INTEGRATING CHILDREN’S DISCLOSURE AND MATERNAL ACCURATE
KNOWLEDGE OF CHILDREN’S THOUGHTS AND FEELINGS: A LONGITUDINAL
EXAMINATION

by

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A thesis submitted in conformity with the requirements
for the degree of Master of Arts
Department of Psychology
University of Toronto

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Integrating Children’s Disclosure and Maternal Accurate Knowledge of Children’s Thoughts and Feelings: A Longitudinal Examination

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2009

Abstract

One hundred and eleven mother-child dyads visited the laboratory when children were 10 to 12 years old and again two years later. Children’s self-disclosure to mothers and mothers’ accurate knowledge of effective comforting strategies were examined together in the context of maternal warmth and children’s positive coping. Maternal warmth longitudinally predicted children’s disclosure, and children’s disclosure longitudinally predicted mothers’ accurate knowledge of comforting strategies. Maternal warmth moderated the association between mothers’ accurate knowledge of comforting strategies and children’s positive coping. Specifically, maternal knowledge predicted child coping only in children of cold mothers. Implications for the socialization of coping and the role of child disclosure and parents’ accurate knowledge in parenting interventions are discussed.
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1 Introduction

Traditionally, parenting styles and behaviors have been thought to have a direct influence on children’s social and emotional development; this view has dominated socialization theory and research. Notable examples include warm-democratic parenting where parents exercise unconditional positive regard, empathy, and a special consideration of their children’s feelings in their parenting practices (Baldwin, 1955), inductive discipline where parents offer rational explanations and reasons for punishment (Hoffman, 1970), parental monitoring of older children’s activities and behaviors outside the home (Patterson & Southamer-Loeber, 1984), and Baumrind’s (1971) authoritative-authoritarian-permissive typology of parenting styles. All of these approaches to parenting have been deemed to promote positive social and emotional development in children. Recent work in two distinct areas of research indicates that the association between parenting behaviors and child outcomes is less straightforward. These developments concern children’s disclosure to parents and parental knowledge of children’s thoughts and feelings.

1.1 Developments in Children’s Disclosure to Parents

Children’s disclosure refers to the act of volunteering information about thoughts, feelings, and behaviors to parents. Interest in children’s disclosure has emerged from the study of parental monitoring, which is parents’ attention to where their children are spending their time, what they are doing, and how they are changing and developing. Traditional approaches to the study of parental monitoring have focused on the link between poor monitoring and child delinquency (Patterson, Reid, & Dishion, 1992), as well as the positive association between monitoring and children’s school performance (Crouter, MacDermid, McHale, & Perry-Jenkins, 1990). Kerr and Stattin (2000; 2003) were the first to call attention to a serious weakness in the construct validity of many existing measures of parental monitoring. That is, instead of assessing parents’ active efforts to gather information about their children, the measures actually represented the outcome of parental monitoring: parents’ knowledge of their children’s activities and whereabouts. The measures revealed nothing about how parents actually acquired knowledge of their children. Accordingly, Stattin and Kerr (2000) have argued that parental knowledge of children’s activities outside the home is largely driven by the child, given that children’s disclosure of information about those activities explains more than double the amount of variance in parental monitoring as
either parental control of activities or parental solicitation of information. Thus, children’s
disclosure is now conceptualized as a feature (arguably the most important one, at least
according to Kerr and Stattin) of parental monitoring/parental knowledge of children’s activities
and whereabouts.

Clearly, the parents of children who are inclined to disclose have an advantage over the parents
of discreet or secretive children when it comes to monitoring and subsequent knowledge of their
children’s activities outside of the home (e.g., Bumpus & Hill, 2008). This thinking is in line
with the focus on child effects and the view of socialization as a bidirectional process (Maccoby
& Martin, 1983; Kuczynski, 2003). It is tempting to use the significance of the child’s role in
parental monitoring to downgrade that of the parent. Rather than asking who contributes most to
parental knowledge, however, a more pertinent question is what makes children more likely to
disclose in the first place?

In an attempt to answer this question, recent research, all of it cross-sectional in nature, has
addressed parenting antecedents of children’s disclosure. Smetana, Metzger, Gettman, and
Campione-Barr (2006) have reported that greater maternal acceptance, characterized by maternal
warmth and support, was associated with higher levels of children’s disclosure about personal
issues. In their study maternal acceptance accounted for 46% of the variance in disclosure. Other
research has found that children’s perceptions of their parents’ authoritativeness was positively
related to disclosure (Darling, Cumsille, Caldwell, & Dowdy, 2006), and children whose parents
were warm, and exhibited high behavioral control coupled with low psychological control
reported more self-disclosure to parents (Soenens, Vansteenkiste, Luyckx, & Goossens, 2006).
Wissink, Dekovic, and Meijer (2006) reported that a construct they labeled support, referring to
parental warmth and responsiveness, was highly correlated with disclosure in separate samples of
Dutch, Moroccan, Turkish, and Surinamese children living in the Netherlands. Finally, Almas,
Grusec, and Tackett (2009) have found that a composite of positive parenting variables
consisting of authoritativeness, responsiveness to distress, and perspective taking predicted
children’s disclosure to parents.

In addition to parents’ characteristics, enduring features of the child such as temperament and
personality undoubtedly have an influence on the nature of the developing parent-child
relationship. One example of a child characteristic that may affect likelihood of disclosure to
parents is temperamental agreeableness. Agreeableness is a personality trait characterized by compliance, sincerity, trust in others, and a general concern for cooperation and social harmony (Costa, McCrae, & Dye, 1991). Children who are high in agreeableness are likely to be more open and communicative with their parents. In order to effectively evaluate the influence of parenting on children’s disclosure, individual variations in children’s temperament and personality (i.e., agreeableness) must be controlled for (Maccoby, 2006).

What can be concluded from these recent developments in the literature on children’s disclosure is that parents do in fact play an important role in facilitating children’s disclosure. Moreover, the communication and dialogue that may occur following children’s disclosure allows parents to acquire knowledge not only about their children’s activities outside the home, but also about their children’s feelings and the ways in which they think.

1.2 Developments in Parents’ Accurate Knowledge of Children’s Thoughts and Feelings

Research in the area of children’s disclosure has focused on the importance of parents’ knowledge of their children’s activities and whereabouts outside the home in order to effectively monitor their behaviors. Another separate field of research has focused on the role of parents’ accurate knowledge of children’s thoughts and feelings in the broader realm of children’s social and emotional development. This interest in accurate knowledge and the movement beyond a straightforward parenting to child outcomes link has developed from research findings that have identified the moderating role of variables such as child temperament, mood, age, and sex, on the relation between parenting behaviors and child outcomes (Grusec, Goodnow, & Kuczynski, 2000).

Vinik, Almas, and Grusec (2009) have studied the link between the accuracy of mothers’ knowledge of what distresses and comforts their children and two child outcomes, coping and prosocial behavior. They found first that the children of mothers who were accurate about what hypothetical events would distress them were more likely to use positive strategies to cope with distress than children of inaccurate mothers. A second finding was that mothers’ accurate knowledge of what comforted their children predicted children’s greater coping ability only in anxiety-prone children. Parallel results were reported for the outcome of child prosocial behavior; mothers’ accurate knowledge of what comforted their children was positively related
to children’s prosocial behavior in school only for anxiety-prone children. As an explanation, the researchers pointed to the fact that anxiety-prone children are more frequently distressed than non-anxious children. Thus, the mothers of anxiety-prone children are at an advantage (at least, in the acquisition of knowledge) because they have many more opportunities to learn what comforting strategies are effective with their particular children. These accurate mothers can later discuss and model distress-reducing behaviors that their children can employ in easing their own distress and the distress of other children. In a related study, Kiel and Buss (2006) have reported that mothers who were knowledgeable about how their children would act in distressing situations were more likely to have children with less fearful temperaments. The researchers suggested that mothers who do not know how their children will react to distress are more likely to exacerbate their children’s fears by responding inappropriately when they are upset.

In another area of children’s conduct, discipline and conflict, Hastings and Grusec (1997) found that mothers were more satisfied with the outcomes of a conflict when they were more knowledgeable about their adolescent’s thoughts and feelings during the conflicts, and that knowledgeable fathers had fewer conflicts with their children overall. Research has also demonstrated that mothers with increased knowledge of the discipline strategies that their children believed worked best were more effective in eventually achieving child compliance in situations where their children had been initially non-compliant (Davidov & Grusec, 2006).

Finally, in the domain of children’s cognitive development, Miller, Manhal, and Mee (1991) demonstrated that parents who could accurately predict their children’s performance on cognitive tasks had children who achieved higher scores on the tasks. It is possible that accurate parents use their knowledge of their children to teach at a developmentally appropriate level, and as a result their children are better able to learn from them.

Parental knowledge of children’s thoughts and feelings is valuable for a variety of reasons, the most apparent being that it allows parents to take into account multiple variables that influence the effectiveness of their interventions. Presumably, the accurate knowledge that these mothers and fathers possess allows them to tailor their parenting to their individual children, and to actively problem-solve and demonstrate flexibility in how they socialize their children (Grusec, Goodnow, & Kuczynski, 2000). These are likely the parents who will be most successful in achieving their parenting goals and producing positive socialization outcomes in their children.
Two questions follow from the recent developments in research on parental knowledge of children’s thoughts and feelings. First, how do parents acquire knowledge of their children’s thoughts and feelings, and second, what do parents do with this knowledge? While it is clear that parents’ accurate knowledge of their children’s thoughts and feelings has positive affects on children’s socialization, more specific research is needed to explore the mechanisms involved in the pathway that includes knowledge acquisition and positive child outcomes.

1.3 The Present Study: Integrating Children’s Disclosure and Maternal Accurate Knowledge of Children’s Thoughts and Feelings

Recent advances in research from two areas, children’s disclosure to parents and maternal accurate knowledge of children’s thoughts and feelings, indicates a clear progression from traditional examinations of straightforward links between parenting behaviors and child outcomes. The present study integrated the two lines of research on children’s disclosure and maternal accurate knowledge of effective comforting strategies by assessing them together. This study also examined the two in the context of one parenting antecedent, maternal warmth and acceptance, and one socialization outcome, children’s use of positive coping strategies. Moreover, the present study was longitudinal; children and their mothers were assessed first when the children were 10 to 12 years old, and again two years later when they were 12 to 14 years old. This allowed for an inference of causality. As noted earlier, all previous studies on children’s disclosure and maternal knowledge of children’s thoughts and feelings have utilized cross-sectional designs (Almas, Grusec, & Tackett, 2009; Darling, Cumsille, Caldwell, & Dowdy, 2006; Kiel & Buss, 2006; Smetana, Metzger, Gettman, & Campione-Barr, 2006; Soenens, Vansteenkiste, Luyckx, & Goossens, 2006; Vinik, Almas, & Grusec, 2009; Wissink, Dekovic, & Meijer, 2006).

How then, do mothers acquire accurate knowledge of their children’s thoughts and feelings? Maternal warmth may be related to children’s disclosure because children are more inclined to have conversations with warm mothers about issues causing them distress in their daily lives. These mothers are approachable and accepting, facilitating the type of open relationship where children feel comfortable sharing their thoughts and emotions. All of the aforementioned studies of parenting antecedents of children’s disclosure have reported that maternal warmth (or an authoritative parenting style, which contains an element of warmth) was consistently linked to
greater child disclosure (Almas, Grusec, & Tackett, 2009; Darling, Cumsille, Caldwell, & Dowdy, 2006; Smetana, Metzger, Gettman, & Campione-Barr, 2006; Soenens, Vansteenkiste, Luyckx, & Goossens, 2006; Wissink, Dekovic, & Meijer, 2006). Children’s recurrent disclosure, then, provides mothers with accurate information about their children’s thoughts and feelings about what alleviates their distress.

What do mothers do with their knowledge once they have acquired it? Children’s disclosure presumably allows for conversations in which mothers, particularly warm ones, can gain knowledge to use in teaching their children to use positive coping strategies to deal with daily stressors. We know that children need to understand and regulate their negative emotions before they are able to effectively cope with them (Gottmann, Katz, & Hooven, 1996; Ramsden & Hubbard, 2002). Through talking with their mothers, children not only appropriate models for how to manage stress, but also reflect on these models in order to make sense of their emotions (see Laible & Panfile, 2009, for a review of the role of mother-child conversations in the socialization of coping). Over time, mothers should become increasingly accurate in their knowledge of what comforts their children, thereby allowing them to be effective in the socialization of coping through these mother-child conversations.

Finally, children’s anxiety-proneness may play an important role in children’s disclosure of their thoughts and feelings and in mothers’ acquisition of accurate knowledge of effective comforting strategies. Anxiety-prone children are more frequently distressed, and thus provide ample opportunities for their mothers to experiment with comforting strategies. Anxiety-prone children may also choose their distress as a frequent topic of their self-disclosure, while less anxious children likely spend more time talking about other subjects with their mothers. Past research has confirmed that children’s anxiety-proneness is a moderator of the association between mothers’ accurate knowledge of effective comforting strategies and children’s positive coping (Vinik, Almas, & Grusec, 2009).

In the present study the following four main hypotheses were addressed: 1) maternal warmth when children are 10 to 12 years old predicts children’s disclosure at age 12 to 14, 2) children’s disclosure at age 10 to 12 predicts maternal accurate knowledge of effective comforting strategies when children are 12 to 14 years old, but this effect will be moderated by children’s anxiety-proneness at age 10 to 12, 3) children’s disclosure mediates the relation between
maternal warmth when children are 10 to 12 years old and maternal accurate knowledge of
effective comforting strategies when children are 12 to 14 years old, and 4) maternal accurate
knowledge of effective comforting strategies mediates the relation between children’s disclosure
at age 10 to 12 and children’s positive coping at age 12 to 14. Two alternative hypotheses were
also explored: 5) maternal warmth, children’s disclosure, and maternal accurate knowledge of
effective comforting strategies when children are 10 to 12 years old make independent
contributions to children’s positive coping at age 12 to 14, and 6) children’s anxiety-proneness at
age 10 to 12 moderates the relation between maternal accurate knowledge of effective
comforting strategies when children are 10 to 12 years old and children’s positive coping at age
12 to 14. An alternative possibility was also assessed: maternal warmth when children are 10 to
12 years old moderates the relation between maternal accurate knowledge of effective
comforting strategies when children are 10 to 12 years old and children’s positive coping at age
12 to 14. It was reasoned that mothers’ application of accurate knowledge might be more
effective in a context of warmth and supportiveness (see Darling & Steinberg, 1993, for example,
who argue that parenting styles moderate the influence of parenting interventions).

2 Method

2.1 Participants

This study drew on data from an ongoing prospective longitudinal study of emotional and social
development conducted by researchers at the University of Toronto Child Study Centre.
Participants were recruited by telephone from a data base maintained in the researchers’
department. These families had previously agreed to be contacted for participation in research on
child development.

At Time 1 (T1), 150 children (46% female, age range = 9-13 years, mean age = 132 months) and
their mothers participated in a laboratory visit. Of those who participated in the T1 study, 111
children (49% female, age range = 11-15 years, mean age = 154 months) and their mothers
returned approximately two years later for Time 2 (T2). Of the longitudinal participants, 94
mothers (85%) were married or living in a common law partnership at T2. Only one mother did
not complete high school, and 105 mothers (95%) reported attending college or university.
Mothers identified their ethnicities as follows: Western European, 53%; Canadian, 18%; Asian,
12%; Eastern European, 7%; African/Caribbean, 4%; other (e.g., mixed parentage, white South African, Latino), 6%.

The participants who did not return for T2 (N = 39) were compared with those who participated on demographic variables as well as T1 maternal warmth, children’s disclosure, maternal comfort accuracy, and children’s positive coping. Mothers who did not participate at T2 had significantly lower maternal warmth scores when compared with mothers who did return, $t(147) = 2.36, p = .02$, but these participants did not differ otherwise from the longitudinal participants on their education level, marital status, or any of the other variables measured at T1.

2.2 Procedure

At T1 mothers completed one measure (the warmth measure) at home prior to their visit to the laboratory. At both time points the mother and child visited the laboratory for approximately two hours for an interview and completion of self-report questionnaires on the computer. Two interviewers who were male and female university students ran each session; males interviewed only mothers. Mothers and their children were separated for the majority of the study, with the exception of the introduction/informed consent and debriefing segments.

2.3 Measures

2.3.1 Maternal Warmth (Time 1)

This measure was adapted from Hastings and Hersh (1999). Mothers were given a piece of paper with the instructions, “Please write a paragraph describing what it is like to be the mother of your child”, and a second piece of paper with the instructions, “Please write a second paragraph telling me a bit about your child”. Two independent raters assigned each essay a score from 1 (not at all present) to 5 (strong presence) for the level of warmth expressed by the mother on two dimensions: her positive view of her child (e.g., “He is a very bright child”, “She has a real ability to see the good in everyone”) and her feelings of pleasure, happiness and enjoyment of her child (e.g., “It makes me smile just thinking about her”, “I learn so much from him every day; he enriches my life”). Raters achieved 80% agreement for the pleasure dimension (Kappa = 0.73, $p < .001$) and 92% agreement for the positive view dimension (Kappa = 0.80, $p < .001$). The raters resolved differences in scoring by discussion, and the consensus was used for data
analysis. The two dimensions of both essays loaded on a single factor, and were thus averaged to form one measure of maternal warmth.

2.3.2 Child Disclosure (Time 1)

Child disclosure to parents at T1 was measured with a modified version of the Child Disclosure subscale of the Parental Monitoring Scale (Kerr & Stattin, 2000). The subscale consisted of 5 items, 3 measuring children’s disclosure and 2 measuring children’s secrecy. The 3 disclosure items were, “Do you tell your parents about your friends just like that, without being asked (e.g., which friends you hang out with and how you think and feel about various things)?”, “How often do you want to tell your parents about school (e.g., how each subject is going; relationships with teachers)?”, and “Do you like to tell your parents about what you did and where you went after school?”. Children were asked to identify how often each situation happened on a scale from 1 (never happens) to 5 (always happens). A mean score for the 3 items was calculated to form a total child disclosure score. Kerr and Stattin (2000) have reported a Cronbach’s alpha of .78 for the complete Child Disclosure subscale. In this study, Cronbach’s alpha for the 3 disclosure items from the Child Disclosure subscale was .64.

2.3.3 Child Disclosure (Time 2)

Three measures were used to assess children’s disclosure to mothers at T2. For the first measure interviewers described to children six hypothetical vignettes about problems with close friends (e.g., “Two of your close friends are in a fight and they each tell you their side of the story. Each of them wants you to pick a side, but you don’t want to get into the middle of it. You don’t know what to do”). Following the description of each vignette children were asked to indicate (on a computer) how likely they would be to tell their mothers about the situations on a scale from 1 (not likely) to 3 (very likely). The disclosure scores for the six vignettes were averaged to form a single vignette disclosure score.

For the second measure of disclosure children were asked by an interviewer to describe up to four issues or situations involving close friends that they had recently experienced. After the description of each experience the children were asked to indicate (on a computer) their level of disclosure to their mothers about the situation by choosing 1 (no disclosure), 2 (partial
disclosure), or 3 (full disclosure). The disclosure scores for the experiences generated by the child were averaged to form a single experience disclosure score.

The third disclosure measure consisted of a single item presented on the computer, “In general, when you have a problem or an issue involving a close friend, how often do you tell your mom about it?”. Children answered this question on a scale ranging from 1 (not often at all) to 5 (very often).

As the three disclosure measures were significantly intercorrelated (vignette and experience, \( r = .29, p < .01 \); vignette and general, \( r = .65, p < .001 \); experience and general, \( r = .39, p < .001 \)) they were standardized and averaged to form a T2 child disclosure composite. This composite was used as the measure of T2 child disclosure in all statistical analyses.

2.3.4 Maternal Comfort Accuracy (Time 1 and Time 2)

The accuracy of mothers’ knowledge for the types of strategies they could use to effectively comfort their children when distressed was evaluated using a measure developed by Vinik, Almas, and Grusec (2009). Children were read two potentially upsetting scenarios, “You have to give a big oral presentation in class tomorrow. It’s a big and important presentation and you are really nervous about it” and “One day in school you lose your favourite hat that you got for your birthday a few weeks ago. You loved that hat and wore it every chance you could. Now that it’s lost you are really upset”, and were told to imagine themselves in that situation. Children were then read four comforting strategies that could be used by their mothers for the first scenario (“Listens to the presentation and tells you what she thinks about it”, “Tells you the presentation will go well and not to worry”, “Lets you practice by yourself”, “Tries to cheer you up by doing something you like, for example, cooking your favorite meal”) and four parallel comforting strategies for the second scenario (“Offers to try and help you look for your hat”, “Tells you she’s really sorry you lost your hat and not to be upset”, “Lets you deal with things by yourself”, “Tries to cheer you up by suggesting you do something you like, for example, getting an ice cream cone”), and were asked to rate how much better each strategy would make them feel on a scale from 1 (not at all better) to 5 (much much better). In a separate room mothers were presented with the same scenarios and strategies in written form (T1) and on the computer (T2) and were asked to rate the items with their best estimates of the responses their children would produce.
In scoring maternal accurate knowledge of child comfort, the item(s) to which the child assigned his or her highest and lowest ratings were first identified. The mother’s responses to each of those same items were then compared to her child’s ratings. A mother’s rating was considered correct if it was the same as the child’s rating or if it was within one point in either direction. A total accuracy score of 0, 1, 2, or 3 was then assigned to the mother. A score of 3 indicated that the mother’s ratings were all correct. A score of 2 indicated that more than half but less than all of her ratings were correct. A score of 1 indicated that fewer than half but at least one of her ratings was correct. A score of 0 indicated that none of her ratings were correct. To ensure that mothers of children who gave extreme ratings to many items were not at a disadvantage, a score of 3 was also given to mothers whose scores matched on five or more of the items for which the child gave the highest and lowest scores.

2.3.5 Child Positive Coping (Time 1 and Time 2)

Children’s coping with specific daily stressors was measured with the Self-Report Coping Scale (Causey & Dubow, 1992). In paper format (T1) and on the computer (T2), children were presented with the lead sentence, “When I get a bad grade in school, one worse than I normally get, I usually…” followed by a list of 34 items that described possible responses (e.g., “Tell a friend or family member what happened”, “Try to think of different ways to solve it”, “Make believe nothing happened”). The questionnaire asked children to rate how likely they would be to respond in each manner, on a scale from 1 (never) to 5 (always). Children were then presented with a second lead sentence, “When I have an argument or fight with a friend, I usually…” and were given the same instructions to respond to the same 34 items. The 68 items were grouped into 5 coping strategy subscales. A principal components analysis of the 5 subscales (with varimax rotation) yielded two components (Approach and Avoidance) and replicated the factor structure demonstrated by the authors of the measure (Causey & Dubow, 1992). In this study, the Approach scale, which represents more effective coping strategies, was used as a measure of positive coping. The Approach Scale consisted of the Seeking Social Support (16 items; e.g., “Get help from a friend”) and Self-Reliance/Problem Solving (16 items; e.g., “Decide on a way to deal with the problem and do it”) subscales. Relevant items were averaged for each individual subscale. The authors reported Cronbach’s alphas ranging from .68 to .84 for the 5 coping strategy subscales. In the present study Cronbach’s alphas for the Seeking Social Support and the
Self-Reliance/Problem Solving subscales at T1 were .91 and .88, respectively, and at T2 were both .90.

2.3.6 Child Anxiety-proneness (Time 1)

Children’s anxiety-proneness was assessed using a measure developed by Vinik, Almas, and Grusec (2009). Children were presented with a list of 10 ordinary events that they might potentially find distressing (“Damaging your bicycle”, “Taking part in a school play”, “Getting an injection/shot”, “Making a mistake in front of other people”, “Moving to a new house or apartment”, “Watching a scary movie on TV”, “Other children calling you names”, “Getting a bad mark in school in your best subject”, “Going to a party at a friend’s house”, “Having a fight with a friend”) and were then asked to rate how upsetting they would find each of the events on a scale from 1 (not upsetting at all) to 5 (very upsetting). Ratings for the 10 items were averaged to form children’s anxiety-proneness scores.

2.3.7 Child Agreeableness (Time 2)

Children’s temperamental agreeableness was assessed with the Big Five Personality Inventory (John & Srivastava, 1999). Children were presented (on a computer) with 44 statements about personal qualities, and were asked to indicate how much they believed each of these statements applied to them on a scale from 1 (disagree strongly) to 5 (agree strongly). Individual items were averaged to form 5 personality dimension subscales: Agreeableness (9 items; “Likes to cooperate with others”), Conscientiousness (9 items; “Makes plans and follows through with them”), Openness (10 items; “Likes to reflect, play with ideas”), Extraversion (8 items; “Generates a lot of enthusiasm”), and Neuroticism (8 items; “Gets nervous easily”). The present study used only the Agreeableness subscale, as it was most relevant to children’s disclosure. John and Srivastava (1999) have reported a Cronbach’s alpha of .79 for the subscale; in the present study Cronbach’s alpha was .79.

3 Results

Prior to statistical analysis, all variables were examined for fit between their distributions and the assumptions of multivariate analysis. Missing values were replaced with series means; in all cases fewer than 5% of the values were missing. All assumptions were met and no outliers were
found, leaving 111 cases for analysis. Table 1 displays descriptive statistics for the study variables, at both T1 and T2.

Table 1

Descriptive Statistics for Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal warmth (T1)</td>
<td>3.96</td>
<td>0.71</td>
<td>1.50 - 5.00</td>
</tr>
<tr>
<td>Child disclosure (T1)</td>
<td>3.15</td>
<td>0.87</td>
<td>1.00 - 5.00</td>
</tr>
<tr>
<td>Child disclosure 1 (T2)</td>
<td>2.18</td>
<td>0.52</td>
<td>1.17 - 3.00</td>
</tr>
<tr>
<td>Child disclosure 2 (T2)</td>
<td>1.87</td>
<td>0.75</td>
<td>1.00 - 3.00</td>
</tr>
<tr>
<td>Child disclosure 3 (T2)</td>
<td>3.21</td>
<td>1.18</td>
<td>1.00 - 5.00</td>
</tr>
<tr>
<td>Maternal comfort accuracy (T1)</td>
<td>2.10</td>
<td>0.61</td>
<td>0.50 - 3.00</td>
</tr>
<tr>
<td>Maternal comfort accuracy (T2)</td>
<td>2.22</td>
<td>0.59</td>
<td>0.50 - 3.00</td>
</tr>
<tr>
<td>Child positive coping (T1)</td>
<td>25.42</td>
<td>5.51</td>
<td>12.00 - 37.75</td>
</tr>
<tr>
<td>Child positive coping (T2)</td>
<td>26.62</td>
<td>5.25</td>
<td>11.50 - 38.75</td>
</tr>
<tr>
<td>Child anxiety-proneness (T1)</td>
<td>2.64</td>
<td>0.50</td>
<td>1.00 - 3.60</td>
</tr>
<tr>
<td>Child agreeableness (T2)</td>
<td>3.85</td>
<td>0.59</td>
<td>2.67 - 5.00</td>
</tr>
</tbody>
</table>

Note. Child-report child disclosure 2 (T2) N = 87, all other variables N = 111.

Table 2 presents the Pearson correlations between the study variables. In terms of contemporaneous findings, maternal warmth, children’s disclosure, and children’s use of positive coping strategies were all intercorrelated at T1. At T2 children’s disclosure was positively related to children’s use of positive coping strategies. Longitudinally, children who disclosed to their mothers at T1 had mothers who were more accurate two years later in their knowledge of what comforted them. These children also used more positive coping strategies both concurrently with their disclosure, and two years later. Children’s disclosure at T1 was significantly correlated with
children’s disclosure at T2, maternal comfort accuracy at T1 was significantly correlated with maternal comfort accuracy at T2, and child positive coping at T1 was significantly correlated with children’s positive coping at T2.
Table 2

Intercorrelations Among Study Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maternal warmth (T1)</td>
<td></td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Child disclosure (T1)</td>
<td>.42**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Child disclosure (T2)</td>
<td>.30**</td>
<td>.31**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Maternal comfort accuracy (T1)</td>
<td>.07</td>
<td>.13</td>
<td>.13</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Maternal comfort accuracy (T2)</td>
<td>.07</td>
<td>.22*</td>
<td>.12</td>
<td>.29**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Child positive coping (T1)</td>
<td>.23*</td>
<td>.42**</td>
<td>.37**</td>
<td>.09</td>
<td>.05</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Child positive coping (T2)</td>
<td>.07</td>
<td>.24**</td>
<td>.43**</td>
<td>.13</td>
<td>.03</td>
<td>.50**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Child sex</td>
<td>.08</td>
<td>.14</td>
<td>.25**</td>
<td>.07</td>
<td>.06</td>
<td>.33**</td>
<td>.29**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Child age</td>
<td>.03</td>
<td>-.03</td>
<td>-.15</td>
<td>-.04</td>
<td>-.03</td>
<td>-.05</td>
<td>.00</td>
<td>.07</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Child anxiety-proneness (T1)</td>
<td>.05</td>
<td>.03</td>
<td>.17^</td>
<td>.07</td>
<td>-.01</td>
<td>.27**</td>
<td>.08</td>
<td>.19*</td>
<td>.02</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>11. Child agreeableness (T2)</td>
<td>.14</td>
<td>.19*</td>
<td>.24**</td>
<td>.13</td>
<td>.08</td>
<td>.34**</td>
<td>.24*</td>
<td>.34**</td>
<td>-.07</td>
<td>.13</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. ^p < .10, *p < .05, **p < .01.
3.1 Predicting Children’s Disclosure from Maternal Warmth

A hierarchical multiple regression was used to test the first hypothesis, that maternal warmth longitudinally predicts children’s disclosure. The results of this analysis are presented in Table 3. At the first step four control variables were entered: children’s sex, children’s age, children’s temperamental agreeableness and children’s disclosure at T1. At the second step the four control variables and maternal warmth at T1 were included as predictors. At this final step only maternal warmth at T1 was a significant predictor of children’s disclosure at T2, $\beta = .20, p < .05$. This indicated that when children’s disclosure at age 10 to 12 was held constant, the children of warm mothers disclosed more two years later. Maternal warmth at age 10 to 12 explained an additional 3% of the variance in children’s disclosure at age 12 to 14 above the 18% variance accounted for by children’s sex, age, agreeableness and disclosure at age 10 to 12.

Table 3
Summary of Regression Analysis for the Prediction of Children’s Disclosure at T2 (N = 111)

<table>
<thead>
<tr>
<th>Predictors Added</th>
<th>Step 1</th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Child sex</td>
<td>0.29</td>
<td>0.15</td>
<td>.18$^\wedge$</td>
<td>0.30</td>
<td>0.15</td>
<td>.19$^\wedge$</td>
</tr>
<tr>
<td>Child age</td>
<td>-0.17</td>
<td>0.10</td>
<td>-.14 $</td>
<td>-0.18</td>
<td>0.10</td>
<td>-.15$^\wedge$</td>
</tr>
<tr>
<td>Child agreeableness</td>
<td>0.17</td>
<td>0.13</td>
<td>.12 $</td>
<td>0.15</td>
<td>0.13</td>
<td>.11 $</td>
</tr>
<tr>
<td>Child disclosure (T1)</td>
<td>0.24</td>
<td>0.08</td>
<td>.26$^{**}$</td>
<td>0.16</td>
<td>0.09</td>
<td>.18$^\wedge$</td>
</tr>
<tr>
<td>Maternal warmth (T1)</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
<td>0.22</td>
<td>0.11</td>
<td>.20$^*$</td>
</tr>
</tbody>
</table>

Note. $R^2 = .18$ for Step 1 ($p < .001$); $\Delta R^2 = .03$ for Step 2 ($p < .05$).

$^\wedge p < .10, * p < .05, **p < .01.$
3.2 Predicting Mothers’ Accurate Knowledge of Effective Comforting Strategies from Children’s Disclosure

A hierarchical multiple regression was used to test the second hypothesis, that children’s disclosure, moderated by children’s anxiety-proneness, predicts mothers’ comfort accuracy two years later. The results of this analysis are presented in Table 4. At the first step four control variables were entered: children’s sex, children’s age, children’s temperamental agreeableness and maternal comfort accuracy at T1. At the second step the four control variables, children’s anxiety-proneness at T1, and children’s disclosure at T1 were included as predictors. At the third step a children’s disclosure by children’s anxiety-proneness at T1 interaction term was added. At this final step maternal comfort accuracy at T1 and children’s disclosure at T1 were significant predictors of maternal comfort accuracy at T2, $\beta = .20$, $p < .05$, and $\beta = .25$, $p < .01$, respectively. This indicated continuity in maternal comfort accuracy over the two-year study period and that when maternal comfort accuracy at T1 was held constant, children who disclosed to their mothers when they were 10 to 12 years old had mothers who were accurate in their knowledge of what comforted them two years later.
Table 4

Summary of Regression Analysis for the Prediction of Maternal Comfort Accuracy at T2 (N = 111)

<table>
<thead>
<tr>
<th>Predictors Added</th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th>Step 2</th>
<th></th>
<th></th>
<th></th>
<th>Step 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>Child sex</td>
<td>0.04</td>
<td>0.12</td>
<td>.04</td>
<td></td>
<td>0.03</td>
<td>0.12</td>
<td>.03</td>
<td></td>
<td>0.02</td>
<td>0.12</td>
<td>.02</td>
</tr>
<tr>
<td>Child age</td>
<td>-0.02</td>
<td>0.08</td>
<td>-.02</td>
<td></td>
<td>-0.02</td>
<td>0.08</td>
<td>-.02</td>
<td></td>
<td>-0.01</td>
<td>0.08</td>
<td>-.02</td>
</tr>
<tr>
<td>Child agreeableness</td>
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<td>0.10</td>
<td>.03</td>
<td></td>
<td>0.01</td>
<td>0.10</td>
<td>.01</td>
<td></td>
<td>0.01</td>
<td>0.10</td>
<td>.01</td>
</tr>
<tr>
<td>Maternal comfort accuracy (T1)</td>
<td>0.27</td>
<td>0.09</td>
<td>.28**</td>
<td></td>
<td>0.25</td>
<td>0.10</td>
<td>.26**</td>
<td></td>
<td>0.24</td>
<td>0.09</td>
<td>.25**</td>
</tr>
<tr>
<td>Child anxiety-proneness (T1)</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td></td>
<td>-0.04</td>
<td>0.11</td>
<td>-.04</td>
<td></td>
<td>-0.02</td>
<td>0.11</td>
<td>-.02</td>
</tr>
<tr>
<td>Child disclosure (T1)</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td></td>
<td>0.13</td>
<td>0.06</td>
<td>.19^</td>
<td></td>
<td>0.13</td>
<td>0.06</td>
<td>.20*</td>
</tr>
<tr>
<td>Child disclosure × anxiety</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td></td>
<td>…</td>
<td>…</td>
<td>…</td>
<td></td>
<td>0.16</td>
<td>0.14</td>
<td>.11</td>
</tr>
</tbody>
</table>

*Note. $R^2 = .09$ for Step 1 ($p < .05$); $\Delta R^2 = .03$ for Step 2 (ns); $\Delta R^2 = .01$ for Step 3 (ns).

*<i>p < .10</i>, *<i>p < .05</i>, **<i>p < .01</i>.
3.3 Mediational Analyses

The third hypothesis was that children’s disclosure at T1 would mediate the relation between maternal warmth at T1 and children’s positive coping at T2. As maternal warmth at T1 was not significantly correlated with positive coping at T2, conditions for mediation were not met.

The fourth hypothesis was that maternal comfort accuracy at T1 would mediate the relation between children’s disclosure at T1 and children’s positive coping at T2. As comfort accuracy at T1 was not significantly correlated with positive coping at T2, conditions for mediation were not met.

3.4 Predicting Children’s Use of Positive Coping Strategies

As the two mediational hypotheses were not confirmed, the two alternative hypotheses were then explored. A hierarchical multiple regression was performed in order to test the fifth hypothesis, that maternal warmth, children’s disclosure, and maternal comfort accuracy when children are 10 to 12 each independently predict children’s positive coping at age 12 to 14, and the sixth hypothesis that children’s anxiety-proneness at age 10 to 12 moderates the relation between maternal comfort accuracy when children are 10 to 12 and children’s positive coping at age 12 to 14. In this regression maternal warmth at age 10 to 12 was also explored as a possible moderator of the relation between maternal comfort accuracy at age 10 to 12 and children’s positive coping at age 12 to 14.

The results of this analysis are presented in Table 5. Children’s sex, children’s age, children’s temperamental agreeableness and children’s positive coping at T1 were included as controls at the first step of the regression. At the second step maternal warmth at T1, maternal comfort accuracy at T1, children’s disclosure at T1, and children’s anxiety-proneness at T1 were included as predictors. Three two-way interactions terms were added at the third step: maternal comfort accuracy at T1 by maternal warmth at T1, maternal comfort accuracy at T1 by children’s anxiety-proneness at T1, and maternal warmth at T1 by children’s anxiety-proneness at T1. At the fourth step a three-way maternal comfort accuracy at T1 by maternal warmth at T1 by children’s anxiety-proneness at T1 interaction term was added.
Table 5

Summary of Regression Analysis for the Prediction of Positive Coping at T2 (N = 111)

<table>
<thead>
<tr>
<th>Predictors Added</th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
<th>Step 3</th>
<th></th>
<th>Step 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>B</td>
<td>SE B</td>
<td>B</td>
<td>SE B</td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Child sex</td>
<td>1.63</td>
<td>0.96</td>
<td>.16*</td>
<td></td>
<td>1.66</td>
<td>0.97</td>
<td>.16*</td>
<td></td>
</tr>
<tr>
<td>Child age</td>
<td>-0.05</td>
<td>0.64</td>
<td>-.01</td>
<td></td>
<td>-0.01</td>
<td>0.65</td>
<td>-.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Child agreeableness</td>
<td>0.39</td>
<td>0.80</td>
<td>.04</td>
<td>0.38</td>
<td>0.82</td>
<td>.04</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>Child positive coping (T1)</td>
<td>0.41</td>
<td>0.09</td>
<td>.43***</td>
<td>0.42</td>
<td>0.10</td>
<td>.44***</td>
<td>0.42</td>
<td>0.09</td>
</tr>
<tr>
<td>Maternal warmth (T1)</td>
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<td>…</td>
<td>…</td>
<td>-0.59</td>
<td>0.68</td>
<td>-.08</td>
<td>-0.85</td>
<td>0.67</td>
</tr>
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<td></td>
<td>…</td>
<td>0.54</td>
<td>0.74</td>
<td>.06</td>
<td>-0.01</td>
<td>0.74</td>
</tr>
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<td>Child disclosure (T1)</td>
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<td></td>
<td>…</td>
<td>0.30</td>
<td>0.60</td>
<td>.05</td>
<td>0.36</td>
<td>0.58</td>
</tr>
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<td></td>
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<td>-0.74</td>
<td>0.92</td>
<td>-.07</td>
<td>-0.51</td>
<td>0.90</td>
</tr>
<tr>
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<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>-2.37</td>
<td>0.97</td>
</tr>
<tr>
<td>Comfort accuracy × anxiety</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>-2.43</td>
<td>1.32</td>
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<tr>
<td>Warmth × anxiety</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>-0.63</td>
<td>1.43</td>
</tr>
<tr>
<td>Comfort accuracy × warmth × anxiety</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>2.19</td>
</tr>
</tbody>
</table>

Note. $R^2 = .27$ for Step 1 ($p < .001$); $\Delta R^2 = .01$ for Step 2 (ns); $\Delta R^2 = .07$ for Step 3 ($p < .05$); $\Delta R^2 = .01$ for Step 4 (ns).

*p < .10, *p < .05, ***p < .001.
At the final step children’s sex and children’s positive coping at T1 were both significant predictors of children’s positive coping at T2, $\beta = .19, p < .05$, and $\beta = .43, p < .001$, respectively. This indicated that girls used more positive coping strategies than boys did at age 12 to 14, and that there was continuity in positive coping over the two-year study period. There were no main effects of either warmth at T1, disclosure at T1, comfort accuracy at T1, or anxiety-proneness at T1. The comfort accuracy by warmth interaction was significant, $\beta = -.20, p < .05$, while the comfort accuracy by anxiety-proneness, warmth by anxiety-proneness, and the comfort accuracy by warmth by anxiety-proneness interaction terms were not statistically significant (although the comfort accuracy by anxiety-proneness interaction approached statistical significance). Together, the four control variables (children’s sex, age, agreeableness and positive coping at T1), maternal warmth at T1, children’s disclosure at T1, maternal comfort accuracy at T1, and children’s anxiety-proneness at T1 accounted for 28% of the variance in children’s use of positive coping strategies at T2, and the three two-way interaction terms independently accounted for an additional 7% of the variance.

The significant comfort accuracy by warmth interaction was explored using the procedure outlined by Aiken and West (1991) for probing significant interactions between continuous predictors using multiple regression. The comfort accuracy by warmth interaction remained significant in a reduced model that included only the control variables, the two main effects and the interaction. Maternal comfort accuracy at T1 predicted the use of positive coping strategies two years later in children of mothers low in warmth, $\beta = .25, t(110) = 2.36, p < .05$, but not in children of mothers high in warmth, $\beta = -.19, t(110) = -1.51, p = .14$. A plot of the regression lines for the predicted high (one standard deviation above the mean) and low (one standard deviation below the mean) values of the moderator and independent variable is presented in Figure 1.
Discussion

The present study integrated and extended two developing areas of research - children’s self-disclosure to mothers and mothers’ accurate knowledge of their children. The two constructs were examined longitudinally in the framework of one parenting characteristic, maternal warmth, and one child outcome, positive coping. The results of this study highlight significant connections between the two areas of research, as well as movement forward from the traditional study of the straightforward effects of parenting style on child outcomes.

4.1 Maternal Warmth Predicts Children’s Disclosure

The first main hypothesis was confirmed. When holding children’s disclosure at age 10 to 12 constant, maternal warmth when children were 10 to 12 years old predicted children’s disclosure two years later. This finding is in accord with cross-sectional research that has reported direct links between warm parenting and children’s disclosure, but is significant because it allows for an inference of causality. Maternal warmth can now be conceptualized as an antecedent of children’s disclosure, not just a correlate.
4.2  Children’s Disclosure Predicts Mothers’ Accurate Knowledge

The second main hypothesis was that children’s anxiety-proneness at age 10 to 12 would moderate the relation between children’s disclosure to their mothers at age 10 to 12 and mothers’ accurate knowledge of the strategies they could use to effectively comfort their children at age 12 to 14. Although it was expected that highly anxious children might disclose more about their distress because they are more frequently upset, and that as a result their mothers would become more accurate in their knowledge of how their children could best be comforted, this was not found to be the case. This nonsignificant finding is interesting because in the prediction of children’s coping at T2 the children’s anxiety-proneness at T1 by maternal accurate knowledge of child comfort at T1 interaction closely approached significance, which is in accord with the cross-sectional findings of Vinik, Almas, and Grusec (2009). There is a possibility that the accurate mothers of non-anxious children could have acquired their knowledge from other sources besides their children’s disclosure. It is likely, for example, that attentive mothers learn at least some information about their children’s thoughts and feelings through observation.

While testing the children’s disclosure by anxiety-proneness interaction, a significant main effect of children’s disclosure was found. Children’s disclosure to their mothers at age 10 to 12 predicted mothers’ accurate knowledge of the strategies they could use to effectively comfort their children at age 12 to 14. Mothers’ accurate knowledge of effective comforting strategies was controlled for at T1, which allows for the conclusion that children’s disclosure at age 10 to 12 led to mothers’ accurate knowledge two years later.

4.3  Mothers’ Accurate Knowledge by Warmth Interaction Predicts Children’s Coping

How do mothers acquire accurate knowledge of their children’s thoughts and feelings? The discussion thus far indicates that it is through promoting children’s disclosure by being a warm parent. What do mothers do with this knowledge once they have acquired it? The hypothesis that maternal warmth, children’s disclosure, and mothers’ accurate knowledge of child comfort would all make independent contributions to the prediction of children’s use of positive coping strategies was not confirmed. It was found instead that the association between maternal accurate knowledge of effective comforting strategies when children were 10 to 12 years old and children’s positive coping at age 12 to 14 (when controlling for children’s positive coping at age
10 to 12) was moderated by maternal warmth when children were 10 to 12 years old. However, the form of the moderation was different from what was predicted. Specifically, mothers’ accurate knowledge of effective comforting strategies was positively related to children’s positive coping only in the children of cold mothers. Recall that the maternal warmth measure in this study consisted of two dimensions: the mother’s positive view of her child, and the mother’s pleasure and enjoyment of her child. A mother with a negative view of her child and who takes little pleasure in parenting would thus, according to the measure used in this study, be considered cold. We speculate that these mothers would be dissatisfied with their children’s behaviors, and would likely try to change these behaviors through their parenting interventions. Conversely, warm mothers, who enjoy and accept their children, would not be concerned with altering their children’s behaviors. Mothers use their knowledge of what strategies comfort their children in teaching their children to employ their own strategies to deal with daily stressors. Thus, if a mother would like to teach her child to change the way in which he or she copes with distress, it is important that she be accurate in her knowledge of what comforts her child. If a mother is satisfied with her child’s repertoire of coping strategies, the accuracy of her knowledge is not important to the socialization of her child’s coping because she is not trying to change it in the first place. Hence, mothers who are dissatisfied with their children’s behaviors need to be accurate in their knowledge of their children if they wish to produce positive child outcomes (e.g., effective coping).

For the children of warm mothers, mothers’ accurate knowledge of effective comforting strategies was not significantly related to children’s positive coping. However, upon examination of a graph of the interaction (see Figure 1), there is a trend towards high levels of maternal warmth, indicative of mothers’ acceptance of their children’s behaviors, having a detrimental affect on children’s abilities to use positive strategies to cope with distress. Perhaps these mothers view their children too positively, and are thus unable (or unwilling) to see that their coping behaviors are ineffective and could be changed. Although this is an unsettling suggestion, other research has found that positive parenting behaviors can produce negative child effects under specific circumstances. For example, mothers’ encouragement of emotional expression in anticipation of children’s negative emotions significantly predicted children’s asocial behavior in children high in negative affect (Lundell, 2008). The researcher suggested that mothers’
encouragement of emotion expression might worsen anxious children’s fears, making it even more difficult for them to later inhibit their anxiety in order act socially with other children.

4.4 Limitations and Future Directions

An unexpected finding in the present study was that the two mediational models were untestable due to lack of significant correlations between the variables. One possible explanation, and a shortcoming of this study, is that the measures of children’s disclosure did not specifically assess children’s disclosure of their thoughts and feelings. The 3 items in Kerr and Stattin’s (2000) measure of children’s disclosure (used at T1) asked children how much they voluntarily told their parents about friends, school, and activities after school. The measure of disclosure at T2, created for this study, focused on children’s disclosure to mothers concerning problems with their close friends, as peer relationships are of central importance at this stage of development (Rubin, Bukowski, & Parker, 2006). While it is true that children inevitably reveal information about their thoughts and feelings in the process of disclosing peer issues to their mothers, future research should develop and utilize a more precise measure of children’s disclosure of their thoughts and feelings to parents.

Another limitation of this study is that it included only mother-child dyads. While research on children’s disclosure studying both parents generally reports that children disclose more frequently to mothers than to fathers (Youniss & Smollar, 1985; Waizenhofer, Buchanan, & Jackson-Newsom, 2004; Smetana, Metzger, Gettman, & Campione-Barr, 2006), some studies have found a positive association between children’s expressivity and sociability and their disclosure to fathers (Crouter, Helms-Erikson, Updegraff, & McHale, 1999; Crouter, Bumpus, Davis, & McHale, 2005). Clearly, there is more work to be done in this area. In the domain of parental knowledge of children’s thoughts and feelings, research on the accuracy of fathers’ knowledge is still in its infancy. Future studies of children’s disclosure and parental knowledge should include fathers in order to provide a more complete picture that includes paternal socialization and co-parenting.

The present study’s sample was relatively homogeneous with regards to socioeconomic status and ethnicity; the majority of mothers reported having some post-secondary education and self-identified as Anglo-European. While samples composed of other ethnic groups and income brackets may yield different findings, socialization in a cross-cultural or socioeconomic context
was beyond the scope of this study. A concern regarding the sample of this study is the attrition of cold mothers. However, as one of the dimensions of low warmth is displeasure in parenting, it was to be expected that cold mothers would not relish returning to the laboratory to spend two hours discussing their child and their parenting. Realistically, the fact that the mothers who dropped out of the study after T1 had significantly lower maternal warmth scores compared to the mothers who returned may have introduced some bias into the sample. While this is unfortunate, it seems inevitable in research studies of this nature.

Future research may also expand to other sources of parental knowledge of children’s thoughts and feelings in the context of warm parenting. For example, warm mothers may disclose to their children, and this modeling of disclosure could facilitate children’s reciprocation. The limited literature that exists on parents’ self-disclosure to children has found that parental disclosure is related to older children’s openness in communication with their parents (Abelman, 1975) as well as increased trust, understanding, and perceived commonalities with parents (Miller & Stubblefield, 1993). It would indeed be interesting to explore the influence of parental disclosure to children on children’s disclosure to parents, and the affect of this type of reciprocal disclosure on parents’ knowledge of children’s thoughts and feelings.

4.5 Conclusion

The present study makes a contribution to knowledge on how parenting influences children’s abilities to cope with distress. It is not a straightforward link, as the results of this study have shown that children’s disclosure of their thoughts and feelings and mothers’ accurate knowledge of effective comforting strategies are both implicated. This study attempted to uncover how mothers acquire accurate knowledge of what comforts their children, and what mothers do with this knowledge. It was found that maternal warmth longitudinally predicted children’s disclosure of their thoughts and feelings to their mothers, and that children’s disclosure of their thoughts and feelings to their mothers longitudinally predicted mothers’ accurate knowledge of what strategies they could use to effectively comfort their children. Additionally, we now know that it is important for mothers who are dissatisfied with their children’s behaviors to have accurate knowledge of effective comforting strategies in order to help their children learn to employ effective coping strategies. The study highlights how the two developing literatures of children’s disclosure to parents and parents’ accurate knowledge of their children are related, as well as
unique findings with regards to their affect on child development within the context of warm/cold parenting.
References


