the way your mother handled the disagreement was?

**CONFLICT OUTCOME EVALUATION:**

Now, let's talk about the way the conflict ENDED. You said that at the end, <repeat last things from both persons>. THINK BACK TO THE END OF THE ARGUMENT: TELL ME HOW YOU FELT AND WHAT YOU THOUGHT SPECIFICALLY ABOUT HOW THE ARGUMENT WAS ENDED.

* Could you mark on this scale how SATISFIED YOU were with this CONCLUSION IMMEDIATELY AFTER THE DISAGREEMENT ENDED?

* Why did you feel this way?

**PERCEPTIONS OF RELATIVE CONTROL:**

* Could you mark on this scale, at the time of the argument, how much INFLUENCE you thought YOU were having OVER WHAT WAS HAPPENING THROUGHOUT THE ARGUMENT?

* Could you mark on this scale, at the time of the argument, how much INFLUENCE you thought YOUR MOTHER was having OVER WHAT WAS HAPPENING THROUGHOUT THE ARGUMENT?

* Explain to me why you felt this way about the amount of influence you and your mother had over what was happening in the argument.
INTERNALIZATION:
What did you LEARN from this disagreement with your mother?
What did you learn SPECIFICALLY ABOUT YOUR MOTHER from this disagreement?

RELATIONSHIP IMPACT:
* What kind of impact do you think this disagreement had on your relationship with your mother? That is did it change your relationship with your Mother in any way, good or bad? WHY OR WHY NOT?
* THINK BACK TO THE TIME OF THE ARGUMENT: How long would you say it took before the disagreement BLEW OVER and things went back to normal between you and your Mother. (get a DETAILED estimate of time in minutes, hours, or days)

DEBRIEFING:
Okay. I don't have any more specific questions to ask you, but if there is anything else you'd like to comment on, please feel free. I want to make sure that I have all the information that you think I should know in order to really understand what happened between you and your mother. Is there anything at all that you would like to add?

Also. if you have any questions please feel free to ask.

I realize that we have been talking about conflicts and that this can sometimes be difficult. I just want to make sure that you are feeling O.K. about things. If not, and you would like to talk about it, please feel free.

Thank-you very much for taking part in this study.

Oh, by the way, What made you decide that you wanted to take part in this study?
E. Response Booklet

SUB NUM: _______________ RATING: _______________

COULD YOU PLEASE INDICATE ON THIS SCALE HOW YOU ARE FEELING RIGHT NOW:

| EXTREMELY BAD | EXTREMELY GOOD |

WHAT WOULD YOU CALL THIS FEELING? _______________
Subject Number: ____________________ Interviewer:____________________
Adolescent’s Birth Date: _____________ Gender: ______  Grade Level: ______
Mood Condition: N  G  B
Comments Regarding Difficulty arriving at an appropriate memory:

How many days ago did disagreement with mother take place? ________________

Description of events preceding the argument:

Label for MOOD the adolescent was in BEFORE THE DISAGREEMENT STARTED:
SUB NUM:______________ RATING:______________

COULD YOU PLEASE INDICATE ON THIS SCALE HOW YOU WERE FEELING RIGHT BEFORE YOU HAD THE DISAGREEMENT WITH YOUR MOTHER:

<table>
<thead>
<tr>
<th>EXTREMELY BAD</th>
<th>EXTREMELY GOOD</th>
</tr>
</thead>
</table>

WHAT WOULD YOU CALL THIS FEELING?________________________
COULD YOU PLEASE INDICATE ON THIS SCALE HOW YOU WERE FEELING JUST AFTER THE BEGINNING OF THE ARGUMENT WITH YOUR MOTHER:

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTREMELY BAD</td>
<td>EXTREMELY GOOD</td>
</tr>
</tbody>
</table>

WHAT WOULD YOU CALL THIS FEELING? __________________________
Could you please indicate on this scale how you were feeling right after the disagreement with your mother ended:

[--------------------*-------------------*-------------------]  
Extremely Bad       Extremely Good

What would you call this feeling? ____________________________
Could you rate on this scale how well you think your mother understood you at the end of the argument?

1-----------------2-----------------3-----------------4-----------------5-----------------6-----------------7
Did not understand me at all

Understood me completely
COULD YOU RATE ON THIS SCALE WHO YOU THINK IS MORE TO BLAME FOR THIS DISAGREEMENT?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Mom's</td>
<td>Equal</td>
<td>All My</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fault</td>
<td>Blame</td>
<td>Fault</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
COULD YOU RATE ON THIS SCALE HOW FAIR YOU THOUGHT THE WAY YOUR MOTHER HANDLED THE DISAGREEMENT WAS?

1------------2-------------3-----------------4----------------------5------------------6------------------7
Completely Unfair

Completely Fair
COULD YOU RATE ON THIS SCALE HOW SATISFIED YOU WERE WITH THE CONCLUSION OF THE ARGUMENT IMMEDIATELY AFTER THE DISAGREEMENT ENDED?

1-----------------2-----------------3-----------------4-----------------5-----------------6-----------------7
Completely Unsatisfied
Satisfied
COULD YOU RATE ON THIS SCALE HOW MUCH INFLUENCE YOU THINK YOU HAD OVER WHAT WAS HAPPENING THROUGHOUT THE ARGUMENT?

1-------------2-------------3-------------4-------------5-------------6-------------7
No Influence Complete Control
Whatsoever Over Argument
COULD YOU RATE ON THIS SCALE HOW MUCH INFLUENCE YOU THINK YOUR MOTHER HAD OVER WHAT WAS HAPPENING THROUGHOUT THE ARGUMENT?

1-----------------2-------------3---------------4----------------5-----------------6----------------7
No Influence Complete Control
Whatever Over Argument
F. Interviewer's Comments

SUB NUM: __________

Where was the interview conducted? Was the environment appropriate?

Any comments regarding the participant's ability to talk freely and openly during the interview:

Interviewer's summary and comments regarding the participant and/or the interview:

Any observations of interest?
G: Coding Scheme for Adolescent Interviews

A) CONTENT OF THE DISAGREEMENT:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chores (CH)</td>
<td>Concerns regarding family duties and responsibilities, such as doing the dishes, cleaning, walking the dog, setting the table, or shoveling snow, etc.</td>
</tr>
<tr>
<td>Physical Appearance (APP)</td>
<td>Concerns regarding acceptable standards of dress and appearance including hair, makeup use, condition or style of clothing, body piercing and tattoos, etc.</td>
</tr>
<tr>
<td>Personality/Behavior Style (PERS)</td>
<td>Concerns regarding irritating personality traits or behavioral styles such as being very excitable, hyperactive, stubborn, or over-talkative, tardy, lazy, etc. Other examples may include having poor manners, engaging in argumentative behavior, etc.</td>
</tr>
<tr>
<td>Homework/Academic Achievement/Career Issues (ACAD)</td>
<td>Concerns regarding homework, grades, course selection, or career decisions</td>
</tr>
<tr>
<td>Interpersonal Relations (IR)</td>
<td>Concerns regarding getting along with others such as fighting with siblings or friends, hitting, quarreling, arguing, teasing or hurting others</td>
</tr>
<tr>
<td>Regulation of Interpersonal Relations (REGIR)</td>
<td>Concerns regarding one's choice of friends, decisions regarding when to see friends, participation in social activities such as parties or clubs, dating and sex, or other interaction with people</td>
</tr>
<tr>
<td>Bedtime/Sleep/Curfew (BED)</td>
<td>Concerns regarding appropriate times to be home after school or in the evening or when to go to bed or when to get up</td>
</tr>
<tr>
<td>Health and Hygiene (HEA)</td>
<td>Concerns regarding diet, health, substance use/abuse (e.g., smoking, drinking, drugs, caffeine), working out, sex (in the context of pregnancy/STD's/birth control, etc.) Concerns regarding hygiene (e.g., cleanliness, brushing teeth, showers, washing hands before meals, etc.)</td>
</tr>
<tr>
<td>Regulation of activities (ACTIV)</td>
<td>Concerns regarding CHOICE or TIMING or DURATION of activities, such as telephone use, TV watching, internet, video games, music, practicing piano, sports, shopping, driving, etc.</td>
</tr>
<tr>
<td>Finances (FIN)</td>
<td>Concerns regarding spending habits, earning money, budgeting, being responsible with money, allowance, etc.</td>
</tr>
</tbody>
</table>
B) INITIATION OF THE DISAGREEMENT:
-use the categorical coding scheme outlined below, do not double code
-is it the child who is reacting negatively to the parents’ agenda or is it the mother
who is reacting negatively to the child’s agenda
-possible codes include:

**Child Opposes Parent’s Agenda (COPA):**
Disagreement begins when the child is 1) unwilling to accept the mother’s request, suggestion, or point of view; 2) child breaks a family rule or agreement; and 3) illustrates his/her opposition in either a direct or indirect manner.

Examples:  
-Child says “I don’t want to go study”  
-When child forgot to put the cutlery away at the agreed upon time  
-When the child failed to maintain her bedroom up to par

**Mother Opposes Child’s Permission Initiations (PERM):**
Disagreement begins when the mother is opposed to a request made by the child.

Examples:  
-Child asks if she can go out with her friends.  
-Child asks if she can have a party.

**Mother Opposes Child’s Agenda (MOCA):**
Disagreement begins when the parent is opposed to the child’s agenda, suggestion, point of view, assertion, or behavior. The opposition can be made in either a direct or indirect manner.

Examples:  
-Mother is upset with the child’s behavior at school  
-Mother disagrees with the child’s choice of activities  
-Mother is not satisfied with the child’s performance on a given task
C) MOTHER'S BEHAVIOR DURING THE DISAGREEMENT:
-rate the mother's behavior on a 7-point Likert scale
-this is the reader's objective opinion based on all the information made available throughout the transcript, it may or may not be similar to the adolescent's subjective evaluation of the mother's behavior
-rate solely the mother's behavior independent of the outcome of the disagreement
-the coder needs to justify the rating, please note on the coding form anything that you think is relevant, and please take the following behaviors into consideration

a) Does the mother impose a punishment? Is the punishment appropriate given the content of the disagreement? Does the mother make threats of punishment, but does not actually implement it?
b) Is the mother insistent on getting her point across? How much energy does she use to get her point across? Do the mother's actions match the content of the disagreement or does she "blow things out of proportion"?
c) How intrusive or controlling is the mother's behavior?
d) Is there evidence that the mother is attempting to take the child's feelings and point of view into consideration? Does she modify her strategies to match the child's state? Is the mother taking the child's reaction to her behavior into consideration?
e) Do the mother's behavior work to escalate the intensity of the argument or are they more conducive to working towards a mutually satisfying outcome?
f) Is the mother able to acknowledge any positive aspects of the child's behavior/personality?

1 = Mother uses excessively harsh/intrusive strategies and/or promotes conflict escalation, there is no evidence that the mother is taking the child's mood state or point of view into consideration, there is no evidence that she is using the child's reactions to shape her choice of strategies, severity of the strategies do not seem match the content of the disagreement

4 = Mother is not excessively harsh, but there is no evidence that she is taking the child's mood state, point of view, and/or reactions into consideration and there is no evidence that the mother is willing to compromise. Alternatively, a rating of 4 can be given when the mother uses a combination of harsh and sensitive strategies that seem to balance each other out.

7 = Mother makes her comments and requests in a gentle manner, she is clearly considerate of the child and/or is sensitive to the child's mood state and reactions to her behavior, there is evidence that the mother is trying to understand the child's point of view, and/or the mother acknowledges positive aspects of the child's behavior/personality, and there is evidence that the mother is willing to compromise with the child in an appropriate manner, however the establishment of a compromise is not necessary for this rating.
D) CHILD'S BEHAVIOR DURING THE DISAGREEMENT:
-rate on a 7-point Likert scale how difficult the child’s behavior was during the argument
- this is the reader’s objective opinion based on all the information made available throughout the transcript, it may or may not be similar to the adolescent’s or the mother’s evaluation of the child’s behavior
-rate solely the child’s behavior independent of the outcome of the disagreement, what is important is how the child handles the disagreement and not whether the child is compliant/noncompliant
-the coder needs to justify their rating, please take the following child behaviors into consideration when making a rating, and comment on each behavior on the coding form
-please note on the coding form anything that you think is relevant even if it is not listed here

a) How much does the child resist their mother’s agenda? Or how insistent is the child to have the mother adopt their agenda?
b) How much energy does the child use to get the point across? Do the child’s actions match the content of the disagreement or does he/she “blow things out of proportion”?
c) How intrusive or controlling is the child’s behavior?
d) Is there evidence that the child is attempting to take the mother’s feelings and point of view into consideration?
e) Is there evidence that the child is taking any responsibility for their role in the disagreement?
f) Do the child’s behaviors work to escalate the intensity of the argument or are they more conducive to working towards a mutually satisfying outcome?

1 = child is completely hostile/rude and/or promotes conflict escalation, there is no indication that the child is willing to take the mother’s perspective into account, this may be evidenced by the child’s attempts to ignore the parent and/or to be controlling of the parent, the child’s strategies do not seem to match the content of the disagreement, the child is unable to take any responsibility for their role in the argument

4 = child is not excessively hostile/rude towards the mother, yet there is no evidence that the child is taking the mother’s feelings, point of view, and/or reactions into consideration and there is no evidence that the child is willing to compromise. Alternatively, a rating of 4 can be given when the child uses a combination of hostile and sensitive measures that seem to balance each other out. Please indicate on the coding form if the child receives this rating because they seem to be unable to confront the parent.

7 = child makes his/her comments and requests in a gentle manner, the child is open to considering the mother’s perspective and/or is sensitive to the mother’s feelings, it is clear that the child is trying to understand the mother’s point of view and that the child recognizes his/her role in the disagreement, and/or there is evidence that the child is willing to compromise with the mother in an appropriate manner, however establishment of a compromise is not necessary for this rating
E) CONFLICT RESOLUTION:
-use the categorical coding scheme outlined below, do not double code
-note when a Third Party Intervention occurs, you must also specify the outcome of the conflict

Third Party Intervention: Someone other than the child or the mother proposes or dictates a solution or mediates the conflict.

No Resolution:
Neither the mother nor the child makes any submission to their position. Thus, achieving a compromise is impossible. Both parties retain their original position at the end of the disagreement.

a) Unresolved—Standoff: The argument is terminated in a hostile manner. One or both participants refuse to continue the discussion.

b) Unresolved—Passive: The argument is terminated prior to reaching a resolution, but the ending is not hostile. In this case, it seems more like the participants ran out of steam, or ran out of time, before a resolution could be achieved.

Child Submission:
Child modifies his/her position in order to terminate the disagreement. The mother does not modify her position through the course of the argument.

c) Child Submission—No Acceptance: The child goes along with the mother’s demands or viewpoint and/or promises to change his/her behavior, and/or gives up getting their own way. However, there is no indication that the child does so because he/she has come to agree with or accept the parent’s position. The child may submit to the parent simply because they feel powerless, or to avoid continuing the argument.

d) Child Submission—With Acceptance: The child goes along with the mother’s demands or viewpoint and/or promises to change his/her behavior, and/or gives up getting their own way. However, it is clear that the reason the child does so is because he/she has come to agree with or accept the parent’s position. The child submits to the parent because he/she understands that it is the right thing to do.

Maternal Submission:
Mother modifies her position in order to terminate the disagreement. The child does not modify his/her position through the course of the argument.

e) Maternal Submission—No acceptance: The parent agrees or accedes to the child’s demands or viewpoint and/or promises to change his/her behavior, and/or gives up on trying to get the child to behave in a certain way. However, there is no indication that the mother does so because she has come to agree with the child’s position. The parent may submit because they feel powerless, or to avoid continuing the argument.

f) Maternal Submission—With Acceptance: The parent agrees or accedes to the child’s demands or viewpoint and/or promises to change his/her behavior, and/or gives up on trying to get the child to behave in a certain way. However, it is clear that the reason the mother does so is because she has come to agree with the child’s position. The mother submits to the child because she understands that it is the right thing to do.

Mutual Give and Take:
Both the mother and the child modify their position in order to terminate the disagreement.

g) Compromise: The mother and the child take each other’s position/opinion into consideration and alter their original position in order to find a mutual solution. It is not necessary that the mother and child alter their positions equally, as long as both make some kind of concession to the other.
F) WHAT THE CHILD THINKS THE MOTHER'S MOTIVATION IS?

-rate the child’s perceptions of the mother’s motivation on a 7-point Likert scale
-look at responses to the questions asking:
   a) why they think the mother handled the situation in the way that she did,
   b) what they think the mother’s intentions were, and
   c) what they think the mother was trying to accomplish
-also include any other statements made about the mother’s motivation at any other place in the interview
-if a number of different reasons for the mother’s behavior are identified, you need to take all of this information into account when making your rating

1 = child is only able to make negative attributions for the mother’s motivation, all the reasons identified indicate that the child thinks the mother was acting in a self-serving manner and/or not in the interest of the child, the child may or may not think the mother was deliberately trying to hurt him/her, but it is obvious that the child thinks that the mother was not thinking about him/her

4 = the child can identify sensible reasons motivating the mother’s behavior, the parent may or may not benefit from the situation, but there is no indication that the child thinks that the mother was acting in a self-serving manner, nor is there any evidence that the child thinks that the mother had his/her best interest at heart, the mother may be seen as simply being task focused

7 = it is clear that the child sees the mother as acting in accordance to what she believes is in the child’s best interest, if there is any benefit to the mother from the situation it is perceived to be secondary to the potential benefits to the child, the mother’s motivations are seen to be purely benevolent
**G: CHILD'S GOALS**

-child may have more than one goal, thus multiple codes may be used

<table>
<thead>
<tr>
<th>GOAL</th>
<th>DESCRIPTION OF GOAL</th>
</tr>
</thead>
</table>
| Relationship Goal (REL) | 1. This goal is not exclusively about the self; it may be to provide benefit for the relationship or be entirely other-focused.  
2. This goal may include wanting to reassure mother or put mother at ease out of concern or consideration of mother’s feelings, not just out of concern for the self.  
3. It also may reflect a concern for maintaining a good relationship with the mother.  
4. It may include wanting mutual agreement or a mutually satisfying resolution.                                                                                      |
| Emotional Support goals (ES) | 1. This goal involves a desire for the mother to fill an emotional need.  
2. This may include wanting the mother’s approval, emotional support, trust, sympathy, respect, forgiveness or understanding.  
3. This also may include wanting the mother to acknowledge adolescent’s feelings or point of view and support decisions made.                                                                                                           |
| Autonomy goals (AUT)   | 1. This goal involves expression of independence, the desire to make own decisions, to do things on own terms, or the assertion of one’s individuality or uniqueness.  
2. This may wanting the mother to recognize and acknowledge one’s independence, maturity and competence in handling one’s own affairs.                                                                                                           |
| Dominance goals (DOM)  | 1. This goal involves a desire to control or change the mother’s (or another’s) actions, feelings, or thoughts, usually in the interest of benefiting the self, NOT to benefit the other.  
2. This may include wanting the mother to admit being in the wrong.  
3. This goal could involve making the mother feel negatively (e.g., teasing)  
4. It may also include venting of anger, frustration for “no reason”, taking out bad day on Mother, etc.                                                                                                                        |
| Instrumental goals (INST) | 1. This goal involves wanting to obtain or accomplish the concrete end result over which the disagreement erupted (i.e. obtaining permission to do something, or avoiding or getting out of doing something)  
2. This is a goal that is specific to the disagreement situation (i.e. the disagreement was about wanting to achieve or accomplish something)                                                                                                  |
| Avoidance goals (AV)   | 1. This is a goal which involves wanting to avoid or halt any further interaction and/or confrontation with the mother.  
2. This may include not wanting to engage in the disagreement, or once engaged, wanting nothing else other than to end the disagreement as soon as possible.                                                                                                    |
**H: DURATION OF IMPACT ON RELATIONSHIP WITH MOTHER:**

-rate on 7-point Likert scale

-look at child’s response to the question “How long did it take before things blew over and went back to normal between you and your Mother?”

1 = almost immediately, less than 30 minutes
2 = 31 minutes - 2 hours
3 = less than 6 hours
4 = up to 24 hours
5 = up to 2 days
6 = up to 1 week
7 = more than a week
H: Coding Forms

A) Content of Disagreement (give description and appropriate code):

B) Initiation of the Disagreement (give description and appropriate code):
C) Maternal Behavior (Make a rating and justify it with proper evidence):

1------------2-----------3-------------4-------------5-------------6-------------7

Comments:

a) 

b) 

c) 

d) 

e) 

f) 

Other:
D) Child Behavior (Make a rating and justify it with proper evidence):

1---------2---------3---------4---------5---------6---------7

Comments:

a)

b)

c)

d)

e)

f)

Other:
E) Conflict Resolution (write down ending of disagreement and proper code):

F) What the child thinks the mother's motivation is? (write down all relevant statements)

1-----------------------2-----------------------3-----------------------4-----------------------5-----------------------6-----------------------7

Evidence:
G) Child’s Goal (indicate the child’s statements and the proper codes):

H) Duration of Impact on the Relationship:

Evidence: