The Influence of Mother-Child Communication and Relationship Factors in Promoting Healthy Development in High-Risk Children

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ABSTRACT

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Parent-child communication is essential in middle childhood as changes in self-disclosure, shared experiences, and autonomy take place. Investigating communication is crucial in understanding adaptive development, particularly in high-risk families where the likelihood of negative outcomes is high. The present study was designed to examine the contribution of maternal childhood histories of aggression and/or social withdrawal to the prediction of mother-child communication and to children's relationships (quality of parent-child relationship, peer likeability and social competence). In addition, the association between parent-child communication and marital communication was investigated.

Mothers with childhood histories of aggression and/or social withdrawal from the Concordia Longitudinal Risk Project, a longitudinal, intergenerational study, participated with their 9-13 year-old children. Dyads (n=63) discussed conflicts rated as problematic in their relationship. Communication quality was coded using the Communication Coding Scheme (CCS).

Results partially supported the hypotheses that maternal childhood histories of risk contribute to the prediction of mother-child communication quality. Furthermore, results suggested that mother-child communication was related to relationship factors including emotional availability, likeability, and social skills associated with the development of adaptive relationships in middle childhood. Finally, marital communication was positively associated with mother-child communication.

The present findings contribute to the current literature, highlighting the importance of examining parent-child communication and relationship factors in high-risk families and their impact on children's relationships and development.

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Table of Contents

List of Tables

List of Appendices

Page

In recent years, there has been an increase in the prevalence of physical, sexual, and psychological violence in schools and homes. These intentional acts to hurt others are pervasive and have been shown to have a long term negative impact on children and adults. As a result, social scientists have sounded an urgent warning about reducing the risk of abuse, neglect, and violence in our society (Luthar & Brown, 2007; Cicchetti & Rogosch, 2007). One way to address these risks is through research investigating resilience; a process reflecting positive adjustment despite conditions of risk (Luthar & Zelazo, 2003; Rutter, 2000). In the developmental literature, resilience is said to derive from various forces, including aspects of the proximal and distal environments, and even from individual protective factors such as self-regulation or self efficacy as these factors are also affected by the quality of relationships in the family and community (for reviews, see Luthar, 2006; Luthar & Zelazo, 2003). The central mission of researchers who study resilience is to shed light on processes that ease and exacerbate the negative effects of various adverse life conditions and to derive specific directions for interventions and social policies (Luthar & Brown, 2007; Rutter, 2000).

Although the construct of resilience has been somewhat neglected over the past five decades, research to date clearly demonstrates that the most harmful environmental risk is the sustained presence of neglect and abuse (Luthar & Brown, 2007). Certain social factors such as histories of childhood aggression and social withdrawal, low socioeconomic status, little parental education, and negative parenting practices such as hostility and criticism, have been shown to be risk factors for maladjustment and have been shown to increase the likelihood of harmful environments and profoundly impair the chances of resilient adaptation (Serbin, Stack, & Schwartzman, 2000; Luthar & Brown,

2007). Conversely, committed, loving relationships have high protective potential. Researchers recognize that resilience is founded in relationships, and that healthy relationships promote well being (Luthar, 2006). Despite this knowledge, considerable attention is devoted to studying what relationships should *not* consist of, while neglecting to identify positive factors that promote healthy relationships.

Parent-Child Relationship, Social Competence and the Family Context

In most cultures, parents are the central socializing agent. As such, examining the parent-child relationship is a crucial step towards understanding the protective role of relationships in development. Bowlby (1969) highlighted the importance of the early mother-child relationship by arguing that an infant develops beliefs about significant others through his/her interactions with a primary caregiver. These beliefs were thought to develop into internal working models that may be activated later in life (Laible, 2007). Abundant research stemming from the attachment literature has emphasized the critical role of early social relationships in child development (Bentley, 2002; Stack et al., submitted). Furthermore, as children grow, positive parenting traits such as warmth and sensitivity have been shown to lead to positive adaptation, while parenting that is reticent and hostile has been shown to lead to maladjustment (Grunzeweig et al., in press; Bentley, 2002).

The research on parenting and child development highlights the importance of a healthy parent-child relationship in children's positive adaptation and as a protective factor for children in conditions of risk. Moreover, the association between parenting and child development provides support for social learning theory (Patterson, 1982). In line with social learning, children learn from observing their parents. Furthermore, theorists

supporting transactional theory (Sameroff & Chandler, 1975) and bidirectionality (Bell, 1968) argue that relationships involve multiple people and factors, thus children, parents, and the environment alike hold a position of influence on each other (Kuczynski, 2003). Yet, most studies have taken a unidirectional approach in trying to understand the complexity of relationships by, for example, studying mothers and children separately. Focusing on relational constructs (i.e. each partner's behaviour influences and is dependent upon the others) and not the individual would better capture how these systems influence each other bi-directionally.

Communication is a central feature of the parent-child relationship and reflects the bi-directional nature of the relationship between parent and child. Communication is a relational construct, i.e. involves interacting with and relating to another person, which involves the transfer of information from one person to another and can be verbal or non-verbal (i.e. gestures, facial expressions). As children grow, changes in cognitive competence, social boundaries, and autonomy take place, thus adapting parent-child communication to meet these developmental challenges is essential. Taken together, parent-child communication has been reported to play a crucial role in children's socialization processes (Zhang, 2007).

Parent-child communication characterized by negative talk, conformity, criticism, parental inattention to and lack of acknowledgement of the needs and feelings of the child, and role reversal (child providing support to the parent) has been associated with child outcomes related to adolescent risky behavior including early sexual behavior and drug and alcohol use (e.g., Jones & Houts, 1992; Reese, Bird, & Tripp, 2007; Otten, Harakeh, Van der Eijnden, & Engels, 2007; Schrodt, Ledbetter, Ohrt, 2007). In contrast,

parent-child communication characterized by responsiveness, confirmation, attributions, and explanations has been linked to children's adjustment and emotional security (Brown, Fitzgerald, Shipman, & Schneider, 2007; Reece, Bird, & Tripp, 2007; Schrodt, Ledbetter, & Ohrt, 2007). In other words, the key factor important to children's mental health and well-being is the quality of communication (Otten et al., 2007).

Parents with better communication quality may be more appropriate role models for their children; they may be encouraging adaptive appraisals about conflict, enhancing the parent-child bond, and increasing children's sense of security (Brown, Fitzgerald, Shipman, & Schneider, 2007). Nonetheless, studies examining parent-child communication are limited and have mainly relied on parent and self report measures. Furthermore, there is a paucity of research about the protective value of parent-child communication in conditions of risk. Consequently, there is a clear need to study the quality of parent-child communication using varied methods and samples.

While parent-child communication is important to child development, less is known about its association to competencies involved in adaptive relationships. Emotional competence includes skills in regulating, expressing, recognizing, and understanding emotions. These skills are critical for establishing and building relationships, developing self-confidence and self-regulation, and effectively coping with stressful situations, all of which ultimately lead to positive adaptation and personal well-being (see Cole, Martin, & Dennis, 2004 for a review). Through the processes of socialization, parenting may influence a child's emotional development. For example, a mother's accessibility and her ability to read and respond to her child's emotional communication is essential as it has been shown to lead to healthy socio-emotional

adaptation in offspring (Bornstein et al., 2006). These abilities are reflected in the construct of Emotional Availability (EA) and can be measured by the EA scales (Biringen & Robinson, 1991). Emotional availability is a relational construct that describes the quality of emotional exchanges between children and their parents. By measuring EA our understanding of the importance of parent-child communication for adaptive relationships would be enhanced.

Moreover, children's social competencies are essential to the development of adaptive relationships (Jones & Houts, 1992). That is, investigating the association between parent-child communication and children's social skills is an integral part in efforts to identify what constitutes a healthy relationship. Children's social competencies including likeability, cooperation, assertiveness, empathy, and self-control, are important in predicting positive interactions with peers and teachers (Meier, DiPerna, & Oster, 2006; Roberts & Strayer, 1996).By measuring children's social skills across different settings (i.e. home and school), a better understanding of the impact of communication on the development of relationship competence in childhood is gained.

While parent-child communication remains important for children's relationships it is essential to examine how parent-child communication occurs in the context of the family. For example, associations between the marital relationship and parent-child relationship have been made (Erel & Burman, 1995). Supportive marital relationships have been associated with supportive, responsive parent-child relationships in infancy through to adolescence (e.g. Cowan & Cowan, 1992; Brody, Stoneman & McCoy, 1994; Conger et al., 1992). Moreover, according to family systems theory (e.g. Minuchin, 1985), families are arranged hierarchically, suggesting that parent's behaviours influence

children's behaviours more strongly than the reverse (e.g. Erel & Burman, 1995). This implies that marital communication quality will likely influence parent-child communication quality more strongly than the alternative.

Investigating parent-child communication and its association with relationship variables and the association between marital and parent-child communication is especially important during middle childhood, where increases in cognitive competence and social responsibility take place. During this period, children begin to determine their own experiences to a greater degree than previously in childhood, and reduce the need for parental input and approval (Collins, Madsen, & Susman-Stillman, 2002). Middle childhood is also a period of development that has been somewhat neglected in the literature (Fei-Yin Ng et al., 2004; Weinfeld, Ogawa & Egeland, 2002), yet major transition points occur, such as maturational changes and social constraints (Collins & Madsen, 2003). The changes that occur in middle childhood inevitably alter the amount, kind, content, and significance of interactions between parents and children and children and peers (Collins, Madsen, Susman-Stillman, 2002).

High-Risk Populations

Investigating communication is crucial in understanding adaptive development, and this is particularly the case in high-risk families where the likelihood of negative outcomes is high. In high-risk populations, families display high rates of psychosocial problems (Boyle & Lipman, 2002), and are often exposed to cumulative risk factors such as low income, low levels of education, poor social support, and psychopathology that can affect parenting and child development (Serbin, Stack, & Schwartzman, 2000). Maladaptive behavioural styles such as aggression and social withdrawal have been

shown to be important risk factors associated with negative psychosocial outcomes that negatively affect life transitions and influence intergenerational cycles of risk (Caspi & Moffit, 1995; Rubin, Burgess & Coplan, 2002). Childhood aggression is a stable trait, and as such, can persist into adulthood and influence parenting strategies (Patterson, 1982; Cairns et al., 1998). Childhood aggression has been linked to an increase in risky behaviours such as cigarette smoking and drug and alcohol use, and poor peer relations (Serbin, Stack, & Schwartzman, 2000). Although the pathways to risk for social withdrawal may be harder to detect, research has shown that it too is a stable trait (Cooperman, 1996) and is associated with negative psychosocial outcomes. Socially withdrawn women place themselves at risk by hindering their capacity to learn competent social skills (Serbin et al., 2004). Due to their negative life trajectories, aggressive and/or socially withdrawn mothers place their children at risk for behaviour problems, school drop-out and low self-esteem (Serbin et al., 2004).

Given that maternal risk factors serve as significant predictors of parenting styles, and may therefore influence the outcomes of offspring, there has been a growing interest in studying the transfer of risk from one generation to the next. Intergenerational studies provide the framework needed to explain how parents' experiences and behaviours are transferred to children, as well as examine the processes underlying intergenerational continuities. The Concordia Longitudinal Risk Project (Concordia Project) offers the unique opportunity to study women identified in childhood as aggressive and or socially withdrawn in an intergenerational framework. Studies stemming from the Concordia Project have demonstrated that childhood histories of aggression and/or social withdrawal are predictive of poor outcomes such as school drop-out, delinquency, teen pregnancy,

adult criminality, as well as mental illness (Serbin, Stack, & Schwartzman, 2000). Furthermore, as parents, women from the Concordia Project sample have been shown to be more unresponsive, hostile, and intrusive in their interactions with their children (Bentley, 2002), provide less cognitive stimulation, and poorer home environments (Saltaris et al., 2004), and use less effective parenting strategies with their children (Grunzeweig et al., in press). Thus, parenting is one mechanism through which risk is transferred. However, it is not solely the presence of an environmental risk factor that will lead to poor developmental outcomes as some children adapt well in spite of conditions of risk. Therefore, it is important to identify from the multitude of interacting systems, those factors that will promote or inhibit competence in individuals (Cicchetti, 1993; Serbin & Stack, 1998).

The Present Study

Given the importance of healthy relationships for adaptive development and the importance of relational constructs such as parent-child communication for socialization, the following communication variables were examined in the present study: engagement, responsiveness, positive and negative climate, and orientation (conversation or conformity; based on Koerner & Fitzpatrick, 2002). Conversation orientation describes unrestrained interaction, i.e. open expression of ideas, beliefs, and values about an array of topics, while conformity orientation describes uniformity of beliefs and values, not often placing importance on the individual's needs (Koerner & Fitzpatrick).

The present study employed a high-risk intergenerational community sample of mothers and children in order to address three objectives: (1) to examine the role of maternal childhood histories of aggression and social withdrawal in the prediction of

parent-child communication quality (engagement, responsiveness, positive and negative climate, and orientation), (2) to examine parent-child communication quality and its association with relationship factors (emotional availability, likeability, and social skills) in 9-13 year-old children who were the offspring of the original sample of women in the Concordia Project women and, (3) to determine the association between marital and parent-child communication quality. This study focused on mother-child interactions as children spend a large part of their time with their mothers, and there is a broad literature on mothers and their children from which to draw. In the context of the present study's focus, it was hypothesized that: (1) mothers with childhood histories of aggression and/or social withdrawal and their children would have poorer and more negative communication (2) better mother-child communication (e.g., highly engaged, responsive, positive, and conversational communication) would be associated with better relationship quality including emotional availability in mothers and children and greater social skills such as likeability, cooperation, and self-control in children, and (3) marital communication including conflict resolution, would be positively related to mother-child communication quality.

Method

Participants

Participants for the present study came from a larger pool of individuals enrolled in the Concordia Longitudinal Risk Project (Schwartzman, Ledingham, & Serbin, 1985). The Concordia Project originated in 1977 when 1774 French-speaking children in grades 1, 4, or 7 were recruited from schools in economically disadvantaged areas of inner-city Montreal (Schwartzman, Ledingham, & Serbin, 1985). At the time of recruitment, each

participant was screened on dimensions of aggression and social withdrawal using a French version of the Pupil Evaluation Inventory (PEI; Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976), a peer nomination technique that compares children to their classmates. The PEI contains 34 items based on three factors: Aggression, Social Withdrawal, and Likeability. For example, Aggression items included statements such as "those who start a fight over nothing" and "those that are mean and cruel to other children", and Withdrawal items included statements such as "those who have very few friends" and "those who aren't noticed much". Children were asked to nominate their classmates who best matched each item on the PEI. Total nomination scores for each factor were converted to z-scores for each sex within each class to remove the effects of sex differences in rates of aggression and withdrawal, and the effects of class size. Percentile cutoffs were used to establish which children had received extreme scores on aggression and withdrawal compared to their peers. Children were considered to be high psychosocial risk, relative to same sex classmates, if they obtained extreme scores on dimensions of aggression (above 95^{th} percentile), withdrawal (above 95^{th} percentile), or both (above 75^{th} percentile); a normative comparison group (i.e. 25^{th} – 75^{th} percentiles) of children from the same schools and neighborhoods was also identified at the same time. A more detailed description of the original methodology can be found in Schwartzman et al. (1985). These children were then followed into adulthood, providing a unique opportunity to study the intergenerational transfer of risk.

The present study included 63 mothers drawn from a follow-up study of a larger sub-sample (n=75) of original female child participants from the Concordia Project and their children. These mothers and their middle childhood aged children (38 boys, 25

girls) participated in the present study. Due to attrition and procedural errors, 63 was the maximum number of dyads that could be used in this study. At the time of data collection, children's ages ranged between 9 to 13 years (M=10.85, SD=.97), and their grade levels ranged from 2 to 7 (M= 4.61, SD=.99). At the time of testing, mothers' ages ranged from 32.80 to 42.49 years (M= 37.45, SD= 2.41). Mothers had attained 5 to 17 years of schooling (M= 12.36, SD= 2.49), 55 mothers were married (includes common law couples), 8 were not, and their occupational prestige ratings, assessed by the Standard International Occupational Prestige Scale (SIOPS; Treiman, 1977), ranged from 19 to 62 (M=43.21, SD=11.63). The mean prestige rating corresponds to the following types of jobs: mechanic, travel consultant and organizer, and jewelry and precious metal worker. Demographic variables for women with high aggression and/or withdrawal were compared to the comparison mothers in the current sample to ensure that there were no significant differences between the two (Table 1). Within-sample comparisons were also performed to ensure the sub-sample from which the current participants were drawn was not significantly different from the larger Concordia sample; no significant differences were found (Table 2). As in past studies of the Concordia Project (Grunzeweig, et al., in press; DeGenna, Stack, Serbin, Ledingham, & Schwartzman, 2006), maternal childhood risk status was considered as a dimension rather than a categorical variable in order to maximize the power of the analyses.

Procedure

The present study was part of a larger project in which a home visit and 2 school visits were conducted comprising a series of interviews, questionnaires and naturalistic observations. Following an explanation of the protocol (Appendix A) and informed

consent (Appendix B), mothers participated in a series of interactions with their children (i.e. a Jenga task, a problem-solving task, and a conflict task). Mother-child dyads were seated at either their kitchen table or on their living room sofa. All interactions were videotaped using a Sony Video 8AF camera with directional microphone that was fixed on a tripod and placed in front of the dyad. A stopwatch was used to time the duration of each task. Experimenters left the room for each taped interaction. The focus of the present study was on the conflict task where mothers and children discussed and worked towards resolving an issue of conflict in their relationship. The dyad rated topics they considered problematic by each completing a conflict questionnaire (see Appendices C and D). The issue rated as most conflictual by both mother and child was subsequently discussed for 6 minutes. Most dyads used the allotted 6 minutes to discuss the conflict (mean length of task= 5.6 minutes, range= 2.56-6 minutes, SD=.77), however if they completed their discussion before the allotted time, they were given the next most highly rated conflict on their questionnaires to discuss for the remainder of the task. Despite this, some dyads still completed their discussion before the allotted time was up; in this case, the task was terminated (n=19; above 4 minutes n=14, above 3 minutes n=5).

Observational Coding Measures

A time line indicating hours, minutes, seconds, and frames per second was edited onto the videotapes of the mother-child interactions obtained during the home visit. The start and stop times for each interaction were recorded in order to calculate the exact duration of the session in minutes and seconds. The mother-child interactions during the conflict task were subsequently coded using the Communication Coding Scheme (CCS).

The Communication Coding Scheme (CCS). The CCS was used to code the

Table 1

Demographic Variables for Mothers with Histories of Aggression and/or Social Withdrawal and Comparison Mothers: Means, Standard Deviations, and t-values

	Risk mothers* (N=32)		Comparison mothers** (N=31)		
Demographic Variable	M	SD	M	SD	t-value
Child Age	10.80	0.87	10.90	1.07	0.55
Maternal Age at Testing	37.32	2.51	37.58	2.33	2.49
Maternal Age at Birth of First Child	25.73	3.45	26.24	3.80	0.38
Maternal Education (years)	11.59	2.38	13.16	2.60	0.42
Prestige Rating	252.26	162.04	283.03	164.31	0.74

*Risk mothers were defined as those who scored above the 95th percentile on Aggression and below the 75th percentile on Withdrawal (highly Aggressive), the reverse criteria for highly Withdrawn mothers, and above the 75th percentile on both Aggression and Withdrawal (mothers high on both). **Comparison mothers were defined as those who scored between the 25th and 75th percentiles on both scales.

Table 2

Demographic Information for Mothers and Children in the Sub-Sample from which the Current Sample is Drawn and the Larger Sub-Sample: Means and Standard Deviations

	Sub-Sample (N=75)		Larger Sub-Sample (N=303)		z-score
Demographic Variable	M	SD	M	SD	
Childhood Aggression	0.25	1.03	0.32	1.04	-0.64
Childhood Withdrawal	0.37	1.01	0.37	0.96	-0.02
Maternal Age at Birth of First Child	24.87	3.27	24.23	3.42	1.69
Maternal Education (years)	12.24	2.47	11.69	2.36	1.9

Note. Z-scores above 1.96 indicate significant differences.

quality of communication between mother and child during the interaction. The author developed this observational measure for the purposes of the study, based in part on existing literature (Fitzpatrick & Ritchie, 1994; Reese, Bird, & Tripp, 2007). The coding scheme was designed to rate mother and child communication (verbal statements and non-verbal behaviours) on scales measuring engagement, responsiveness, climate (divided into positive and negative), and orientation (divided into conversation and conformity). A brief description of these codes can be found in Table 3. According to the CCS, the coder watches the videotaped interaction and after every 60 second interval of tape, rates the dyad, mother, and child on a Likert-type scale for each of the components listed above. The scale ranges from "Not at all" (1) to "Extremely" (5). Dyad, mother, and child ratings are coded on separate passes. Therefore, the coder assigned 6 codes across the 6 minute task (1 per 60 second interval) ranging from 1 to 5 for mother, child, and dyad on each communication variable. Intervals not exceeding 30 seconds in duration were deemed un-codeable and were eliminated from the final data analyses. Detailed operational definitions of the codes as well as a sample coding sheet can be found in Appendix E.

Reliability. In order to assess inter-rater reliability, 25% of the sample was randomly selected and double-coded by the primary coder, as well as an undergraduate student who acted as a secondary coder and was blind to the study's hypotheses. Both primary and secondary coders were blind to maternal risk status. Percentage agreement reliability (PA; agreements divided by total agreements plus disagreements) and Cohen's kappa coefficients (r_K) were calculated to assess the reliability. Cohen's kappa tabulates the inter-observer agreement as a proportion of potential agreement following a

correction for chance agreement (Kaplan & Saccuzzo, 2001). The overall values obtained for Engagement, Responsiveness, Negative Climate, Positive Climate, and Orientation all fell within a range indicating that there was substantial agreement (Cohen, 1960); see Table 3.

Data Reduction. After coding was completed, the scores on each of the communication variables (engagement, responsiveness, negative climate, positive climate, and orientation) for each interval were combined so that an overall communication score across the 6 intervals was obtained.

Emotional Availability Scales (EAS; Biringen, et al., 1988; 1993). In the present study, the quality of the mother-child relationship was assessed using the EA Scales. Emotional availability is a relationship construct capturing each partner's accessibility to the other and the ability of each partner to read and respond to the other's emotional communications (Biringen & Robinson, 1991). The EA Scales consist of five globally rated measures of emotional availability. These measures include maternal sensitivity, structuring, and hostility, and child responsiveness and involvement. Scores on these measures range from 1 (nonoptimal) to 7 (optimal), except for maternal sensitivity and hostility which range from 1 to 9, and 1 to 5, respectively . The EA scales have been used reliably in previous studies (Biringen, Emde, Brown, Lowe, Myers, et al., 1999; Biringen, Matheny, Bretherton, Renouf, & Sherman, 2000; Bornstein, Gini, Suwalsky, Putnick, & Haynes, et al., 2006; Bentley, 2002; Stack et al., submitted).

Questionnaire Measures

A complete version or sample items of the questionnaire measures can be found in Appendices F-K.

Table 3

Brief Description, Percent Agreement, and Kappa Coefficient for Communication Coding Variables

Category	Brief Description	Percent Agreement (%)	Kappa Coefficient (rk)
Engagement	Degree to which each person is taking part in the conversation; amount of enthusiasm and interest demonstrated	80.45	0.79
Responsiveness	Degree to which each person is responsive to each others' ideas/opinions; how well they stay on topic, share thematic content, and are sensitive to the other's needs	76.24	0.75
Negative Climate	Climate during discussion includes: criticism, sarcasm, hostility, poor outlook on resolving the conflict, reference to negative emotions, behaviors or evaluations	73.64	0.72
Positive Climate	Climate during discussion includes: encouragement, praise. positive outlook on resolving the conflict, reference to positive emotions, behaviors, or an event	72.97	0.71
Orientation	Central beliefs that determine how people communicate; can either be conversation (unrestrained interaction) or conformity (homogeneity of attitudes, values, beliefs)	78.46	0.77

The Demographic Information questionnaire (DIQ). The DIQ was used to gather socio-demographic information about the participating families, such as mothers' current age, number of years of education, occupational status, etc. The DIQ has been used in past studies of the Concordia Project and has been shown to be an effective measure of participants' demographics (e.g., Serbin et al., 1998).

Pupil Evaluation Inventory (PEI). The PEI (Pekarik et al., 1976) was revised for its use in the current study. In the original study, the PEI was used as a peer nomination instrument. For the present study, the child participant's teachers completed a questionnaire about the target child considering knowledge about the rest of the classmates. The items in the scale remain as they were in the original measure used in the earlier study (see Schwartzman, Ledingham, & Serbin, 1985). For purposes of the current study a descriptor making up the likeability factor score was used to assess the teacher's perception of how well liked the participant was by his/her classmates, thus contributing to the measurement of relationship outcomes. Although this questionnaire is designed to measure likeability, caution must be used when interpreting the scale as it is the teacher's perception of how well liked the target child is by his/her peers.

The Social Skills Rating System (SSRS). The SSRS (Gresham & Elliot, 1990) assesses children's social behaviours (e.g. Empathy, Assertion, Cooperation, and Self-Control) with higher scores reflecting better social skills. This self-report scale has been found to be reliable and valid (Gresham & Elliot, 1990).

Matson's Evaluation of Social Skills with Youngsters (MESSY). The MESSY assesses inappropriate social skills (Matson, Rotatorio, Helsel, 1983) and consists of 62 items which are rated by the child or adolescent and/or parents and teacher according to a

five-point likert-type scale. A total score on the MESSY can be derived from the items which are related to six factors originally named 'Appropriate Social Skill', 'Inappropriate Assertiveness', 'Impulsive', 'Overconfident', 'Jealousy/Withdrawn', and 'Miscellaneous Items' (too difficult to classify). In the present study, the total score on the mother and child MESSY was used. The MESSY has been demonstrated to have satisfactory psychometric properties (Teodoro et al., 2005).

ENRICH (Evaluation and Nurturing Relationship Issues, Communication and Happiness) Inventory. The ENRICH Inventory (Fowers & Olson, 1993) contains three 10-item subscales including Marital Satisfaction, Communication, and Conflict Resolution. There is also a seven item Idealistic Distortion Scale. Together these sub-scales assess marital satisfaction and attitudes and beliefs about marital communication and conflict resolution, as well as the extent to which the person is being optimistic, realistic or pessimistic in answering the questions. In the present study, the marital communication and conflict resolution subscales were used. The ENRICH scales have been found to be reliable (coefficient alpha reliabilities ranging from .68 to 86) and are well validated (Fowers & Olson, 1993).

Results

Prior to conducting statistical analyses, descriptive statistics were used to assess the normality of the distribution, skewness for each variable, and to identify outliers. While some variables were slightly skewed, these variables tended to be naturally infrequent and therefore would typically not be normally distributed. Consequently, it was elected not to transform them. Correlations between the communication quality variables obtained from the CCS suggested they were positively related to one another,

except for negative climate. Therefore an exploratory factor analysis, principle components with Varimax rotation (using eigenvalues greater than 1 criterion) was used to determine if the communication variables were separate factors. For mother, child, and dyad a two factor score was obtained: engagement, responsiveness, positive climate, and orientation constituted a factor while negative climate constituted another. Based on these results, it was elected to combine the engagement, responsiveness, positive climate, and orientation communication variables into an average communication quality variable while retaining negative climate as a separate variable. Therefore, the mean of dyad, mother, and child scores for communication quality and negative climate were used in the statistical analyses. Using an average score assured that the variables remained on an interpretable scale and also took into account the length of time dyads discussed the conflict.

Hierarchical multiple regression analyses were used to examine the contributions of: 1) maternal childhood histories of aggression and withdrawal to the prediction of parent-child communication quality, 2) parent-child communication quality and its association to relationship factors (emotional availability, likeability, and social skills), and 3) marital communication quality and its association to the prediction of parent-child communication quality. In each of the hierarchical regression analyses, the predictor variables were entered following a chronological sequence; maternal histories of Aggression and Withdrawal entered separately in Step 1, and maternal Education entered in Step 2, followed by maternal and child demographic variables in Step 3. While child gender and maternal education were not hypothesized to predict communication quality or child outcomes, they were included as control measures. In addition, preliminary

analyses revealed that Communication quality was correlated with the length of time of the conflict task. Therefore, the number of intervals coded was entered as a control variable in step 4. Communication variables were entered in the final step. Significant regressions that were relevant to the research hypotheses are reported in the text; however, if trends were in line with hypotheses and the literature, they were also included. Non-significant results can be found in Appendix K. All statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS Version 15 for Windows).

Objective 1: Maternal risk predicting parent-child communication

Intercorrelations among maternal risk, control, and communication variables are provided in Table 4. For the analyses related to maternal risk predicting communication quality, maternal Education was entered in step 2 followed by child Gender in step 3, and number of coded intervals in step 4. In addition, the interaction between maternal Aggression and Social Withdrawal was entered in the final step in order to consider the influence of the main effects (i.e. Aggression and Social Withdrawal) first (Cohen & Cohen, 1983).

Communication Quality. The regression analysis examining maternal childhood histories of Aggression and Withdrawal as predictors of dyadic Communication accounted for 36.6 % (21 % adjusted) of the total variance (Table 5). In step 1, maternal histories of Aggression (*Beta*=-.58, $p<.01$) emerged as a significant predictor of Dyad Communication, accounting for 32% of the variance. In step 5, the final step, maternal histories of Aggression (*Beta*=-.65, $p<.001$) remained a significant predictor. In dyads where mothers had histories of Aggression, communication quality was poorer.

Table 4

Intercorrelations among Maternal Childhood Risk and Communication Variables

	1	2	3	4	5	6	7	8	9
1. Maternal Childhood Aggression	--	-.07	.52**	.03	.03	.00	.19	.07	-.55**
2. Maternal Childhood Withdrawal	-.07	--	.16	-.10	-.21	-.08	.09	-.00	.01
3. Aggression x Withdrawal	.52**	.16	--	.13	.09	.05	.18	.07	.11
4. Mother Communication	.03	-.10	.13	--	.70**	-.00	-.25	-.13	-.34
5. Child Communication	.03	-.21	.09	.70**	--	-.16	-.24	-.26*	-.23
6. Child Climate: Negative	.00	-.08	.05	-.00	-.16	--	.37**	.75**	-.01
7. Mother Climate: Negative	.19	.09	.18	-.25	-.24	.37**	--	.79**	.18
8. Dyad Climate: Negative	.07	-.00	.07	-.13	-.26*	.75**	.79**	--	.07
9. Dyad Communication Quality	-.55**	.01	.11	-.34	-.23	-.01	.18	.07	--

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$

Table 5

Maternal Childhood Levels of Aggression and Social Withdrawal and Dyadic Communication (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.32	0.50**
Childhood Aggression	-0.58	0.32	-3.60***		
Childhood Withdrawal	-0.14	0.02	-0.87		
Step 2				0.01	0.24
Childhood Aggression	-0.60	0.32	-3.57***		
Childhood Withdrawal	-0.18	0.02	-0.98		
Maternal Education	0.09	0.01	-0.49		
Step 3				0.01	0.34
Childhood Aggression	-0.62	0.33	-3.57***		
Childhood Withdrawal	-0.18	0.02	-0.97		
Maternal Education	0.09	0.01	-0.53		
Child Gender[a]	0.09	0.01	0.58		
Step 4				0.02	0.76
Childhood Aggression	-0.65	0.35	-3.66***		
Childhood Withdrawal	-0.18	0.02	-0.98		
Maternal Education	0.11	0.01	-0.61		
Child Gender	0.14	0.02	0.81		
Number of Intervals Coded	-0.15	0.02	-0.87		
Step 5				0.02	0.56
Childhood Aggression	-0.65	0.35	-3.63***		
Childhood Withdrawal	-0.14	0.01	-0.72		
Maternal Education	-0.10	0.01	-0.54		
Child Gender	0.14	0.02	0.79		
Number of Intervals Coded	-0.12	0.01	-0.64		
Childhood Aggression x Withdrawal	0.13	0.01	0.75		
	R = .61		R^2_{Adj} = .21		F = 2.31[t]

[t]p < 0.10, *p < 0.05, **p < 0.01, ***p < .001
Note. [a]Child Gender: boys = 1, girls = 2.

The regression examining maternal childhood histories of aggression and social withdrawal as predictors of mother Communication accounted for 26.3% (18.4% adjusted) of the total variance (Table 6). Maternal Education (*Beta*=.43, $p<.001$) emerged as a significant predictor of mother Communication in step 2, accounting for 16 % of the variance. Higher levels of maternal Education were associated with better mother communication quality. In step 3, maternal Education (*Beta*=.42, $p<.002$) remained significant, while child Gender (*Beta*=.22, $p<.074$) emerged as a trend, accounting for 4% of the variance. Mothers tended to have better communication with girls than boys. In step 4, when the number of coded intervals was added, maternal Education (*Beta*=.42, $p<.001$) remained significant, while child Gender no longer approached significance. In step 5, the Aggression and Social Withdrawal interaction term was added and maternal Education (*Beta*=.41, $p<.002$) remained significant, while child Gender (*Beta*=.21, $p<.083$) approached significance.

In the regression examining maternal childhood histories of Aggression and Withdrawal as predictors of child Communication, 31.3% (24 % adjusted) of the total variance was accounted for (Table 7). Maternal Education (*Beta*=.25, $p<.071$) tended towards significance in Step 2, accounting for 5.2 % of the variance. Higher levels of maternal Education tended to be associated with better communication quality. Child Gender (*Beta*=.40, $p<.001$) significantly predicted Child Communication in Step 3, accounting for 15 % of the variance. Girls had better communication quality compared to boys. In Step 4, number of intervals (*Beta*=.22, $p<.052$) tended towards significance, accounting for 4 % of the variance. Child Communication quality tended to be better when the length of the discussion was longer.

Table 6

Maternal Childhood Levels of Aggression and Social Withdrawal and Mother Communication (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.01	0.34
Childhood Aggression	0.02	0.00	0.16		
Childhood Withdrawal	-0.10	0.01	-0.79		
Step 2				0.16	10.98**
Childhood Aggression	0.08	0.01	0.66		
Childhood Withdrawal	0.06	0.00	0.44		
Maternal Education	0.43	0.16	3.31**		
Step 3				0.05	3.31^t
Childhood Aggression	0.05	0.00	0.44		
Childhood Withdrawal	0.10	0.01	0.78		
Maternal Education	0.42	0.15	3.32**		
Child Gender[a]	0.22	0.04	1.82^t		
Step 4				0.04	2.77
Childhood Aggression	0.07	0.00	0.60		
Childhood Withdrawal	0.11	0.01	0.85		
Maternal Education	0.42	0.15	3.40***		
Child Gender	0.19	0.03	1.63		
Number of Intervals Coded	0.19	0.04	1.66		
Step 5				0.02	1.12
Childhood Aggression	-0.01	0.00	-0.10		
Childhood Withdrawal	0.08	0.00	0.59		
Maternal Education	0.41	0.14	3.30**		
Child Gender	0.21	0.04	1.76^t		
Number of Intervals Coded	0.17	0.03	1.43		
Childhood Aggression x Withdrawal	0.15	0.01	1.06		
	R = .51		R^2_{Adj} = .18		F = 3.32**

$^t p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table 7

Maternal Childhood Levels of Aggression and Social Withdrawal and Child Communication (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.05	1.42
Childhood Aggression	0.01	0.00	0.10		
Childhood Withdrawal	-0.21	0.04	-1.67^{t}		
Step 2				0.05	3.39^{t}
Childhood Aggression	0.05	0.00	0.37		
Childhood Withdrawal	-0.12	0.01	-0.89		
Maternal Education	0.25	0.05	1.84^{t}		
Step 3				0.15	11.56***
Childhood Aggression	-0.00	0.00	-0.02		
Childhood Withdrawal	-0.04	0.00	-0.33		
Maternal Education	0.23	0.05	1.90^{t}		
Child Gender[a]	0.40	0.15	3.40***		
Step 4				0.05	3.95^{t}
Childhood Aggression	0.02	0.00	0.16		
Childhood Withdrawal	-0.03	0.00	-0.27		
Maternal Education	0.24	0.05	1.97^{t}		
Child Gender	0.37	0.13	3.21**		
Number of Intervals Coded	0.22	0.05	2.00^{t}		
Step 5				0.02	1.42
Childhood Aggression	-0.07	0.00	-0.54		
Childhood Withdrawal	-0.07	0.00	-0.53		
Maternal Education	0.23	0.04	1.87^{t}		
Child Gender	0.39	0.14	3.36***		
Number of Intervals Coded	0.20	0.04	1.73^{t}		
Childhood Aggression x Withdrawal	0.16	0.02	1.19		

$R = .56$ $R^2_{Adj} = .24$ $F = 4.26$***

$^{t}p < 0.10$, $*p < 0.05$, $**p < 0.01$, $***p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Objective 2: Parent-child communication predicting child relationship factors

Intercorrelations among communication variables and child relationship factors are provided in Tables 8 and 9.

Emotional Availability. The regression examining mother Communication as a predictor of maternal sensitivity accounted for 22.3 % (14 % adjusted) of the total variance (Table 10). In step 3, Child Gender (*Beta*=.24, $p<.067$) emerged as a trend. Mothers were more sensitive with girls than with boys. In Step 4, Child Gender (*Beta*=.22, $p<.098$) remained a trend, while in Step 5 mother Communication (*Beta*=.40, $p<.005$) emerged as a significant predictor of maternal sensitivity accounting for 12 % of the variance. Mothers who demonstrated better communication quality were more sensitive with their children.

The regression examining mother Communication as a predictor of maternal structuring accounted for 23.7 % (16 % adjusted) of the total variance (Table 11). In step 2, maternal Education (*Beta*=.24, $p<.083$) tended to predict maternal structuring, accounting for 5 % of the variance. Mothers who had more education tended to use higher levels of structuring. In step 3, maternal Education (*Beta*=.23, $p<.085$) remained a trend, while child Gender (*Beta*=.28, $p<.031$) emerged as a significant predictor, accounting for 7.3% of the variance. Mothers used more structuring with girls than with boys. In step 4, maternal Education (*Beta*=.23, $p<.085$) remained a trend and child Gender (*Beta*=.28, $p<.033$) remained significant. In step 5, mother Communication (*Beta*=.37, $p<.007$) emerged as a significant predictor, accounting for 10 % of the variance. Mothers who had better communication quality had higher levels of structuring during interactions with their children.

Table 8

Intercorrelations among Communication and Relationship Variables (EA & Likeability)

	1	2	3	4	5	6	7	8	9	10	11	12
1. Mother Comm[a]	--	.70**	-.00	-.25	-.13	-.34	-.07	.41**	.43**	-.24	.24	.14
2. Child Comm	.70**	--	-.16	-.24	-.26*	-.23	.01	.19	.19	.01	.12	.14
3. Child Climate: Negative	-.00	-.16	--	.37**	.75**	-.01	-.34*	-.03	-.04	.15	-.03	.21
4. Mother Climate: Negative	-.25	-.24	.37**	--	.79**	.18	-.05	-.21	-.11	.17	-.13	-.16
5. Dyad Climate: Negative	-.13	-.26*	.75**	.79**	--	.07	-.17	-.13	-.08	.16	-.11	-.07
6. Dyad Comm	-.34	-.23	-.01	.18	.07	--	-.07	-.19	-.29	.01	-.34	-.26
7. Teacher Likeability	-.07	.01	-.34*	-.05	-.17	-.07	--	-.16	-.14	-.03	.06	-.18
8. Sensitivity	.41**	.19	-.03	-.21	-.13	-.19	-.16	--	.71**	-.59**	.60**	.31*
9. Structuring	.43**	.19	-.04	-.11	-.08	-.29	-.14	.71**	--	-.51**	.50**	.31*
10. Hostility	-.24	.01	.15	.17	.16	.01	-.03	-.59**	-.51**	--	-.30*	-.12
11. Responsiveness	.24	.12	-.03	-.13	-.11	-.34	.06	.60**	.50**	-.30*	--	.70**
12. Involvement	.14	.14	.21	-.16	-.07	-.26	-.18	.31*	.31*	-.12	.70**	--

[t] $p < 0.10$, $*p < 0.05$, $**p < 0.01$

[a] "Comm"=communication

Table 9

Intercorrelations among Communication and Relationship Variables (Social Skills)

	8	9	10	11	12	13
1. Mother Comm[a]	.23	.22	.20	.20	-.05	-.15
2. Child Comm	.29*	.34**	.29*	.39**	-.18	-.22
3. Child Climate: Negative	.14	.11	.17	.12	.07	-.03
4. Mother Climate: Negative	-.17	-.17	-.01	-.08	.11	.19
5. Dyad Climate: Negative	-.06	-.10	.00	-.08	.08	.18
6. Dyad Comm	-.32	-.17	-.14	.02	.17	.27
7. SSRS Total	.87**	.92**	.90**	.88**	-.19	-.71**
8. SSRS Cooperation	--	.73**	.80**	.60**	-.17	-.63**
9. SSRS Assertion	.73**	--	.73**	.85**	-.13	-.62**
10. SSRS Empathy	.80**	.73**	--	.68**	-.25	-.72**
11. SSRS Self-Control	.60**	.85**	.68**	--	-.14	-.56**
12. MESSY Total Mother	-.17	-.13	-.25	-.14	--	.20
13. MESSY Total Child	-.63**	-.62**	-.72**	-.56**	.20	--

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$

[a]"Comm"=communication

Table 10

Mother Communication and Maternal Sensitivity (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.01	0.32
Childhood Aggression	-0.10	0.01	-0.80		
Childhood Withdrawal	-0.01	0.00	-0.06		
Step 2				0.00	0.27
Childhood Aggression	-0.09	0.01	-0.71		
Childhood Withdrawal	0.02	0.00	0.14		
Maternal Education	0.07	0.00	0.52		
Step 3				0.06	3.48^t
Childhood Aggression	-0.12	0.01	-0.94		
Childhood Withdrawal	0.07	0.00	0.48		
Maternal Education	0.07	0.00	0.47		
Child Gender[a]	0.24	0.06	1.87^t		
Step 4				0.04	2.20
Childhood Aggression	-0.11	0.01	-0.81		
Childhood Withdrawal	0.07	0.00	0.53		
Maternal Education	0.07	0.00	0.50		
Child Gender	0.22	0.04	1.69^t		
Number of Intervals Coded	0.19	0.03	1.48		
Step 5				0.12	8.49**
Childhood Aggression	-0.13	0.02	-1.09		
Childhood Withdrawal	0.03	0.00	0.24		
Maternal Education	-0.10	0.01	-0.71		
Child Gender	0.14	0.02	1.14		
Number of Intervals Coded	0.11	0.01	0.91		
Mother Communication	0.40	0.12	2.91**		
	R = .47		R^2_{Adj} = .14		F = 2.68*

$^t p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table 11

Mother Communication and Maternal Structuring (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.01	0.27
Childhood Aggression	0.05	0.00	0.35		
Childhood Withdrawal	-0.08	0.01	-0.62		
Step 2				0.05	3.11^t
Childhood Aggression	0.08	0.01	0.61		
Childhood Withdrawal	0.01	0.00	0.07		
Maternal Education	0.24	0.05	1.76^t		
Step 3				0.07	4.90*
Childhood Aggression	0.05	0.00	0.36		
Childhood Withdrawal	0.07	0.00	0.48		
Maternal Education	0.23	0.05	1.75^t		
Child Gender[a]	0.28	0.07	2.21*		
Step 4				0.00	0.00
Childhood Aggression	0.04	0.00	0.35		
Childhood Withdrawal	0.07	0.00	0.48		
Maternal Education	0.23	0.05	1.74^t		
Child Gender	0.28	0.07	2.18*		
Number of Intervals Coded	-0.01	0.00	-0.06		
Step 5				0.11	7.71**
Childhood Aggression	0.02	0.00	0.15		
Childhood Withdrawal	0.03	0.00	0.19		
Maternal Education	0.07	0.00	0.54		
Child Gender	0.21	0.04	1.67		
Number of Intervals Coded	-0.08	0.01	-0.66		
Mother Communication	0.37	0.10	-2.78**		
	R = .49		R^2_{Adj} = .16		F = 2.90*

$^t p < 0.10$, $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

The regression examining dyad Communication as a predictor of maternal structuring accounted for 44.3 % (30 % adjusted) of total variance (Table 12). In step 3, child Gender (*Beta*=.39, $p<.041$) emerged as a significant predictor, accounting for 15% of the variance. Mothers used more structuring with girls than with boys. In Step 4, child Gender (*Beta*=.32, $p<.099$) became a trend. In step 5, maternal histories of Aggression (*Beta*=-.54, $p<.016$) emerged as a significant predictor. Mothers with histories of aggression showed lower levels of structuring with their children. Child Gender (*Beta*=.40, $p<.022$) and dyad Communication (*Beta*=-.21, $p<.005$), were also significant predictors, accounting for 22% of the variance. In dyads with better communication quality, mothers used lower levels of structuring.

Likeability. The regression examining child negative climate as a predictor of teacher rated likeability accounted for 16.4 % (4 % adjusted) of the total variance (Table 13). In step 5, child negative climate (*Beta*= -.31, $p<.038$) emerged as a significant predictor, accounting for 9 % of the variance. Children who displayed more negative communication behaviours were less liked by their classmates, as reported by their teachers.

Social Skills. The regression examining child communication as a predictor of child-rated social skills (Total) accounted for 23.5 % (15 % adjusted) of total variance (Table 14). In step 1, maternal histories of Social Withdrawal (*Beta*=-.28, $p<.028$) predicted child social skills, accounting for 8 % of the variance. Mothers with histories of social withdrawal had children with fewer self-rated social skills compared to their peers. However, in step 2, Social Withdrawal (*Beta*=-.25, $p<.067$) became a trend when maternal Education was entered. In step 3, while Social Withdrawal no longer

Table 12

Dyad Communication and Maternal Structuring (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.30
Childhood Aggression	-0.14	0.02	-0.75		
Childhood Withdrawal	-0.08	0.01	-0.41		
Step 2				0.00	0.12
Childhood Aggression	-0.16	0.02	-0.80		
Childhood Withdrawal	-0.11	0.01	-0.51		
Maternal Education	-0.07	0.00	-0.35		
Step 3				0.15	4.61*
Childhood Aggression	-0.21	0.04	-1.11		
Childhood Withdrawal	-0.11	0.01	-0.55		
Maternal Education	-0.11	0.01	-0.53		
Child Gender[a]	0.39	0.15	2.15*		
Step 4				0.05	1.60
Childhood Aggression	-0.16	0.02	-0.82		
Childhood Withdrawal	-0.11	0.01	-0.55		
Maternal Education	-0.08	0.01	-0.40		
Child Gender	0.32	0.09	1.72[t]		
Number of Intervals Coded	0.24	0.05	1.26		
Step 5				0.22	9.51**
Childhood Aggression	-0.54	0.16	-2.59*		
Childhood Withdrawal	-0.21	0.03	-1.21		
Maternal Education	-0.14	0.02	-0.84		
Child Gender	0.40	0.14	2.45*		
Number of Intervals Coded	0.15	0.02	0.91		
Dyad Communication	-0.58	0.22	-3.08**		
	R = .67		R^2_{Adj} = .30		F = 3.18*

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table 13

Child Communication (Negative Climate) and Teacher-Rated Likeability (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.38
Childhood Aggression	0.03	0.00	0.21		
Childhood Withdrawal	-0.12	0.01	-0.84		
Step 2				0.03	1.48
Childhood Aggression	-0.02	0.00	-0.11		
Childhood Withdrawal	-0.18	0.03	-1.19		
Maternal Education	-0.19	0.03	-1.22		
Step 3				0.02	0.98
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.22	0.04	-1.39		
Maternal Education	-0.22	0.04	-1.37		
Child Gender[a]	-0.15	0.02	-0.99		
Step 4				0.00	0.18
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.21	0.04	-1.31		
Maternal Education	-0.22	0.04	-1.34		
Child Gender	-0.16	0.02	-1.04		
Number of Intervals Coded	0.06	0.00	0.42		
Step 5				0.09	4.59*
Childhood Aggression	0.00	0.00	0.00		
Childhood Withdrawal	-0.22	0.04	-1.39		
Maternal Education	-0.17	0.02	-1.11		
Child Gender	-0.15	0.02	-1.01		
Number of Intervals Coded	0.01	0.00	0.43		
Child Climate: Negative	-0.31	0.09	-2.14*		
	R = .40		R^2_{Adj} = .04		F = 1.37

†p < 0.10, *p < 0.05, **p < 0.01, ***p < .001

Note. [a]Child Gender: boys = 1, girls = 2.

Table 14

Child Communication and Child-Rated Social Skills (SSRS Total Score) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.10	3.36*
Childhood Aggression	0.14	0.02	1.13		
Childhood Withdrawal	-0.28	0.08	-2.25*		
Step 2				0.00	0.28
Childhood Aggression	0.15	0.02	1.20		
Childhood Withdrawal	-0.25	0.05	-1.87^t		
Maternal Education	0.07	0.00	0.53		
Step 3				0.08	5.49*
Childhood Aggression	0.13	0.02	1.02		
Childhood Withdrawal	-0.19	0.03	-1.43		
Maternal Education	0.07	0.00	0.53		
Child Gender[a]	0.29	0.08	2.34*		
Step 4				0.00	0.11
Childhood Aggression	0.13	0.02	1.05		
Childhood Withdrawal	-0.19	0.03	-1.41		
Maternal Education	0.07	0.00	0.54		
Child Gender	0.29	0.08	2.27*		
Number of Intervals Coded	0.04	0.00	0.33		
Step 5				0.05	3.21^t
Childhood Aggression	0.13	0.02	1.07		
Childhood Withdrawal	-0.18	0.03	-1.36		
Maternal Education	0.01	0.00	0.11		
Child Gender	0.19	0.03	1.45		
Number of Intervals Coded	-0.02	0.00	-0.12		
Child Communication	0.25	0.05	1.79^t		
	R = .49		R^2_{Adj} = .15		F = 2.76*

$^t p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

approached significance, child Gender (*Beta*=.29, p<.023) emerged as a significant predictor accounting for 8 % of the variance. Girls rated themselves as having more social skills than boys. In Step 4 child Gender (*Beta*=.29, p<.027) remained significant. In step 5, child Gender no longer predicted child social skills, however, child Communication (*Beta*=.25, p<.079) tended to predict child social skills, accounting for 5 % of the variance. Children with greater communication quality tended to rate themselves as having more social skills compared to their peers.

The regression examining child communication as a predictor of child self-control accounted for 20.4 % (12 % adjusted) of total variance (Table 15). In step 1, maternal histories of Social Withdrawal (*Beta*=-.22, p<.088) tended to predict self-control, accounting for 5 % of the variance. Mothers with histories of Social Withdrawal had children who tended to rate themselves as having less self control compared to their peers. However, in step 2, Social Withdrawal no longer predicted self-control when maternal Education was entered. In step 3, child Gender (*Beta*=.27, p<.039) predicted self-control, accounting for 7 % of the variance. Girls rated themselves as having more self control than boys In Step 4, child Gender (*Beta*=.26, p<.046) remained a significant predictor. In step 5, while child Gender no longer approached significance, child Communication (*Beta*=.29, p<.047) significantly predicted child self-control, accounting for 6 % of the variance. Children with greater communication quality tended to rate themselves as having more self-control compared to their peers.

The regression examining mother communication as a predictor of child cooperation accounted for 16.5 % (8 % adjusted) of total variance (Table 16). In step 1, maternal histories of Social Withdrawal (*Beta*=-.29, p<.019) significantly predicted

Table 15

Child Communication and Child Self-Control (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.06	1.81
Childhood Aggression	0.08	0.01	0.66		
Childhood Withdrawal	-0.22	0.05	-1.74^t		
Step 2				0.01	0.89
Childhood Aggression	0.11	0.01	0.82		
Childhood Withdrawal	-0.17	0.03	-1.24		
Maternal Education	0.13	0.01	0.94		
Step 3				0.07	4.46*
Childhood Aggression	0.08	0.01	0.64		
Childhood Withdrawal	-0.11	0.01	-0.84		
Maternal Education	0.13	0.01	0.95		
Child Gender[a]	0.27	0.07	2.11*		
Step 4				0.00	0.12
Childhood Aggression	0.09	0.01	0.67		
Childhood Withdrawal	-0.11	0.01	-0.81		
Maternal Education	0.13	0.01	0.95		
Child Gender	0.26	0.07	2.04*		
Number of Intervals Coded	0.04	0.00	0.34		
Step 5				0.06	4.14*
Childhood Aggression	0.09	0.01	0.69		
Childhood Withdrawal	-0.10	0.01	-0.75		
Maternal Education	0.06	0.00	0.47		
Child Gender	0.16	0.02	1.16		
Number of Intervals Coded	-0.02	0.00	-0.17		
Child Communication	0.29	0.06	-2.03*		
	R = .45		R^2_{Adj} = .12		F = 2.31*

$^t p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table 16

Mother Communication and Child Cooperation (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.11	3.50*
Childhood Aggression	0.12	0.01	0.94		
Childhood Withdrawal	-0.29	0.09	-2.40*		
Step 2				0.00	0.00
Childhood Aggression	0.12	0.01	0.92		
Childhood Withdrawal	-0.30	0.07	-2.22*		
Maternal Education	-0.00	0.00	-0.02		
Step 3				0.03	1.86
Childhood Aggression	0.10	0.01	0.76		
Childhood Withdrawal	-0.26	0.06	-1.94[t]		
Maternal Education	-0.01	0.00	-0.06		
Child Gender[a]	0.17	0.03	1.36		
Step 4				0.00	0.14
Childhood Aggression	0.10	0.01	0.78		
Childhood Withdrawal	-0.26	0.06	-1.91[t]		
Maternal Education	-0.01	0.00	-0.05		
Child Gender	0.17	0.03	1.30		
Number of Intervals Coded	0.05	0.00	0.38		
Step 5				0.03	2.04
Childhood Aggression	0.09	0.01	0.67		
Childhood Withdrawal	-0.28	0.06	-2.08*		
Maternal Education	-0.09	0.01	-0.64		
Child Gender	0.13	0.01	0.98		
Number of Intervals Coded	0.01	0.00	0.07		
Mother Communication	0.20	0.03	-1.43		
	R = .41		R^2_{Adj} = .08		F = 1.84

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

cooperation, accounting for 9 % of the variance. Mothers with histories of social withdrawal had children who rated themselves as being less cooperative compared to their peers. In Step 2, when Maternal Education was entered, Social Withdrawal (*Beta*=-30, $p<.031$) remained a significant predictor. In Step 3, when child Gender was entered, Social Withdrawal (*Beta*=-.26, $p<.057$) became a trend. In Steps 4 when number of intervals was entered, Social Withdrawal (*Beta*=-.26, $p<.061$) remained a trend. In step 5, when mother communication was entered, Social Withdrawal (*Beta*=.-28, $p<.042$) was significant. Mothers with histories of social withdrawal had children who rated themselves as being less cooperative.

The regression examining dyad communication as a predictor of mother rated child social skills (total score on MESSY) accounted for 50.1 % (38 % adjusted) of the total variance (Table 17). In step 3, maternal histories of Aggression (*Beta*=.30, $p<.094$) emerged as a trend, while child Gender (*Beta*=-.46, $p<.009$) emerged as a significant predictor of child social skills, accounting for 21 % of the variance. Mothers with histories of aggression tended to rate their children as having poorer social skills than their peers. Boys were also rated as having poorer social skills than girls. In step 4, maternal histories of Aggression no longer approached significance, but child Gender (*Beta*=-.43, $p<.021$) remained significant. In step 5, maternal histories of Aggression (*Beta*=.60, $p<.005$), child Gender (*Beta*=-.50, $p<.004$), and Dyad Communication (*Beta*=.51, $p<.009$) predicted child social skills, accounting for 17 % of the variance. In dyads with mothers with histories of aggression and better communication quality, children were rated by their mothers as having poorer social skills.

Table 17

Dyad Communication and Mother-Rated Social Skills (MESSY Total Score) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.08	1.21
Childhood Aggression	0.28	0.07	1.49		
Childhood Withdrawal	-0.01	0.00	-0.05		
Step 2				0.03	0.76
Childhood Aggression	0.24	0.05	1.24		
Childhood Withdrawal	-0.08	0.01	-0.40		
Maternal Education	-0.18	0.03	-0.87		
Step 3				0.21	8.01**
Childhood Aggression	0.30	0.08	1.74[t]		
Childhood Withdrawal	-0.08	0.01	-0.44		
Maternal Education	-0.14	0.02	-0.76		
Child Gender[a]	-0.46	0.21	-2.83**		
Step 4				0.02	0.63
Childhood Aggression	0.27	0.06	1.51		
Childhood Withdrawal	-0.08	0.01	-0.44		
Maternal Education	-0.15	0.02	-0.84		
Child Gender	-0.43	0.16	-2.46*		
Number of Intervals Coded	-0.14	0.02	-0.79		
Step 5				0.17	8.10**
Childhood Aggression	0.60	0.20	3.06**		
Childhood Withdrawal	0.01	0.00	0.05		
Maternal Education	-0.10	0.01	-0.60		
Child Gender	-0.50	0.21	-3.21**		
Number of Intervals Coded	-0.06	0.00	-0.40		
Dyad Communication	0.51	0.17	2.85**		
	R = .71		R^2_{Adj} = .38		F = 4.01**

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Objective 3: Marital Communication predicting Parent-Child Communication

Intercorrelations among marital communication variables and parent-child communication variables are provided in Table 18.

Marital Communication. The regression examining marital communication as a predictor of mother-child dyad communication accounted for 47.2 % (31 % adjusted) of the total variance (Table 19). In step 1, maternal histories of Aggression (*Beta*=-.47, $p<.03$) predicted dyad Communication, accounting for 21 % of the variance. In dyads with mothers with histories of Aggression, communication quality was poorer. In Step 5, marital communication emerged as a significant predictor (*Beta*=.48, $p<.02$) accounting for 22.5 % of the variance. In families where couples had good communication, mother and child had better communication quality.

The regression examining marital conflict resolution as a predictor of mother-child dyad communication accounted for 42.5 % (25.6 % adjusted) of the total variance (Table 20). In step 1, maternal histories of Aggression (*Beta*=-.47, $p<.03$) predicted dyad Communication, accounting for 20.8 % of the variance. In dyads with mothers with histories of aggression, communication quality was poorer. In step 5, marital conflict resolution emerged as a significant predictor (*Beta*=.52, $p<.04$) accounting for 24 % of the variance. In families where couples had good conflict resolution, mother and child had better communication quality. Taken together, marital communication and conflict resolution predicted better mother-child communication quality.

Table 18

Intercorrelations among Parent-Child Communication and Marital Communication Variables

	1	2	3	4	5	6	7	8
1. Mother Communication	--	.70**	-.00	-.25	-.13	-.34	-.15	-.02
2. Child Communication	.70**	--	-.16	-.24	-.26*	-.23	-.04	-.07
3. Child Climate:Negative	-.00	-.16	--	.37**	.75**	-.01	-.14	-.03
4. Mother Climate: Negative	-.25	-.24	.37**	--	.79**	.18	-.13	-.06
5. Dyad Climate: Negative	-.13	-.26*	.75**	.79**	--	.07	-.25	-.14
6. Dyad Communication	-.34	-.23	-.01	.18	.07	--	.55**	.57**
7. Couple Communication	-.15	-.04	-.14	-.13	-.25	.55**	--	.76**
8. Conflict Resolution	-.02	-.07	-.03	-.06	-.14	.57**	.76**	--

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$

Table 19

Marital Communication and Mother-Child Dyad Communication (N=55)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.21	2.63[t]
Childhood Aggression	-0.47	0.21	-2.28[t]		
Childhood Withdrawal	-0.19	0.03	-0.89		
Step 2				0.00	0.00
Childhood Aggression	-0.48	0.18	-2.07[t]		
Childhood Withdrawal	-0.19	0.01	-0.79		
Maternal Education	-0.00	0.00	-0.02		
Step 3				0.01	0.14
Childhood Aggression	-0.48	0.18	-2.04[t]		
Childhood Withdrawal	-0.18	0.02	-0.75		
Maternal Education	-0.02	0.00	-0.06		
Child Gender[a]	0.08	0.01	0.37		
Step 4				0.04	0.85
Childhood Aggression	-0.57	0.22	-2.23[t]		
Childhood Withdrawal	-0.18	0.02	-0.72		
Maternal Education	-0.08	0.00	-0.33		
Child Gender	0.19	0.03	0.77		
Number of Intervals Coded	-0.24	0.04	-0.92		
Step 5				0.24	7.72*
Childhood Aggression	-0.54	0.19	-2.45[t]		
Childhood Withdrawal	-0.13	0.01	-0.63		
Maternal Education	-0.19	0.02	-0.85		
Child Gender	0.16	0.02	0.76		
Number of Intervals Coded	-0.19	0.02	-0.89		
Marital Communication	0.52	0.24	-2.78*		
	R = .70		R^2_{Adj} = .31		F = 2.62[t]

[t] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table 20

Marital Conflict Resolution and Mother-Child Dyad Communication (N=55)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.21	2.63[t]
Childhood Aggression	-0.47	0.21	-2.28[t]		
Childhood Withdrawal	-0.19	0.03	-0.89		
Step 2				0.00	0.00
Childhood Aggression	-0.48	0.18	-2.07[t]		
Childhood Withdrawal	-0.19	0.03	-0.79		
Maternal Education	-0.00	0.00	-0.02		
Step 3				0.01	0.14
Childhood Aggression	-0.48	0.18	-2.04[t]		
Childhood Withdrawal	-0.18	0.02	-0.75		
Maternal Education	-0.02	0.00	-0.06		
Child Gender[a]	0.08	0.01	0.37		
Step 4				0.04	0.85
Childhood Aggression	-0.57	0.22	-2.23[t]		
Childhood Withdrawal	-0.18	0.02	-0.72		
Maternal Education	-0.08	0.00	-0.33		
Child Gender	0.19	0.03	0.77		
Number of Intervals Coded	-0.24	0.04	-0.92		
Step 5				0.27	8.78**
Childhood Aggression	-0.45	0.13	-2.09[t]		
Childhood Withdrawal	-0.18	0.02	-0.91		
Maternal Education	-0.41	0.09	-1.74		
Child Gender	0.30	0.07	1.47		
Number of Intervals Coded	-0.20	0.03	-0.93		
Marital Conflict Resolution	0.65	0.27	-2.96**		
	R = .72		R^2_{Adj} = .34		F = 2.85*

[t]p < 0.10, *p < 0.05, **p < 0.01, ***p < .001
Note. [a]Child Gender: boys = 1, girls = 2.

Discussion

In the present study, maternal histories of aggression and/or social withdrawal as predictors of communication quality between high-risk mothers and their middle-childhood aged children and the association between communication quality and relationship factors in middle childhood were examined. In addition, the association between marital communication and parent-child communication was investigated. Taken together, the results partially supported the hypotheses for maternal risk status in predicting mother-child communication and demonstrated that mother-child communication was associated with positive relationship variables (i.e. emotional availability, likeability, social skills). The anticipated association between marital communication and parent-child communication was also supported.

Maternal histories of risk were expected to predict poorer parent-child communication quality. Consistent with our hypotheses, maternal histories of aggression predicted poorer dyadic communication quality suggesting that mothers with childhood histories of aggression and their children have poorer communication quality than dyads where mothers do not have histories of aggression. This finding is consistent with previous research with the Concordia sample whereby maternal aggression has been associated with various problematic outcomes including parenting behaviours, and developmental, behavioral, and health problems in offspring (see Stack et al., 2005 for a review). Maladaptive parenting behaviours (e.g. criticism, hostility) associated with maternal childhood aggression might be expected to prevent a child from receiving adequate modeling for appropriate communication skills. In line with social learning theory, children learn from their parents, thus mother-child dyads with maternal histories

of aggression would be more likely to have poorer communication quality than dyads without histories of risk.

Despite the association between maternal aggression and dyadic communication quality, the lack of findings for maternal risk predicting mother and child communication quality separately was somewhat surprising. The explanation may derive from the way in which communication was measured. Communication is a relational construct, therefore by measuring mother and child separately important information about how each partner interacts in response to the other may be lost. Dyadic codes that consider both partners may yield a better understanding of the nature of communication and a more accurate picture of the parent-child relationship. Support for this explanation comes from Dynamic Systems Theory which views the mother-child relationship as a developing system that is continuously connecting and relating during mutual interactions in their environment (e.g. at home, in public) (Fogel & Garvey, 2007; Granic, 2000). Therefore, each partner has an effect on the other and is constantly changing. By measuring the mother and child separately, the ability to measure changes that characterize the interactions in these relationships is lacking.

Contrary to what was expected, maternal histories of social withdrawal did not predict communication quality. This finding may be explained by the rather small sample size, but also by the nature of social withdrawal. Although less is known about the impact of social withdrawal on parenting ability in mothers, previous research has shown that these mothers may demonstrate more intrusive parenting techniques (Grunzeweig et al., in press). These problematic parenting techniques may be due to a lack of knowledge about appropriate social communication skills resulting from less normative experience

in social interaction. According to the construct of bidirectionality, when a parent and child are able to engage in continuous activity, their behaviours become dependent on one another. Partners are believed to develop expectations and shared goals that make future interactions possible (Maccoby, 1992). Therefore, over time, it may be that mothers and children have come to expect and predict each other's interaction style. As such, to a third party (coder), this interaction style appears to be effective and meets the needs of each partner. This may not however, translate to interactions in other contexts or with other people. Interactions in other social situations may still be problematic. Indirect support for this explanation comes from the present findings that demonstrated maternal histories of social withdrawal predicted poorer social skills in offspring. Consequently, although maternal social withdrawal and parent-child communication appeared unrelated, children of mothers with histories of social withdrawal seemed to have significant problems interacting with their peers. This provides support for the intergenerational transfer of risk.

While maternal risk is associated with communication quality, the effects of risk extend beyond parent-child communication. The hypotheses for the association between communication quality and relationship variables were partially supported. Upon examination, results revealed that mothers' communication quality was associated with their emotional availability while interacting with their children. Specifically, mothers who had better communication quality were more sensitive and used higher levels of structuring with their children while discussing a conflict. However, in dyads with better communication quality mothers used lower levels of structuring. This may suggest that once the child's behaviours are accounted for, mothers do not appear to be structuring as

much. As opposed to a teaching or play task, the conflict task is designed to allow mother and child to openly express themselves, therefore less structuring and limit setting may be required. These results shed light on the overall quality of the affective relationship between mother and child (Biringen, 2000). Mothers who demonstrate greater communication quality are likely to be more in-tune with their children's needs and thus are more equipped to respond to their children's affective requests and behaviours. This relationship between mother and child is essential as it has been shown to lead to better emotional competence in offspring (Bornstein et al., 2006). Furthermore, communication quality was associated with several other positive relationship variables. Children who demonstrated negative communication behaviours were rated as being less liked by their peers. Although there is a paucity of research on the long-term ramifications of likeability on well being, studies are beginning to demonstrate that being liked in childhood is associated with less stress, more resources, and a lower probability of behaviour problems in adulthood (Schwartzman, Serbin, Stack, Hodgins, & Ledingham, 2009). The present results also revealed that children with better communication quality tended to rate themselves as having more appropriate social skills and more self-control. These findings were in line with hypotheses and are consistent with the current literature on the impact of effective communication and parenting. Specifically, effective communication skills are important for social interaction and relate to social acceptance (Black & Logan, 1995). The present findings suggest that children who are better able to communicate with their parents have better social competencies. Social competence has been shown to be a developmental asset necessary for healthy development, and interestingly, self-control has been identified as critical with regard to school success (Lane, Pierson, &

Givner, 2003; Search Institute, 2003). Children with social skills such as self-control are likely to have proactive interactions with peers and teachers which ultimately lead to the development of positive relationships. Given the association between social competence and adaptive relationships, children's social skills are likely to be protective factors against the development of maladaptive relationships and conditions of risk.

Interestingly, in dyads with better communication quality children were rated by their mothers as having poorer social skills. These results could be attributed to mothers' perceptions of appropriate social skills. Mothers in this sample may have had unrealistic expectations of their children's social skills. Furthermore, these perceptions may differ for mothers with and without histories of risk. Although children may actually be demonstrating appropriate skills, mothers with histories of aggression/social withdrawal may be more critical of their children. Future research is warranted to examine the difference between maternal perceptions of social skills among at-risk mothers and comparison mothers. In addition, a comparison between mother reports and teacher reports is warranted. Research has shown that parent and teacher reports can display significant discrepancies (Ferdinand, van der Ende, Verhulst, 2007). Since teachers see children in a different and more social context, their perceptions might be equally important.

The present results suggest that communication quality extends across contexts (i.e. at home and school). Children who are better able to communicate with their parents may have learned the necessary tools enabling them to be socially competent in other domains. Therefore, consistent with attachment theory, these children have likely developed internal working models of themselves, others, and relationships from

experiences with their parents that they use to guide their expectations in subsequent close relationships (Bretherton, 1990). Taken together, parent-child communication quality is an important predictor of children's relationship variables. These findings contribute to the literature on communication as a protective factor against the development of maladaptive relationships, and the parent-child relationship as a protective factor in conditions of risk.

While parent-child communication is an important component characterizing healthy relationships, the marital system may also influence parent-child communication. In the present study, couples with better communication quality were expected to have better communication quality with their children. Results revealed that in families where couples had better communication and better conflict resolution, mother and child also had better communication quality. The present results are consistent with the current literature and support the notion of the transfer of family communication styles directly and indirectly. Through observing their parent's communication behaviours (Van Dorn, Branje, Meeus, 2007) children learn and apply these behaviours to their own interactions. Observing the marital relationship is likely to influence children's internal working models of relationships (Bowlby, 1969, Fincham, Grych, & Osborne, 1994) which could then have consequences for their own social interactions. Given repeated opportunities to observe parents communicating, children may acquire a set of rules, behaviours and expectations for communication with others. Furthermore, marital conflict may indirectly influence children through disrupted parenting (Brody, Arias, & Fincham, 1996). Disrupted parenting can be conceptualized as a perpetuating cycle of risk, whereby children learn maladaptive parenting strategies and later apply them with their own

offspring. In turn, these strategies lead to a coercive cycle of family conflict (Patterson, 1982).

Beyond examining maternal risk and communication variables, child gender and maternal education were also included as predictors of communication quality and relationship outcomes. With respect to gender, findings were fairly consistent. In general, girls appeared to be more likeable, had more appropriate social skills, and participated in interactions with their mothers that were more sensitive. These results may be reflective of gender differences in development and society's conception of gender roles. For example, girls are more often portrayed to be 'nice', 'sweet' and more socially competent than boys in childhood (Daniels, 2007). In addition, girls tend to be perceived as being less physically aggressive and hyperactive (Peplar & Craig, 2006). These beliefs may influence the way in which teachers and mothers perceive girls and boys and even how children perceive themselves.

Several findings emerged with respect to maternal education. For example, education was associated with better mother and child communication quality. Maternal education has often emerged as a protective factor for children in at-risk populations (e.g. Serbin et al., 2002) therefore these findings are not surprising. Communication may be affected by maternal levels of education since in middle childhood cognitive and problem solving abilities are more frequently employed when communicating about a conflict (Van Dorn, Branje, & Meeus, 2007). Furthermore, maternal education seemed to account for much of the variance associated with maternal histories of social withdrawal. Maternal education could be a particularly important protective factor for mothers with histories of social withdrawal as attending school involves a social component. The more

time these women spent at school interacting with teachers and peers, the more exposure they may have had to appropriate social interaction.

Taken together, results from the present study suggest that mothers' childhood history of aggression has a negative influence on the quality of parent-child communication, supporting the notion of parenting as a mechanism in the transfer of risk. This is especially important as parent-child communication was associated with the development of adaptive social skills and the quality of relationships, which are significant outcomes for children in the middle childhood years. However, the observation of communication in the present study was limited to one context (conflict task). The conflict task may not generalize to other situations that typically characterize the mother-child relationship. Future research should investigate communication across multiple contexts and topics. For example, a neutral, non-conflict related topic was not discussed in the current study. Multiple contexts and topics would have provided a useful comparison to understand whether mother and child communication varied as a function of topic and/or context. Furthermore, communication should be examined in different types of high-risk populations, where different parenting strategies may be characteristic of the nature of the particular population.

In summary, findings from the present study contribute to the paucity of research on the influence of parent-child communication on children's relationship quality, likeability, and social competence in a sample of middle-childhood-aged children whose mothers had childhood histories of aggression and social withdrawal. This study took an important step in measuring communication quality through observational methods, rather than relying solely on parent or self reports. In addition, this study brings us one

step closer to understanding what constitutes positive relationships. By examining parent-child communication quality and its role in relationship outcomes, our knowledge on the development and maintenance of positive relationships associated with positive adaptation is furthered.

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Appendix A

Explanation of Conflict Task Protocol

Conflict Resolution Task

1) Complete Parent-Child Conflict Questionnaires

Mother and child are separated in order to complete the parent-child conflict questionnaire (*Potential Parent-Child Conflict Questionnaire*).

"Voici une liste de themes a propos desquels les enfants et les parents sont souvent en disaccord. Nous sommes interesses a connaitre le degree auquel votre enfant et vous (ta mere et toi) etes en desaccord sur ces sujets a la maison. Veuillez évaluer chaque item sur une échelle variant de 0 a 5 ou = je ne suis pas en disaccord et 5 = je suis vraiment en desaccord."

2) Conflict Resolution Task (6 minutes)

L'assistant(e) de recherché doit avoir sélectionne le sujet de discussion a partir des questionnaires remplis par la mere et par l'enfant (*Potential Parent-Child Conflict Questionnaire*). Le sujet de discussion doit être choisi a partir du sujet que la mere et l'enfant auront évalue comme étant problématique sur l'échelle.

Choisi le sujet qui possède le score le plus élevé et ou les scores chez la mere et l'enfant sont très semblables.

"Nous vous avons demande tout a l'heure de remplir un questionnaire afin d'identifier certains themes qui peuvent causer des problèmes dans votre famille. Apres avoir regarde chacune de vos réponses, j'ai choisit un sujet qui semble être l'objet d'une mésentente entre vous et qui ferait l'objet d'une discussion intéressante. Le sujet que vous aveux identifie est _____. J'aimerais que vous preniez les six prochaines minutes pour discuter ensemble de ce sujet. Il est important que vous participiez tout(e) les deux. Je vais maintenant vous laisser seul(e) s et je vais revenir dans six minutes. Avez-vous des questions? Vous pouvez commencer."

Appendix B

Informed Consent Form

***L'INDIVIDU DANS SON MILIEU: Les parents et leurs enfants+**

Directeurs du projet: -Lisa A. Serbin, Ph.D.
-Dale M. Stack, Ph.D.

Numéro d=identification:

Formulaire de consentement

Je, soussigné(e), autorise les chercheurs du projet **L'individu dans son milieu+* de l'université Concordia à rencontrer mon enfant _____à l'école, en deux sessions, durant la période de classe. Je comprends que mon enfant remplira des tests de fonctionnement intellectuel et académique ainsi que des questionnaires sur son comportement et son tempérament. J'autorise également les chercheurs à recueillir des informations sur la vie scolaire de mon enfant de la part de son professeur et à avoir une copie du dernier bulletin de l'année en cours. Finalement, lors d'une troisième visite, je consens à rencontrer les chercheurs de l'université Concordia à la maison avec mon enfant afin de remplir des questionnaires additionnels portant sur notre vie familiale et de recueillir des échantillons de salive sur moi-même, lors de la rencontre, et sur mon enfant, lors de la rencontre et pendant deux jours de la semaine. J'accepte aussi d'être filmé(e) avec mon enfant lors d'une session incluant un jeu et des discussions portant sur des résolutions de problèmes.

Je comprends que toute l'information recueillie demeurera confidentielle et qu'elle ne servira qu'à des fins de recherche. Cependant, si après évaluation des examens votre enfant requérait une attention spéciale, les chercheurs de l'université Concordia s'engagent à faire le suivi de la rencontre afin de référer les services nécessaires.

Dans l'éventualité où j'aurais des questions concernant cette recherche, je pourrai m'adresser soit à Julie Aouad ou bien à Nadine Girouard au (514) 848-2424 extension 2254.

Nom: _____ Date:
EN LETTRES MOULÉES

Signature:

****

Nom de l'enseignant/e:

Année:

Nom du directeur/de la directrice:

Nom de l'école:

Numéro de téléphone: (_____)
code régional

Adresse: _____
rue

_____
ville code postal

Appendix C

Conflict Questionnaire (Mother)

Numéro D'identification: _____

Questionnaire sur les conflits

(parent)

Voici une liste d'éléments à propos desquels les enfants et les parents sont souvent en désaccord. Nous voulons savoir jusqu' à quel point votre enfant et vous êtes en désaccord sur ces sujets à la maison. Veuillez évaluer chaque item sur une échelle de 0 à 5 où 0 = "Je ne suis pas en désaccord" et 5 = "Je suis très en désaccord".

1. Tâches ménagères / aide à la maison.	1	2	3	4	5
2. Travail à l'école / devoirs, notes ou mauvaise conduite à l'école.	1	2	3	4	5
3. Inimité / être capable de garder certaines choses pour lui/elle-même.	1	2	3	4	5
4. Écouter / respecter les demandes et les conseils de ses parents.	1	2	3	4	5
5. L'heure à laquelle l'enfant doit être à la maison le soir.	1	2	3	4	5
6. Apparence physique / façon dont il/elle s'habille.	1	2	3	4	5
7. L'heure du coucher.	1	2	3	4	5
8. Passer du temps ensemble en temps que famille.	1	2	3	4	5
9. Les ami(e)s de mon enfant / les gens avec qui il/elle se tient.	1	2	3	4	5
10. S'entendre avec son/ses frère(s) et sa/ses soeur(s).	1	2	3	4	5
11. L'argent.	1	2	3	4	5
12. Parler au téléphone / regarder la télévision.	1	2	3	4	5
13. Garder sa chambre en ordre.	1	2	3	4	5
14. Prendre un bain / une douche.	1	2	3	4	5
15. _____	1	2	3	4	5
16. _____	1	2	3	4	5
17. _____	1	2	3	4	5
18. _____	1	2	3	4	5

Appendix D

Conflict Questionnaire (Child)

Numéro D'identification: _____

Questionnaire sur les conflits

(Enfant)

Voici une liste d'éléments à propos desquels les enfants et les parents sont souvent en désaccord. Nous voulons savoir jusqu' à quel point ta mère et toi êtes en désaccord sur ces sujets à la maison. Évalue chaque item sur une échelle de 0 à 5 où 0 = "Je ne suis pas en désaccord" et 5 = "Je suis très en désaccord".

1. Mes tâches ménagères / aide à la maison.	1	2	3	4	5
2. Mon travail à l'école / devoirs, notes ou mauvaise conduite à l'école.	1	2	3	4	5
3. Mon inimité / être capable de garder certaines choses pour moi.	1	2	3	4	5
4. Écouter / respecter les demandes et les conseils de mes parents.	1	2	3	4	5
5. L'heure à laquelle je dois être à la maison le soir.	1	2	3	4	5
6. Mon apparence physique / la façon dont je m'habille.	1	2	3	4	5
7. L'heure à laquelle je dois me coucher.	1	2	3	4	5
8. Passer du temps ensemble en temps que famille.	1	2	3	4	5
9. Mes ami(e)s / les gens avec qui je me tiens	1	2	3	4	5
10. M'entendre avec mon/mes frère(s) et ma/mes soeur(s).	1	2	3	4	5
11. L'argent.	1	2	3	4	5
12. Parler au téléphone / regarder la télévision.	1	2	3	4	5
13. Garder ma chambre en ordre.	1	2	3	4	5
14. Prendre un bain / une douche.	1	2	3	4	5
15. _____	1	2	3	4	5
16. _____	1	2	3	4	5
17. _____	1	2	3	4	5
18. _____	1	2	3	4	5

Appendix E

Communication Coding Scheme (CCS)

Communication Coding Scheme (CCS)

Barrieau, Stack, & Burns (2009)

The communication coding scheme was designed to record interactions between 10 - 12 year old children and their mothers. This scheme consists of codes for the following communication variables: engagement, responsiveness, climate, and orientation (conversation and conformity). These variables are coded in one minute intervals. The quality of communication between mother and child is based on these variables.

For maximal results, coders should follow these steps:

- Each component of every interval is coded on a separate pass
- Coders watch the minute interval in full for each component being coded
- A separate code is assigned for the mother, child, and the dyad (includes mother and child). The dyadic code is a joint code for the dyad and is based on each partner's speech and behaviors
- When coding, coders should follow the interval guidelines provided below
- When an interval lasts fewer than 30 seconds, it is not coded

Interval Codes

Interval Guidelines

When choosing a code, the interval may include some or all of the guidelines provided below. A code is chosen when the given interval resembles the guidelines for that code most closely. When ambiguity in choosing a code occurs, coders are reminded to focus on the intensity of the mother and/or child's behaviors when deciding.

***1.* Engagement:** The degree to which each partner separately and in combination are engaged in the **discussion** as both the listener and the speaker. This code is based on the degree to which each person is taking part in the discussion and how much enthusiasm and interest they are demonstrating. This code also includes (with less emphasis) behaviors such as body posture and eye contact.

Scale & Guidelines

1= Not at all engaged, no enthusiasm, or interest in the discussion:

- The partner/dyad is just going through the motions of the task and they do not appear to be having a discussion
- Partner (s) are distracted by/focused on other objects, animals, people, or matters not related to the discussion (accompanied by gaze aversion)
- A subdued tone of voice is being used

- There is more silence than speaking occurring in the interval; bouts of silence are frequent and long lasting
- Comments such as "I don't have anything to say", "I don't care", "there's nothing to talk about", and many one word answers such as 'yes" and "no" can be heard
- One of partners (or both) removes themselves from the discussion area without a valid reason (e.g. bathroom break) or turns away (head or body) from partner to avoid them, or simply because they seem uninterested
- Large behavioral cues indicative of boredom are apparent (body posture: slumped over, laying on table, etc.)
- More subtle behavioral cues such as gaze aversion, yawning, tilted head being supported by hand, playing with hands or an object on table occur frequently

2= Slightly engaged, enthused and interested:

- **A discussion appears to be taking place**, but partners/dyad may also be distracted by other objects, animals, people, or matters not related to the discussion (accompanied by gaze aversion)
- The partner(s) experience bouts of silence throughout the interval in which nothing is being said and it is clear they are not silently reflecting on the discussion
- Comments such as "I don't have anything to say", "I don't care", "there's nothing to talk about", and many one word answers such as 'yes" and "no" can be heard
- There is little eye contact being made, and signs of boredom are apparent (i.e. yawning, tilted head being supported by hand and playing with hands or an object on table) **but are less noticeable than in the description of code 1**

3= Moderately engaged, enthused and interested:

- The partner(s) are having a discussion
- **Short and infrequent bouts** of silence may occur
- Partner(s) may be playing with another object or fidgeting, however **gaze aversion does not occur**
- Very minimal distractions by other objects, animals, people, or matters not related to the discussion may occur, however it is clear that the partner(s) has/have **not lost sight of the discussion**
- Behaviors indicating that the person/dyad is engaged are present (e.g. nodding their head and eye contact) but signs of boredom also occur (i.e. yawning, tilted head being supported by hand and playing with hands or an object on table) **but are less noticeable than in the description of code 2**

4= Very engaged, enthused and interested:

- The partner(s) are **asking and answering** questions and giving their opinions
- They are paying attention and actively listening to each other (nodding, **sounds of agreement "un-uh or disagreement "uh-un"**)

- When someone becomes disengaged (gets up, turns away from, stops participating/speaking) the other partner brings them back on track and re-engages them in the discussion
- Eye contact is frequently made, and an upright body posture (**facing the other partner**) is maintained
- There may be **subtle pauses** in speech and gaze aversion may occur, however there is **more eye contact then gaze aversion**
- Subtle signs of boredom may occur (i.e. yawning, playing with hands or an object on table while maintaining gaze), but are infrequent

5= Extremely engaged, enthused, and interested:

- The person/dyad is actively (asking and answering questions and giving opinion) involved in the discussion
- They are paying attention and actively listening to each other (nodding, sounds of agreement "un-uh or disagreement "uh-un")
- **When speaking, a partner encourages the other to participate more actively in the discussion**
- When someone becomes disengaged (gets up, turns away from, stops participating/speaking) the other partner brings them back on track and re-engages them in the discussion
- An **upbeat tone of voice** is maintained
- Eye contact is maintained more often than gaze aversion occurs
- An upright body posture (facing the other person) is maintained
- **No signs** of boredom occur (i.e. yawning, tilted head being supported by hand and playing with hands or an object on table)

Mother:

Not at all_____Extremely

1 2 3 4 5

Child:

Not at all_____Extremely

1 2 3 4 5

Dyad:

Not at all_____Extremely

1 2 3 4 5

2. Responsiveness: The degree to which each partner and the dyad as a whole are responsive to each other's ideas/opinions **about the conflict**; if/when partners stay on topic and/or how well their dialogue shares thematic content with the other partner. Responsiveness also takes into account each partner's needs and the sensitivity of each partner towards the other. E.g. "we don't think it looks nice", "I don't care what you think"

NB. A partner(s) is not coded as unresponsive if they bring a conversation that has gone off topic back to a conversation about the conflict.

Scale & Guidelines

1=Not at all:

- Partner's response is not contingent on the other person's speech
- One partner does not respond to the other partner's dialogue, or answer a question if one was asked, i.e. the partner is ignored (insensitive)
- The partner moves away (completely avoids) from the topic being discussed (i.e. no relevant information is contributed)
- No acknowledgement is made to the partner's comments

2=Slightly:

- Partner's dialogue does not stay on topic and/or does not address their partner's previous point (could be due misunderstanding)
- Acknowledgement of a partner's speech occurs rarely (nodding head, "un-hun")
- **Partner(s) initiate a novel but irrelevant topic**

3= Moderately:

- Partners stay on topic and address the previous topic of discussion, however they do not seem to share thematic content with the previous comment (e.g. Mom: "we could keep track of how many times you do the dishes to help you remember", Child: " I'm gonna wash them right after supper")
- Acknowledgement of a partner's speech occurs (nodding head, "un-hun")

4=Very:

- Contingent responses occur
- Partners stay on topic and their dialogue shares thematic content with the other partners
- Partners are paying attention to each other
- **Partner (s) initiate a novel, but relevant topic**
- **Both when speaking and listening, partners are acknowledged (speaker: "oui", "c'est vrai", "non" listener: nodding head, "un-hun")**

5=Extremely:

- Partners stay on topic and their dialogue shares thematic content with the other partner's
- Both when speaking and listening, partners are acknowledged (speaker: "oui", "c'est vrai", "non" listener: nodding head, "un-hun")
- Partners are paying attention to each other
- Partner (s) initiate a novel, but relevant topic
- The dyad appears to be **cooperating to resolve the conflict (appears like teamwork)**

- **Many of these may be seen in code 4, but to receive a code 5, they need to occur more frequently and with a greater intensity**

Mother:

Not at all_____Extremely

1 2 3 4 5

Child:

Not at all_____Extremely

1 2 3 4 5

Dyad:

Not at all_____Extremely

1 2 3 4 5

3. Climate: This code refers to the climate created by the discussion between the mother and child. Specifically, it reflects the degree of positivity or negativity present in the discussion. Given the nature of the task (dyads are instructed to discuss a topic on which they disagree), the focus of this code is on how the dyad chooses to resolve/discuss the conflict and not on what they are talking about. The intensity with which they communicate their ideas/opinions is reflected in the climate of the discussion.

a) A positive climate may include such things as:
Encouragement, praise (ex. "oui bravo", "c'est excellent", etc.)
Positive word type: reference to positive emotions, behaviors, or an event (ex. "That party was **fun**")
Positive outlook on resolving the conflict
Respect for the other partner
Behaviors such as smiling, laughing (**NOT** nervous, sarcastic, or 'in your face' laughing), touching, high fives, etc.

b) A negative climate may include such things as:
Criticism, sarcasm, hostility
Poor outlook on resolving the conflict
Negative word type: reference to negative emotions or behaviors and negative evaluations of mother and/or child (ex. "you're **not** being nice when you fight with your brother')
Disrespect for the other partner when discussing (laughing at, name calling, yelling etc)
Behaviors such as rolling eyes, hitting, pushing, sighing, inappropriate laughing (nervous, sarcastic, or 'in your face' laughing)

Scale & Guidelines

1=Not at all 2=Slightly 3=Moderately 4=Very 5=Extremely

As the scale increases, so does the presence of elements listed above as well as the intensity with which the partner/dyad is speaking/behaving. Intensity is key in choosing a code; as even 1 or 2 behaviors at a medium intensity may result in a code 3

1= Includes none of the elements listed above
2= Includes 1 or 2 of the elements/ **low** level intensity
3= Includes 3 or 4 of the elements/**medium** intensity
4= Includes 4 or 5 elements/**high** intensity
5= Includes 6 or more of the elements listed above at any intensity or at least one element above at an **extremely** intense level (e.g. yelling and swearing, or hugging and very warm praise.

Mother:

Not at all negative_____Extremely negative
1 2 3 4 5
Not at all positive_____Extremely positive
1 2 3 4 5

Child:

Not at all negative_____Extremely negative
1 2 3 4 5
Not at all positive_____Extremely positive
1 2 3 4 5

Dyad:

Not at all negative_____Extremely negative
1 2 3 4 5
Not at all positive_____Extremely positive
1 2 3 4 5

4. Orientation of Discussion: Orientations are central beliefs that determine how families communicate. Orientation can either be conversation or conformity.
Conversation Orientation is the degree to which the dyad creates an environment in which both mother and child are encouraged to participate in unrestrained interaction about a wide array of topics (open communication).

-Ex. "Tell me how my rule makes you feel"
"What do you think about our new plan?"

Conversation orientation also includes explanations/extensions in response to questions or of opinions, i.e. when the parent or child explains the event, conflict, behavior or emotion in terms of causes or consequences

-Ex. Mother: "Why do you think I don't like it when you fight"? Child: "Because it's loud"; Mother: "No, because fighting hurts people's feelings"

Conformity Orientation is the degree to which family communication stresses an environment of homogeneity of attitudes, values, and beliefs.

-Ex. "You will go to bed at 9:00 because I said so"

"It's better to keep the peace than try and tell your brother that"

Conformity orientation also includes responses to direct questions in which the respondent is yielding to pressure/conforming and statements, i.e. no discussion of causes/consequences or any explanation of an event, conflict, behavior, or emotion.

-Ex. Mother "You have to stop fighting with your sister", Child "I know". In this example, mother does not provide an explanation as to why they should not fight.

NB. The child's answer would also be conformity.

Scale & Guidelines

As the scale increases, the partner(s) is demonstrating more conversation behaviors.

1= Conformity:

- It is clear that partners are not able to openly have a discussion
- Their interaction includes **only** statements without any explanation of causes, consequences or reasoning
- Their discussion resembles a **'lecture'** i.e. one person does most of the talking, no questions are asked and no opinions are shared
- **Accusations are made** "you never clean your room", without allowing for input from the other partner "no, you never do it"
- When responding, one word answers are used (e.g. "oui", "non")
- There appears to be some reluctance to speak freely from one partner

2= Mostly Conformity:

- Includes many guidelines from code 1, but with a lower intensity (less obvious)
- Partners are not able to have an open discussion. **Both** partners may be speaking, but there is a clear imbalance of speaker/listener roles
- Includes statements without any explanation of causes, consequences or reasoning
- Very few questions are asked and opinions are not sought (does not mean they are not still given)
- When responding, one word answers are often used (e.g. "oui", "non")
- There appears to be some reluctance to speak freely from one partner

3=Conversation & conformity:

- There is an equal balance between statements without any explanation of causes, consequences or reasoning and statements followed by an explanation of causes, consequences or reasoning

- One word answers are used in addition to answers containing opinions and thoughts on the topic being discussed
- Some questions are asked and some opinions are shared

4= Mostly Conversation:
- Partner's discussion resembles a conversation (both partners are speaking/ sharing opinions)
- Includes statements followed by an explanation of causes, consequences or reasoning and responses (answers) containing opinions and thoughts on the topic being discussed
- One word answers occur but are infrequent/ immediately accompanied by another phrase/opinion/explanation
- There is reassurance that the partner(s) can say whatever is on their mind

5= Conversation:
- Statements followed by an explanation of causes, consequences or reasoning and responses (answers) containing opinions and thoughts on the topic being discussed occur
- There is an absence of statements not followed by an explanation of causes, consequences or reasoning
- Partner(s) are continuously seeking out the other's opinion and thoughts on the matter being discussed
- There is reassurance that the partner(s) can say whatever is on their mind
- Partner(s) do not appear to be holding back how they feel or what they think out of fear of punishment

Mother:

Conformity _____ Conversation

1 2 3 4 5

Child:

Conformity _____ Conversation

1 2 3 4 5

Dyad:

Conformity _____ Conversation

1 2 3 4 5

Appendix F

Demographic Information Questionnaire (DIQ)

ID #_____

L'INDIVIDU DANS SON MILIEU

Renseignements sociodémographiques

Tous ces renseignements sont traités de façon totalement confidentielle

1. **Sexe** ☐ M ☐ F

2. **Âge** _____ ans Date de naissance AN ____ MO ____ JR ____

3. **État civil**

Note: "Conjoints de fait": désigne deux personnes qui vivent ensemble comme si elles étaient mariées. Il s'agit de ton état actuel; même si tu es légalement divorcé(e) ou autre, mais que tu vis avec un(e) conjoint(e) présentement, inscris conjoint de fait.

☐ Célibataire	☐ Conjoint	Depuis quelle date?
☐ Marié(e)	☐ Séparé(e)	AN MO JR
☐ Divorcé(e)	☐ Veuf/veuve	_____ _____ _____

4. **Nombre d'enfants** _____

Si enceinte (ou conjointe enceinte), bébé attendu pour: ____ ____
AN MO

Sinon, prévoyez-vous avoir un enfant dans les prochains 12 mois? OUI _____
NON ____

dans les prochains 24 mois? OUI _____
NON ____

Pour <u>chaque enfant</u>:

1 - Inscrire le nom, le sexe, la date de naissance

2 - Encercler "**TE**" si c'est ton enfant (tu es le parent biologique)
"**EC**" si l'enfant du conjoint (le conjoint actuel est le parent biologique)
"**EA**" si c'est un enfant adopté /"**FA**" en foyer d'accueil et qui vit chez toi
Si "TE" et "EC" sont vrais, encercler les deux.

3 - Indiquer si l'enfant vit avec toi, **OUI** ou **NON** ou **GP** (garde partagée)

4 - Inscrire l'année scolaire (si applicable) ainsi que si l'enfant fréquente une classe ou une école spéciale.

(Si tu as plus de quatre enfants, inscrire leurs informations sur une feuille séparée.)

1 NOM SEXE AN MO JR

_____ ☐ M ☐ F ____ ____ ____

L'enfant est: TE EC EA / FA Vit avec toi: OUI ☐ NON ☐ GP ☐

Année scolaire: _____ Classe spéciale: _____

2 NOM SEXE AN MO JR

_____ ☐ M ☐ F ____ ____ ____

L'enfant est: TE EC EA / FA Vit avec toi: OUI ☐ NON ☐ GP ☐

Année scolaire: _____ Classe spéciale: _____

3 NOM SEXE AN MO JR

_____ ☐ M ☐ F ____ ____ ____

L'enfant est: TE EC EA / FA Vit avec toi: OUI ☐ NON ☐ GP ☐

Année scolaire: _____ Classe spéciale: _____

4 NOM SEXE AN MO JR

_____ ☐ M ☐ F ____ ____ ____

L'enfant est: TE EC EA / FA Vit avec toi: OUI ☐ NON ☐ GP ☐

Année scolaire: _____ Classe spéciale: _____

5. **Ta scolarité** complétée (dernière année terminée):

En quoi? (spécialisation/général): _____

Étudies-tu présentement? OUI : Temps plein ☐ partiel ☐ NON ☐

Si oui, quel diplôme postules-tu _____ pour quand?___/___/___/

6. **As-tu un emploi** (rappel: renseignements gardés confidentiels)?

OUI ☐ NON ☐

Occupation: _____ As-tu déjà eu un emploi?

_____

Tes tâches: _____
_____
_____

Oui □ Non □
⇓
En quoi?

Combien d'heures/sem.? _____

Pendant combien de temps?
____ an(s) ____ mois

Salaire de l'heure _____ $

Depuis quand es-tu à cet emploi? inscrire la date

Quand as-tu arrêté de travailler:
date: ____/____/
AN MO

Au cours des 12 derniers mois, as-tu bénéficié de:

Oui □ Non □ l'Assurance chômage?

Oui □ Non □ Prestations d'aide sociale?

Oui □ Non □ la CSST? (préciser:_____)

7. **Informations sur le conjoint (renseignements gardés confidentiels):**

AN MO JR

a) Son nom:_____Date de naissance ____ ____

Son occupation:_____

Ses tâches:_____

Son salaire: _____ $/ heure Nombre d'heures _____ / semaine

AN MO

Il/Elle travaille là depuis: date ____ ____

b) Au cours des 12 derniers mois, a-t-il/elle bénéficié de:

Oui □ Non □ l'Assurance chômage?

Oui □ Non □ Prestations d'aide sociale?

Oui □ Non □ la CSST? (préciser:_____)

c) Sa scolarité complétée (dernière année terminée):
En quoi? (spécialisation/général):_____

Étudie-t-il (elle) présentement? OUI : Temps plein □ partiel □ NON □

Si oui, diplôme postulé?_____ pour quand? (date) ____/____/

8. **Informations sur le père\la mère de tes enfants (si n'habite pas avec toi)**

AN MO JR

a) Son nom:_____ Date de naissance ____ ____
Son occupation:_____

Ses tâches:_____

Son salaire: _____ $/ heure Nombre d'heures _____ / semaine

AN MO
Il/Elle travaille là depuis: date ____ ____

b) Au cours des 12 derniers mois, a-t-il/elle bénéficié de:

Oui ☐ Non ☐ l'Assurance chômage?

Oui ☐ Non ☐ Prestations d'aide sociale?

Oui ☐ Non ☐ la CSST? (préciser:_____)

c) Sa scolarité complétée (dernière année terminée):
En quoi? (spécialisation/général):_____

Étudie-t-il (elle) présentement? OUI : Temps plein ☐ partiel ☐ NON ☐

Si oui, diplôme postulé?_____ pour quand? (date) ____/____/

9. **Disponibilité pour l'entrevue**: un bloc de 2-3 heures

☐ Le matin ☐ L'après-midi
☐ Le soir ☐ La fin de semaine

10. **Je préfère aller à** _____ Guy et Maisonneuve (centre-ville)
_____ 7141 Sherbrooke ouest (N.D.G.)

S.V.P. Vérifier l'adresse et les numéros de téléphone.

_____ _____
No Rue app.

_____ _____ _____
Ville Code postal

Téléphones: Personnel: (_____) _____ - _____

Travail: (_____) _____ - _____
Parents: (_____) _____ - _____
Autre _____: (_____) _____ - _____

Ton numéro de téléphone est B quel nom dans l'annuaire téléphonique: Nom complet et lien avec toi: _____

Adresse électronique: _____

Adresse des parents: _____

_____

_____

Appendix G

Sample Items from the Pupil Evaluation Inventory-R (PEI-R)

Likeability Sample Items

14. est dans ceux/celles que tout le monde aime. _____
17. a très peu d'ami(e)s. _____
24. est particulièrement gentil(le). _____
34. semble toujours comprendre ce qui se passe. _____

Appendix H

Social Skills Rating System (SSRS) - Child Self-Report Questionnaire

IDNO: _____

SSRS

(Gresham & Elliot)

Voici plusieurs choses que les élèves de ton âge peuvent faire. Lis **TOUTES** les phrases et pense à ce que tu fais **TOI**. Ensuite, indique à quelle fréquence chaque comportement se produit. Assure-toi de répondre à **TOUS** les numéros et souviens-toi qu'il n'y a pas de bonnes ou de mauvaises réponses.

		Jamais	Parfois	Très Souvent
1.	Je me fais des ami(e)s facilement.	0	1	2
2.	Je souris, j'envoie la main, ou je fais un signe de la tête aux gens.	0	1	2
3.	Je demande avant d'utiliser les affaires des autres.	0	1	2
4.	J'ignore les camarades qui font les clowns dans la classe.	0	1	2
5.	Je suis désolé(e) pour les autres quand de mauvaises choses leur arrivent.	0	1	2
6.	Je le dis aux autres lorsque je suis fâché(e) contre eux.	0	1	2
7.	Je peux être en désaccord avec les adultes sans chicaner ou argumenter.	0	1	2
8.	Je garde mon bureau propre et en ordre.	0	1	2
9.	Je participe aux activités scolaires comme les sports ou les clubs.	0	1	2
10.	Je fais mes devoirs à temps.	0	1	2
11.	Je dis mon nom aux autres sans qu'on me le demande.	0	1	2
12.	Je contrôle mon humeur quand les gens sont fâchés contre moi.	0	1	2
13.	Je conteste poliment les règles qui me semblent injustes.	0	1	2

		Jamais	Parfois	Très Souvent
14.	Je laisse savoir à mes ami(e)s que je les aime en leur disant ou en leur montrant.	0	1	2
15.	J'écoute les adultes quand ils me parlent.	0	1	2
16.	Je montre que j'aime les compliments que mes ami(e)s me font.	0	1	2
16.	J'écoute mes ami(e)s quand ils/elles parlent de leurs problèmes.	0	1	2
17.	J'évite de faire des choses avec les autres si c'est pour m'attirer des ennuis avec les adultes.	0	1	2
18.	Je termine calmement les disputes avec mes parents.	0	1	2
19.	Je dis de belles choses aux autres quand ils ont fait quelque chose de bien.	0	1	2
20.	J'écoute l'enseignant(e) quand il/elle donne son cours.	0	1	2
21.	Je termine mon travail en classe à temps.	0	1	2
22.	Je commence des conversations avec mes camarades de classe.	0	1	2
23.	Je le dis aux adultes quand ils ont fait quelque chose pour moi que j'aime.	0	1	2
24.	Je suis les directives du professeur.	0	1	2
25.	J'essaie de comprendre comment mes ami(e)s se sentent quand ils/elles sont fâché(e)s, agacé(e)s, ou tristes.	0	1	2
26.	Je demande à mes ami(e)s de m'aider avec mes problèmes.	0	1	2
27.	J'ignore les autres enfants quand ils m'agacent ou me crient des noms.	0	1	2

		Jamais	Parfois	Très Souvent
28.	J'accepte les gens qui sont différents.	0	1	2
29.	J'utilise mon temps libre d'une bonne façon.	0	1	2
30.	Je demande à mes camarades de classe pour me joindre à une activité ou à un jeu.	0	1	2
31.	J'utilise un ton poli lors des discussions en classe.	0	1	2
32.	Je demande de l'aide aux adultes lorsque d'autres enfants essaient de me frapper ou de me pousser.	0	1	2
34.	Je parle avec mes camarades de classe quand il y a un problème ou un conflit.	0	1	2

Merci pour ton aide!

Appendix I

Matson's Evaluation of Social Skills with Youngsters (MESSY)

MESSY (Matson)

This survey is a measure of social behavior. This assessment involves rating how often you do the behaviors or have he feelings described in the sentences. Be sure to rate how often you *really* do or feel this way, not what you think a ;ood answer might be.

1	2	3	4	5
None of the Time	A Bit of the Time	Some of the Time	Most of the Time	All of the Time

.	I make other people laugh. (Tell jokes, funny stories, etc...)	1	2	3	4	5
.	I threaten people or act like a bully.	1	2	3	4	5
.	I become angry easily.	1	2	3	4	5
.	I am bossy (tell people what to do instead of asking).	1	2	3	4	5
.	I gripe or complain often.	1	2	3	4	5
.	I speak when someone else is speaking. (Interrupt)	1	2	3	4	5
.	I take or use things that are not mine without permission.	1	2	3	4	5
.	I brag about myself.	1	2	3	4	5
.	I look at people when I talk with them.	1	2	3	4	5
0.	I have many friends.	1	2	3	4	5
1.	I slap or hit others when I am angry.	1	2	3	4	5
2.	I help a friend who is hurt.	1	2	3	4	5
3.	I cheer up a friend who is sad.	1	2	3	4	5
4.	I give other children dirty looks.	1	2	3	4	5
5.	I feel angry or jealous when someone else does well.	1	2	3	4	5
6.	I feel happy when someone else does well.	1	2	3	4	5
7.	I pick out other children's faults/mistakes.	1	2	3	4	5

1 None of the Time	2 A Bit of the Time	3 Some of the Time	4 Most of the Time	5 All of the Time

8.	I always want to be first.	1	2	3	4	5
9.	I break promises.	1	2	3	4	5
0.	I tell people they look nice.	1	2	3	4	5
1.	I lie to get what I want.	1	2	3	4	5
2.	I pick on others and make them angry.	1	2	3	4	5
3.	I start conversations.	1	2	3	4	5
4.	I say "thank you" when someone does something for me.	1	2	3	4	5
5.	I like to be alone.	1	2	3	4	5
6.	I am afraid to speak to people.	1	2	3	4	5
7.	I keep secrets well.	1	2	3	4	5
8.	I know how to make friends.	1	2	3	4	5
9.	I try to make other people feel sad.	1	2	3	4	5
0.	I make fun of others.	1	2	3	4	5
1.	I stick up for my friends.	1	2	3	4	5
2.	I look at people when they are speaking.	1	2	3	4	5
3.	I think I know it all.	1	2	3	4	5
4.	I share what I have with others.	1	2	3	4	5
5.	I am stubborn.	1	2	3	4	5
6.	I act like I am better than other people.	1	2	3	4	5
7.	I show my feelings.	1	2	3	4	5
8.	I think that people are picking on me when they are not.	1	2	3	4	5

1 None of the Time	2 A Bit of the Time	3 Some of the Time	4 Most of the Time	5 All of the Time

9.	I make sounds that bother others (burping, sniffling).	1	2	3	4	5
0.	I take care of others' property as if it were my own.	1	2	3	4	5
1.	I speak too loudly.	1	2	3	4	5
2.	I call people by their names.	1	2	3	4	5
3.	I ask if I can be of help.	1	2	3	4	5
4.	I feel good if I help someone.	1	2	3	4	5
5.	I try to be better than everyone.	1	2	3	4	5
6.	I ask questions when talking with others.	1	2	3	4	5
7.	I see my friends often.	1	2	3	4	5
8.	I play alone.	1	2	3	4	5
9.	I feel lonely.	1	2	3	4	5
0.	I feel sorry when I hurt someone.	1	2	3	4	5
1.	I like to be a/the leader.	1	2	3	4	5
2.	I join in games with other children.	1	2	3	4	5
3.	I get into fights a lot.	1	2	3	4	5
4.	I am jealous of other people.	1	2	3	4	5
5.	I do nice things for people who are nice to me.	1	2	3	4	5
6.	I ask others how they are, what they have been doing, etc.	1	2	3	4	5
7.	I stay with others too long (wear out my welcome).	1	2	3	4	5
8.	I explain things more than I need to.	1	2	3	4	5
9.	I laugh at others.	1	2	3	4	5
0.	I think that winning is everything.	1	2	3	4	5

31.	I hurt others when teasing them.	1	2	3	4	5
32.	I want to get even with someone who hurts me.	1	2	3	4	5

Appendix J

ENRICH Inventory

(Evaluation and Nurturing Relationship Issues, Communication and Happiness)

IDNO: _____

ENRICH Couple Scale

1	2	3	4	5
Très en désaccord	Désaccord	Je ne sais pas	En accord	Très en accord

Indiquez jusqu=à quel point vous êtes en accord ou en désaccord avec les énoncés suivants.

_____ 1. Je suis très satisfait(e) de la façon dont nous partageons les responsabilités dans notre foyer.
_____ 2. Je peux exprimer mes sentiments intimes à mon/ma partenaire.
_____ 3. Pour terminer une dispute, j'ai tendance à concéder trop rapidement.
_____ 4. Mon/ma partenaire et moi nous comprenons parfaitement.
_____ 5. Je ne suis pas content(e) de certaines caractéristiques personnelles ou habitudes de mon/ma partenaire.
_____ 6. Quand nous avons un problème, mon/ma partenaire refuse souvent d'en parler.
_____ 7. Mon/ma partenaire et moi avons des opinions très différentes sur la meilleure façon de résoudre nos conflits.
_____ 8. Mon/ma partenaire comprend complètement et sympathise avec toutes mes humeurs.
_____ 9. Je suis insatisfait(e) de notre communication et j'ai l'impression que mon/ma partenaire ne me comprend pas.
_____ 10. Mon/ma partenaire fait parfois des commentaires pour me rabaisser.
_____ 11. Quand nous discutons de problèmes, mon/ma partenaire comprend mes opinions et mes idées.
_____ 12. Toutes les nouvelles choses que j'ai apprises à propos de mon/ma partenaire m'ont plu.
_____ 13. Je suis très satisfait(e) de la façon dont nous prenons des décisions et réglons nos différends.
_____ 14. J'aimerais que mon/ma partenaire partage davantage ses sentiments.
_____ 15. Même dans les désaccords, je peux partager mes sentiments et mes idées avec mon/ma partenaire.
_____ 16. Je n'ai jamais regretté ma relation avec mon/ma partenaire.
_____ 17. Je suis insatisfait(e) de notre situation financière et de la façon dont nous prenons les décisions financières.
_____ 18. J'ai parfois de la difficulté à demander ce que je veux à mon/ma partenaire.
_____ 19. Parfois, nous avons de grosses disputes pour des niaiseries.
_____ 20. Mon/ma partenaire a toutes les qualités que je désire chez un(e) partenaire.

_____ 21. Je suis très satisfait(e) de la façon dont nous planifions nos activités et le temps que nous passons ensemble.
_____ 22. J'ai parfois de la difficulté à croire tout ce que mon/ma partenaire me dit.
_____ 23. Je fais de gros efforts pour éviter la chicane avec mon/ma partenaire.
_____ 24. Notre couple est aussi heureux qu'il est possible d'être.

Appendix K

Non-Significant Regression Analyses

Table K-1

Mother Communication and Teacher-Rated Likeability (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.38
Childhood Aggression	0.03	0.00	0.21		
Childhood Withdrawal	-0.12	0.01	-0.84		
Step 2				0.03	1.48
Childhood Aggression	-0.02	0.00	-0.11		
Childhood Withdrawal	-0.18	0.03	-1.19		
Maternal Education	-0.19	0.03	-1.22		
Step 3				0.02	0.98
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.22	0.04	-1.39		
Maternal Education	-0.22	0.04	-1.37		
Child Gender[a]	-0.15	0.02	-0.99		
Step 4				0.00	0.18
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.21	0.04	-1.31		
Maternal Education	-0.22	0.04	-1.34		
Child Gender	-0.16	0.02	-1.04		
Number of Intervals Coded	0.06	0.00	0.42		
Step 5				0.00	0.01
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.21	0.04	-1.30		
Maternal Education	-0.22	0.04	-1.28		
Child Gender	-0.16	0.02	-1.02		
Number of Intervals Coded	0.06	0.00	0.39		
Mother Communication	0.01	0.00	0.08		
	R = 0.27		R^2_{Adj} = -0.06		F = 0.55

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-2

Child Communication and Teacher-Rated Likeability (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.38
Childhood Aggression	0.03	0.00	0.21		
Childhood Withdrawal	-0.12	0.01	-0.84		
Step 2				0.03	1.48
Childhood Aggression	-0.02	0.00	-0.11		
Childhood Withdrawal	-0.18	0.03	-1.19		
Maternal Education	-0.19	0.03	-1.22		
Step 3				0.02	0.98
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.22	0.04	-1.39		
Maternal Education	-0.22	0.04	-1.37		
Child Gender[a]	-0.15	0.02	-0.99		
Step 4				0.00	0.18
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.21	0.04	-1.31		
Maternal Education	-0.22	0.04	-1.34		
Child Gender	-0.16	0.02	-1.04		
Number of Intervals Coded	0.06	0.00	0.42		
Step 5				0.05	2.22
Childhood Aggression	-0.05	0.00	-0.31		
Childhood Withdrawal	-0.20	0.03	-1.27		
Maternal Education	-0.28	0.06	-1.68		
Child Gender	-0.26	0.05	-1.57		
Number of Intervals Coded	0.02	0.00	0.13		
Child Communication	0.25	0.05	1.49		
	R = 0.35		R^2_{Adj} = -0.01		F = 0.94

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-3

Dyad Communication and Teacher-Rated Likeability (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.26
Childhood Aggression	-0.83	0.64	-0.39		
Childhood Withdrawal	-0.15	0.02	-0.70		
Step 2				0.53	1.26
Childhood Aggression	-0.16	0.02	-0.69		
Childhood Withdrawal	-0.28	0.04	-1.15		
Maternal Education	-0.26	0.06	-1.12		
Step 3				0.10	0.23
Childhood Aggression	-0.15	0.05	-0.64		
Childhood Withdrawal	-0.29	0.02	-1.15		
Maternal Education	-0.28	0.06	-1.14		
Child Gender[a]	-0.10	0.01	-0.48		
Step 4				0.12	3.11^t
Childhood Aggression	-0.09	0.58	-0.38		
Childhood Withdrawal	-0.30	0.06	-1.27		
Maternal Education	-0.27	0.05	-1.51		
Child Gender	-0.23	0.05	-1.07		
Number of Intervals Coded	0.38	0.12	1.76^t		
Step 5				0.02	0.49
Childhood Aggression	0.40	0.00	-0.14		
Childhood Withdrawal	-0.29	0.06	-1.20		
Maternal Education	-0.23	0.04	-0.97		
Child Gender	-0.23	0.04	-1.04		
Number of Intervals Coded	0.39	0.13	1.81^t		
Dyad Communication	0.19	0.02	0.73		
	R = 0.48		R^2_{Adj} = 0.23		F = 0.94

$^t p < 0.10$, $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-4

Mother Communication (Negative) and Teacher-Rated Likeability (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.38
Childhood Aggression	0.03	0.00	0.21		
Childhood Withdrawal	-0.12	0.01	-0.84		
Step 2				0.03	1.48
Childhood Aggression	-0.02	0.00	-0.11		
Childhood Withdrawal	-0.18	0.03	-1.19		
Maternal Education	-0.19	0.03	-1.22		
Step 3				0.02	0.98
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.22	0.04	-1.39		
Maternal Education	-0.22	0.04	-1.37		
Child Gender[a]	-0.15	0.02	-0.99		
Step 4				0.00	0.18
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.21	0.04	-1.31		
Maternal Education	-0.22	0.04	-1.34		
Child Gender	-0.16	0.02	-1.04		
Number of Intervals Coded	0.06	0.00	0.42		
Step 5				0.00	0.09
Childhood Aggression	-0.01	0.00	-0.06		
Childhood Withdrawal	-0.21	0.04	-1.28		
Maternal Education	-0.22	0.04	-1.32		
Child Gender	-0.16	0.02	-1.04		
Number of Intervals Coded	0.06	0.00	0.35		
Mother Climate: Negative	-0.05	0.00	-0.30		
	R = 0.27		R^2_{Adj} = -0.06		F = 0.56

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-5

Dyad Communication (Negative) and Teacher-Rated Likeability (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.38
Childhood Aggression	0.03	0.00	0.21		
Childhood Withdrawal	-0.12	0.01	-0.84		
Step 2				0.03	1.48
Childhood Aggression	-0.02	0.00	-0.11		
Childhood Withdrawal	-0.18	0.03	-1.19		
Maternal Education	-0.19	0.03	-1.22		
Step 3				0.02	0.98
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.22	0.04	-1.39		
Maternal Education	-0.22	0.04	-1.37		
Child Gender[a]	-0.15	0.02	-0.99		
Step 4				0.00	0.18
Childhood Aggression	-0.02	0.00	-0.12		
Childhood Withdrawal	-0.21	0.04	-1.31		
Maternal Education	-0.22	0.04	-1.34		
Child Gender	-0.16	0.02	-1.04		
Number of Intervals Coded	0.06	0.00	0.42		
Step 5				0.04	1.96
Childhood Aggression	0.00	0.00	-0.02		
Childhood Withdrawal	-0.21	0.04	-1.32		
Maternal Education	-0.20	0.03	-1.27		
Child Gender	-0.17	0.03	-1.11		
Number of Intervals Coded	0.02	0.00	0.16		
Dyad Climate: Negative	-0.21	0.04	-1.40		
	R = 0.34		R^2_{Adj} = -0.01		F = 0.90

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-6

Mother Communication and Mother-Rated Social Skills (MESSY Total) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.13	0.40
Childhood Aggression	0.15	0.01	0.81		
Childhood Withdrawal	-0.42	0.02	-0.32		
Step 2				0.01	0.04
Childhood Aggression	0.10	0.02	0.76		
Childhood Withdrawal	-0.05	0.06	-0.37		
Maternal Education	-0.28	0.05	-0.19		
Step 3				0.24	18.16**
Childhood Aggression	0.15	0.02	1.29		
Childhood Withdrawal	-0.15	0.06	-1.21		
Maternal Education	-0.02	0.06	-0.13		
Child Gender[a]	-0.50	0.01	-4.26*		
Step 4				0.02	1.58
Childhood Aggression	0.14	0.01	1.16		
Childhood Withdrawal	-0.16	0.06	-1.26		
Maternal Education	0.20	0.05	-0.16		
Child Gender	-0.49	0.05	-4.10*		
Number of Intervals Coded	-0.15	0.12	-1.25		
Step 5				0.01	0.79
Childhood Aggression	0.13	0.00	1.08		
Childhood Withdrawal	-0.17	0.06	-1.35		
Maternal Education	-0.69	0.04	-0.51		
Child Gender	-0.51	0.04	-4.19		
Number of Intervals Coded	-0.17	0.13	-1.41*		
Mother Communication	0.12	0.02	0.89		
	R = 0.53		R^2_{Adj} = -0.20		F = 3.61**

†p < 0.10, *p < 0.05, **p < 0.01, ***p < .001
Note. [a]Child Gender: boys = 1, girls = 2.

Table K-7

Mother Communication and Child-Rated Social Skills (MESSY Total) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.08	2.49[t]
Childhood Aggression	0.03	0.00	0.25		
Childhood Withdrawal	0.28	0.08	2.22*		
Step 2				0.00	0.08
Childhood Aggression	0.04	0.00	0.29		
Childhood Withdrawal	0.30	0.08	2.14*		
Maternal Education	0.04	0.00	0.27		
Step 3				0.06	4.00*
Childhood Aggression	0.07	0.00	0.53		
Childhood Withdrawal	0.24	0.04	1.69[t]		
Maternal Education	0.04	0.00	0.29		
Child Gender[a]	-0.26	0.06	-2.00*		
Step 4				0.00	0.25
Childhood Aggression	0.07	0.01	0.57		
Childhood Withdrawal	0.24	0.05	1.71[t]		
Maternal Education	0.04	0.00	0.30		
Child Gender	-0.27	0.07	-2.03*		
Number of Intervals Coded	0.06	0.00	0.50		
Step 5				0.01	0.74
Childhood Aggression	0.08	0.01	0.65		
Childhood Withdrawal	0.25	0.05	1.78[t]		
Maternal Education	0.09	0.01	0.63		
Child Gender	-0.24	0.05	-1.81[t]		
Number of Intervals Coded	0.09	0.01	0.67		
Mother Communication	-0.12	0.01	-0.86		
	R = 0.40		R^2_{Adj} = 0.06		F = 1.68

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-8

Child Communication and Child-Rated Social Skills (MESSY Total) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.08	2.49[t]
Childhood Aggression	0.03	0.00	0.25		
Childhood Withdrawal	0.28	0.08	2.22*		
Step 2				0.00	0.08
Childhood Aggression	0.04	0.00	0.29		
Childhood Withdrawal	0.30	0.08	2.14*		
Maternal Education	0.04	0.00	0.27		
Step 3				0.06	4.00*
Childhood Aggression	0.07	0.00	0.53		
Childhood Withdrawal	0.24	0.04	1.69[t]		
Maternal Education	0.04	0.00	0.29		
Child Gender[a]	-0.26	0.06	-2.00*		
Step 4				0.00	0.25
Childhood Aggression	0.07	0.01	0.57		
Childhood Withdrawal	0.24	0.05	1.71[t]		
Maternal Education	0.04	0.00	0.30		
Child Gender	-0.27	0.07	-2.03*		
Number of Intervals Coded	0.06	0.00	0.50		
Step 5				0.01	0.54
Childhood Aggression	0.07	0.01	0.57		
Childhood Withdrawal	0.23	0.04	1.66		
Maternal Education	0.07	0.00	0.47		
Child Gender	-0.23	0.04	-1.60		
Number of Intervals Coded	0.09	0.01	0.66		
Child Communication	-0.11	0.01	-0.74		
	R = 0.40		R^2_{Adj} = 0.06		F = 1.64

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-9

Dyad Communication and Child-Rated Social Skills (MESSY Total) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.15	2.45
Childhood Aggression	-0.10	0.01	-0.57		
Childhood Withdrawal	0.36	0.12	1.97^{t}		
Step 2				0.00	0.05
Childhood Aggression	-0.09	0.01	-0.49		
Childhood Withdrawal	0.37	0.11	1.86^{t}		
Maternal Education	0.04	0.00	0.22		
Step 3				0.00	0.13
Childhood Aggression	-0.08	0.01	-0.42		
Childhood Withdrawal	0.37	0.11	1.81^{t}		
Maternal Education	0.05	0.00	0.24		
Child Gender[a]	-0.07	0.00	-0.36		
Step 4				0.00	0.00
Childhood Aggression	-0.08	0.01	-0.39		
Childhood Withdrawal	0.37	0.11	1.78^{t}		
Maternal Education	0.05	0.00	0.24		
Child Gender	-0.07	0.00	-0.36		
Number of Intervals Coded	0.01	0.00	0.06		
Step 5				0.08	2.45
Childhood Aggression	0.14	0.01	0.59		
Childhood Withdrawal	0.43	0.15	2.10*		
Maternal Education	0.09	0.01	0.44		
Child Gender	-0.12	0.01	-0.60		
Number of Intervals Coded	0.07	0.00	0.33		
Dyad Communication	0.35	0.08	1.57		
	R = .49		R^2_{Adj} = .04		F = 1.21

$^{t}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-10

Child Communication and Mother-Rated Social Skills (MESSY Total) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.13	0.39
Childhood Aggression	0.11	0.05	0.81		
Childhood Withdrawal	-0.42	0.01	-0.32		
Step 2				0.01	0.04
Childhood Aggression	0.10	0.02	0.75		
Childhood Withdrawal	-0.05	0.03	-0.37		
Maternal Education	-0.28	0.06	-0.20		
Step 3				0.24	18.16*
Childhood Aggression	0.15	0.01	1.29		
Childhood Withdrawal	-0.15	0.04	-1.21		
Maternal Education	-0.16	0.07	-0.13		
Child Gender[a]	-0.50	0.12	-4.26*		
Step 4				0.02	1.57
Childhood Aggression	0.35	0.02	1.16		
Childhood Withdrawal	-0.16	0.03	-1.26		
Maternal Education	-0.20	0.06	-0.16		
Child Gender	-0.49	0.07	-4.10*		
Number of Intervals Coded	-0.15	0.05	-1.25		
Step 5				0.00	0.15
Childhood Aggression	0.14	0.00	1.15		
Childhood Withdrawal	-0.16	0.06	-1.23		
Maternal Education	-0.03	0.07	-0.25		
Child Gender	-0.50	0.09	-3.90*		
Number of Intervals Coded	-0.16	0.03	-1.30		
Child Communication	0.05	0.09	0.39		
	R = 0.52		R^2_{Adj} = 0.20		F = 3.47*

†p < 0.10, *p < 0.05, **p < 0.01, ***p < .001
Note. [a]Child Gender: boys = 1, girls = 2.

Table K-11

Mother Communication and Child Social Skills (Total SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.10	3.36*
Childhood Aggression	0.14	0.02	1.13		
Childhood Withdrawal	-0.28	0.08	-2.25*		
Step 2				0.00	0.28
Childhood Aggression	0.15	0.02	1.20		
Childhood Withdrawal	-0.25	0.05	-1.87[t]		
Maternal Education	0.07	0.00	0.53		
Step 3				0.08	5.49*
Childhood Aggression	0.13	0.02	1.05		
Childhood Withdrawal	-0.19	0.03	-1.41		
Maternal Education	0.07	0.00	0.53		
Child Gender[a]	0.29	0.08	2.34*		
Step 4				0.00	0.11
Childhood Aggression	0.13	0.02	1.05		
Childhood Withdrawal	-0.19	0.03	-1.41		
Maternal Education	0.07	0.00	0.54		
Child Gender	0.29	0.08	2.27*		
Number of Intervals Coded	0.04	0.00	0.33		
Step 5				0.02	1.13
Childhood Aggression	0.12	0.01	0.95		
Childhood Withdrawal	-0.21	0.03	-1.52		
Maternal Education	0.01	0.00	0.06		
Child Gender	0.26	0.06	2.00[t]		
Number of Intervals Coded	0.01	0.00	0.09		
Mother Communication	0.15	0.02	1.06		
	R = .45		R^2_{Adj} = .12		F = 2.34*

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-12

Child Communication and Child Cooperation (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.11	3.50*
Childhood Aggression	0.12	0.01	0.94		
Childhood Withdrawal	-0.29	0.09	-2.40*		
Step 2				0.00	0.00
Childhood Aggression	0.12	0.01	0.92		
Childhood Withdrawal	-0.30	0.07	-2.22*		
Maternal Education	-0.00	0.00	-0.02		
Step 3				0.03	1.86
Childhood Aggression	0.10	0.01	0.76		
Childhood Withdrawal	-0.26	0.06	-1.94^t		
Maternal Education	-0.01	0.00	-0.06		
Child Gender[a]	0.17	0.03	1.36		
Step 4				0.00	0.14
Childhood Aggression	0.10	0.01	0.78		
Childhood Withdrawal	-0.26	0.06	-1.91^t		
Maternal Education	-0.01	0.00	-0.05		
Child Gender	0.17	0.03	1.30		
Number of Intervals Coded	0.05	0.00	0.38		
Step 5				0.03	2.07
Childhood Aggression	0.10	0.01	0.76		
Childhood Withdrawal	-0.25	0.05	-1.88^t		
Maternal Education	-0.06	0.00	-0.42		
Child Gender	0.09	0.01	0.64		
Number of Intervals Coded	0.00	0.00	0.00		
Child Communication	0.21	0.03	1.44		
	R = 0.41		R^2_{Adj} = 0.08		F = 1.85

$^t p < 0.10$, $*p < 0.05$, $**p < 0.01$, ***p < .001

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-13

Mother Communication and Child Assertion (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.07	2.26
Childhood Aggression	0.16	0.02	1.23		
Childhood Withdrawal	-0.21	0.04	-1.65		
Step 2				0.02	1.12
Childhood Aggression	0.18	0.03	1.40		
Childhood Withdrawal	-0.15	0.02	-1.12		
Maternal Education	0.15	0.02	1.06		
Step 3				0.07	4.63*
Childhood Aggression	0.16	0.02	1.24		
Childhood Withdrawal	-0.10	0.01	-0.71		
Maternal Education	0.14	0.02	1.07		
Child Gender[a]	0.27	0.07	2.15*		
Step 4				0.00	0.01
Childhood Aggression	0.15	0.02	1.21		
Childhood Withdrawal	-0.10	0.01	-0.70		
Maternal Education	0.14	0.02	1.06		
Child Gender	0.27	0.07	2.13*		
Number of Intervals Coded	-0.01	0.00	-0.08		
Step 5				0.01	0.72
Childhood Aggression	0.15	0.02	1.13		
Childhood Withdrawal	-0.11	0.01	-0.79		
Maternal Education	0.09	0.01	0.62		
Child Gender	0.25	0.06	1.90[t]		
Number of Intervals Coded	-0.03	0.00	-0.26		
Mother Communication	0.12	0.01	0.85		
	R = 0.41		R^2_{Adj} = 0.08		F = 1.85

[t]p < 0.10, *p < 0.05, **p < 0.01, ***p < .001

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-14

Child Communication and Child Assertion (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.07	2.26
Childhood Aggression	0.16	0.02	1.23		
Childhood Withdrawal	-0.21	0.04	-1.65		
Step 2				0.02	1.12
Childhood Aggression	0.18	0.03	1.40		
Childhood Withdrawal	-0.15	0.02	-1.12		
Maternal Education	0.15	0.02	1.06		
Step 3				0.07	4.63*
Childhood Aggression	0.16	0.02	1.24		
Childhood Withdrawal	-0.10	0.01	-0.71		
Maternal Education	0.14	0.02	1.07		
Child Gender[a]	0.27	0.07	2.15*		
Step 4				0.00	0.01
Childhood Aggression	0.15	0.02	1.21		
Childhood Withdrawal	-0.10	0.01	-0.70		
Maternal Education	0.14	0.02	1.06		
Child Gender	0.27	0.07	2.13*		
Number of Intervals Coded	-0.01	0.00	-0.08		
Step 5				0.04	2.79
Childhood Aggression	0.15	0.02	1.23		
Childhood Withdrawal	-0.09	0.01	-0.64		
Maternal Education	0.09	0.01	0.65		
Child Gender	0.19	0.03	1.36		
Number of Intervals Coded	-0.06	0.00	-0.49		
Child Communication	0.24	0.04	1.67		
	R = 0.45		R^2_{Adj} = 0.11		F = 2.26[t]

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-15

Mother Communication and Child Empathy (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.10	3.37*
Childhood Aggression	0.15	0.02	1.20		
Childhood Withdrawal	-0.28	0.08	-2.22*		
Step 2				0.00	0.02
Childhood Aggression	0.15	0.02	1.15		
Childhood Withdrawal	-0.28	0.07	-2.08*		
Maternal Education	-0.02	0.00	-0.13		
Step 3				0.10	6.94*
Childhood Aggression	0.12	0.01	0.96		
Childhood Withdrawal	-0.21	0.04	-1.62		
Maternal Education	-0.02	0.00	-0.16		
Child Gender[a]	0.32	0.10	2.63*		
Step 4				0.00	0.21
Childhood Aggression	0.12	0.01	1.00		
Childhood Withdrawal	-0.21	0.04	-1.59		
Maternal Education	-0.02	0.00	-0.15		
Child Gender	0.32	0.09	2.55*		
Number of Intervals Coded	0.06	0.00	0.46		
Step 5				0.01	0.88
Childhood Aggression	0.11	0.01	0.91		
Childhood Withdrawal	-0.23	0.04	-1.68[t]		
Maternal Education	-0.07	0.00	-0.52		
Child Gender	0.29	0.08	2.29*		
Number of Intervals Coded	0.03	0.00	0.25		
Mother Communication	0.13	0.01	0.94		
	R = 0.47		R^2_{Adj} = 0.13		F = 2.52*

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-16

Child Communication and Child Empathy (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.10	3.37*
Childhood Aggression	0.15	0.02	1.20		
Childhood Withdrawal	-0.28	0.08	-2.22*		
Step 2				0.00	0.02
Childhood Aggression	0.15	0.02	1.15		
Childhood Withdrawal	-0.28	0.07	-2.08*		
Maternal Education	-0.02	0.00	-0.13		
Step 3				0.10	6.94*
Childhood Aggression	0.12	0.01	0.96		
Childhood Withdrawal	-0.21	0.04	-1.62		
Maternal Education	-0.02	0.00	-0.16		
Child Gender[a]	0.32	0.10	2.63*		
Step 4				0.00	0.21
Childhood Aggression	0.12	0.01	1.00		
Childhood Withdrawal	-0.21	0.04	-1.59		
Maternal Education	-0.02	0.00	-0.15		
Child Gender	0.32	0.09	2.55*		
Number of Intervals Coded	0.06	0.00	0.46		
Step 5				0.02	1.09
Childhood Aggression	0.12	0.01	1.00		
Childhood Withdrawal	-0.21	0.03	-1.55		
Maternal Education	-0.05	0.00	-0.39		
Child Gender	-0.26	0.06	1.96[t]		
Number of Intervals Coded	0.02	0.00	0.19		
Child Communication	0.15	0.02	1.04		
	R = 0.47		R^2_{Adj} = 0.14		F = 2.57*

[t]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$
Note. [a]Child Gender: boys = 1, girls = 2.

Table K-17

Mother Communication and Child Self-Control (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.06	1.81
Childhood Aggression	0.08	0.01	0.66		
Childhood Withdrawal	-0.22	0.05	-1.74^{t}		
Step 2				0.01	0.89
Childhood Aggression	0.11	0.01	0.82		
Childhood Withdrawal	-0.17	0.03	-1.24		
Maternal Education	0.13	0.01	0.94		
Step 3				0.07	4.46*
Childhood Aggression	0.08	0.01	0.64		
Childhood Withdrawal	-0.11	0.01	-0.84		
Maternal Education	0.13	0.01	0.95		
Child Gender[a]	0.27	0.07	2.11*		
Step 4				0.00	0.12
Childhood Aggression	0.09	0.01	0.67		
Childhood Withdrawal	-0.11	0.01	-0.81		
Maternal Education	0.13	0.01	0.95		
Child Gender	0.26	0.07	2.04*		
Number of Intervals Coded	0.04	0.00	0.34		
Step 5				0.01	0.34
Childhood Aggression	0.08	0.01	0.61		
Childhood Withdrawal	-0.12	0.01	-0.87		
Maternal Education	0.10	0.01	0.63		
Child Gender	0.25	0.05	1.86^{t}		
Number of Intervals Coded	0.03	0.00	0.20		
Mother Communication	0.08	0.01	0.58		
	R = 0.39		R^2_{Adj} = 0.05		F = 1.57

$^{t}p < 0.10$, $*p < 0.05$, $**p < 0.01$, $***p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-18

Dyad Communication and Maternal Sensitivity (SSRS) (N=63)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.02	0.31
Childhood Aggression	-0.13	0.02	-0.69		
Childhood Withdrawal	-0.10	0.01	-0.53		
Step 2				0.06	1.68
Childhood Aggression	-0.19	0.03	-0.98		
Childhood Withdrawal	-0.22	0.04	-1.03		
Maternal Education	-0.27	0.06	-1.30		
Step 3				0.25	9.43**
Childhood Aggression	-0.26	0.06	-1.50		
Childhood Withdrawal	-0.22	0.04	-1.19		
Maternal Education	-0.31	0.08	-1.71^t		
Child Gender[a]	0.50	0.25	3.07**		
Step 4				0.09	3.98^t
Childhood Aggression	-0.19	0.03	-1.11		
Childhood Withdrawal	-0.22	0.04	-1.24		
Maternal Education	-0.27	0.06	-1.59		
Child Gender	0.41	0.15	2.53*		
Number of Intervals Coded	0.32	0.09	1.99^t		
Step 5				0.12	6.50*
Childhood Aggression	-0.47	0.12	-2.50*		
Childhood Withdrawal	-0.29	0.06	-1.83^t		
Maternal Education	-0.32	0.08	-2.05^t		
Child Gender	0.47	0.19	3.17**		
Number of Intervals Coded	0.26	0.06	1.73^t		
Dyad Communication	-0.44	0.12	-2.55*		
	R = 0.74		R^2_{Adj} = 0.43		F = 4.72**

$^t p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < .001$

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-19

Marital Communication and Mother Communication (N=55)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.01	0.31
Childhood Aggression	-0.03	0.00	-0.20		
Childhood Withdrawal	-0.12	0.01	-0.78		
Step 2				0.15	7.23**
Childhood Aggression	0.01	0.01	0.07		
Childhood Withdrawal	0.02	0.02	0.10		
Maternal Education	0.40	0.14	2.69**		
Step 3				0.04	1.77
Childhood Aggression	-0.01	0.00	-0.05		
Childhood Withdrawal	0.07	0.00	0.47		
Maternal Education	0.41	0.15	2.72**		
Child Gender[a]	0.20	0.03	1.33		
Step 4				0.08	4.18*
Childhood Aggression	0.04	0.00	0.32		
Childhood Withdrawal	0.08	0.01	0.53		
Maternal Education	0.41	0.15	2.83**		
Child Gender	0.15	0.02	1.02		
Number of Intervals Coded	0.28	0.08	2.04t		
Step 5				0.06	3.53t
Childhood Aggression	0.03	0.00	0.19		
Childhood Withdrawal	0.04	0.00	0.26		
Maternal Education	0.44	0.17	3.14**		
Child Gender	0.14	0.02	0.99		
Number of Intervals Coded	0.31	0.09	2.26*		
Enrich Communication	-0.26	0.06	-1.88t		
		R = 0.58	R^2_{Adj} = 0.23		F = 3.21*

t$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < .001$
Note. [a]Child Gender: boys = 1, girls = 2.

Table K-20

Marital Communication and Child Communication (N=55)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.04	0.78
Childhood Aggression	-0.06	0.00	-0.39		
Childhood Withdrawal	-0.18	0.03	-1.21		
Step 2				0.02	0.69
Childhood Aggression	-0.05	0.00	-0.30		
Childhood Withdrawal	-0.14	0.02	-0.87		
Maternal Education	0.13	0.02	0.83		
Step 3				0.13	6.58*
Childhood Aggression	-0.08	0.01	-0.55		
Childhood Withdrawal	-0.03	0.00	-0.17		
Maternal Education	0.14	0.02	0.90		
Child Gender[a]	0.38	0.13	2.57*		
Step 4				0.08	4.30*
Childhood Aggression	-0.03	0.00	-0.19		
Childhood Withdrawal	-0.02	0.00	-0.14		
Maternal Education	0.14	0.02	0.94		
Child Gender	0.33	0.10	2.29*		
Number of Intervals Coded	0.29	0.08	2.07*		
Step 5				0.01	0.69
Childhood Aggression	-0.04	0.00	-0.25		
Childhood Withdrawal	-0.04	0.00	-0.26		
Maternal Education	0.15	0.02	1.03		
Child Gender	0.33	0.09	2.25*		
Number of Intervals Coded	0.30	0.08	2.13*		
Enrich Communication	-0.12	0.01	-0.83		
		R = .52	R^2_{Adj} = .16		F = 2.45*

†p < 0.10, *p < 0.05, **p < 0.01, ***p < .001
Note. [a]Child Gender: boys = 1, girls = 2.

Table K-21

Marital Conflict Resolution and Mother Communication (N=55)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.01	0.31
Childhood Aggression	-0.03	0.00	-0.20		
Childhood Withdrawal	-0.12	0.01	-0.78		
Step 2				0.15	7.23**
Childhood Aggression	0.01	0.00	0.07		
Childhood Withdrawal	0.02	0.00	0.10		
Maternal Education	0.40	0.15	2.69**		
Step 3				0.04	1.77
Childhood Aggression	-0.01	0.00	-0.05		
Childhood Withdrawal	0.07	0.00	0.47		
Maternal Education	0.41	0.15	2.72**		
Child Gender[a]	0.20	0.03	1.33		
Step 4				0.08	4.18*
Childhood Aggression	0.04	0.00	0.32		
Childhood Withdrawal	0.08	0.01	0.53		
Maternal Education	0.41	0.15	2.83**		
Child Gender	0.15	0.02	1.02		
Number of Intervals Coded	0.28	0.08	2.04t		
Step 5				0.06	2.84
Childhood Aggression	-0.01	0.00	-0.04		
Childhood Withdrawal	0.05	0.00	0.35		
Maternal Education	0.51	0.19	3.33**		
Child Gender	0.12	0.01	0.83		
Number of Intervals Coded	0.30	0.09	2.22*		
Enrich Conflict Resolution	-0.26	0.05	-1.67[t]		
		R = .57	R^2_{Adj} = .22		F = 3.06*

[t]p < 0.10, *p < 0.05, **p < 0.01, ***p < .001

Note. [a]Child Gender: boys = 1, girls = 2.

Table K-22

Marital Conflict Resolution and Child Communication (N=55)

Variables	Beta	Sr^2	T	R^2_{ch}	F_{ch}
Step 1				0.04	0.78
Childhood Aggression	-0.06	0.00	-0.39		
Childhood Withdrawal	-0.18	0.03	-1.21		
Step 2				0.02	0.68
Childhood Aggression	-0.05	0.00	-0.30		
Childhood Withdrawal	-0.14	0.02	-0.87		
Maternal Education	0.13	0.02	0.83		
Step 3				0.13	6.58*
Childhood Aggression	-0.08	0.01	-0.55		
Childhood Withdrawal	-0.03	0.00	-0.17		
Maternal Education	0.14	0.02	0.90		
Child Gender[a]	0.38	0.13	2.57*		
Step 4				0.08	4.30*
Childhood Aggression	-0.03	0.00	-0.19		
Childhood Withdrawal	-0.02	0.00	-0.14		
Maternal Education	0.14	0.02	0.94		
Child Gender	0.33	0.10	2.29*		
Number of Intervals Coded	0.29	0.08	2.07*		
Step 5				0.03	1.58
Childhood Aggression	-0.06	0.00	-0.45		
Childhood Withdrawal	-0.04	0.00	-0.28		
Maternal Education	0.21	0.03	1.36		
Child Gender	0.31	0.08	2.13*		
Number of Intervals Coded	0.30	0.09	2.18*		
Enrich Conflict Resolution	-0.20	0.03	-1.26		
		R = .54	R^2_{Adj} = .18		F = 2.65*

†p < 0.10, *p < 0.05, **p < 0.01, ***p < .001
Note. [a]Child Gender: boys = 1, girls = 2.