Parenting and Child Mental Health:
The Role of Openness in Internationally Adoptive Families

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Abstract

This study examined the relationships among parenting behaviors, communicative openness, and child mental health in a sample of 67 two-parent, internationally adoptive families. Four hypotheses were tested: (1) parenting quality would be negatively related to child mental health problems; (2) parenting quality would be positively related to child openness during adoption-related conversations; (3) child openness would be negatively related to child mental health problems; and (4) the association between parenting quality and child mental health problems would be mediated by child openness. Certain parenting behaviors significantly predicted both child mental health problems and openness, but mediation was not supported. These findings should be considered in the development of resources for internationally adoptive parents aimed at promoting child mental health.
Parenting and Child Mental Health: The Role of Openness in Internationally Adoptive Families

Internationally adopted children are commonly thought to be at risk for a variety of psychological and behavioral problems. A national survey by the Evan B. Donaldson Adoption Institute showed that 52% of Americans saw international adoptees as more likely to have emotional problems than children adopted domestically in the United States (as cited in Freeark, 2006). One-third of respondents saw adopted children in general as more likely to have difficulties than their non-adopted peers. These pessimistic views persist, despite evidence that the vast majority of internationally adopted children function in the normal range (Juffer & van IJzendoorn, 2005; Wegar, 2000).

Unfortunately, researchers approach international adoption with similar biases; much of the literature focuses on correlates and causes of poor outcomes. International and domestic adoption have been linked to insecure attachment, behavior problems, psychopathology, and academic difficulties (Feigelman, 2001; Irhammar & Bengtsson, 2004; Juffer & van IJzendoorn, 2005). Though these risks are important to consider, it is also wise to remember that there are over 32,000 international adoptions every year and most of these children are remarkably well adjusted (Freidlander et al., 2000; Juffer & van IJzendoorn, 2005; Selman, 2002). Upon close examination, much of the adoption research highlighting adoptees’ various problems also confirms their typically normal development.

Adoption and Attachment

Before placement, internationally adopted children may be transferred from biological parents, to foster parents, to adoptive parents. Given that attachment relationships usually form by 8 or 9 months of age (Irhammar & Bengtsson, 2004), many researchers have been understandably concerned with attachment problems that may result from pre-adoption
instability. Findings have revealed problematic attachment in international adoptees under specific circumstances. For instance, Irhammar and Bengtsson (2004) studied adult attachment in a group of international adoptees and found that late adoption, memories from the time before adoption, divorce, lack of contact with the child’s origin, and a tendency not to think about their biological background were associated with an unresolved/disorganized attachment status. Similarly, Cederblad, Hook, Irhammar, and Mercke (1999) found a connection between the amount of time a child spent in an orphanage and attachment problems. It seems that certain pre-adoption histories increase the likelihood of post-adoption attachment problems.

However, as a group, internationally adopted individuals appear to be as securely attached as non-adopted controls. In the same study by Irhammar and Bengtsson (2004), adult adoptees did not differ significantly from non-clinical controls in attachment status, despite their high mean age of adoption (3 years). Such findings have been replicated with children; internationally adopted infants showed a distribution of secure and insecure attachment relationships similar to control groups, though they did show a higher incidence of disorganized attachment (van Londen, Juffer, & van IJzendoorn, 2007). Overall, children demonstrate an impressive adaptability to new caregivers.

Secure attachments may buffer internationally adopted children against the development of later problems. According to Weinfield, Sroufe, Egeland, & Carlson (1999), children with secure attachment relationships have higher quality friendships, fewer conflicts, and are less likely to have behavior problems than children with insecure attachment relationships. Because international adoptees generally show normative rates of secure attachment, their later social and behavioral adjustment should not be compromised. Research supports high levels of social competence in internationally adopted children. Stams, Juffer, Rispens, and Hoksbergen (2000)
found that internationally adopted girls scored higher in ego control, social competence, and peer
group popularity than non-adopted controls. Being internationally adopted in and of itself does
not appear to be strongly predictive of attachment problems or consequential social difficulties.

*Adoption and Mental Health*

The overrepresentation of internationally adopted children in mental health services is
well established (Brodzinsky, Schecter, & Henig, 1992; Juffer & Van IJzendoorn, 2005).
However, research based on non-clinical samples of children consistently shows few or no
differences in adjustment between adopted and non-adopted children (Haugaard, 1998). The
differences that do appear may be the result of misleading study characteristics. For example,
Juffer and van IJzendoorn (2005) performed a meta-analysis of over 25,000 cases and more than
80,000 controls and found that international adoptees showed significantly more total behavior
problems, internalizing problems, and externalizing problems than non-adopted controls.
However, using the same measure of behavior problems (CBCL) with a smaller sample,
Cederblad et al. (1999) found no significant mental health differences between international
adoptees and non-adopted controls.

Several explanations for these contradictory findings have been suggested. The effect
sizes found in the aforementioned meta-analysis were fairly small, but were able to reach
statistical significance with such a large sample size. Researchers have argued that statistically
significant findings evidencing international adoptees’ problematic adjustment are often too
small to be clinically meaningful (Freeark, 2006; Juffer & van IJzendoorn, 2005). These small
differences in mean adjustment score may be the result of a small minority of international
adoptees with severe problems. Haugaard (1998) shows that adopted children as a group can
show poorer adjustment than non-adopted children due solely to a small minority of cases in a
sample. He argues that considering all subgroups of adopted children together may lead to statistics that overestimate the risk to some children and underestimate the risk to others.

Control groups that are unrepresentative of the general population of non-adopted children can also lead to an overestimation of the risks associated with international adoption. Adopted youth are often compared only with non-adopted children who have grown up with two biological parents. Freeark (2006) suggests that such comparisons may be misleading, given that an analysis of a large national survey on adolescent health found that adolescents with divorced parents showed far greater adjustment problems than adopted adolescents living in two parents families (Feigelman 2001). Similarly, Fergusson, Lysnekey, & Horwood (1995) found that adolescents from single-mother families showed more problematic adjustment than adopted adolescents. International adoptees have compared favorably to domestic adoptees as well. In the meta-analysis by Juffer and van IJzendoorn (2005), internationally adopted children presented fewer total behavior problems, internalizing problems, and externalizing problems than domestically adopted children. They were also less often referred for mental health services. This resilience was surprising to the authors who had hypothesized the reverse, given the higher rate of pre-adoption adversity for international adoptees. (Juffer & van IJzendoorn, 2005; Verhulst, Althus, & Versluis-Den-Bieman, 1990). So, homogenous control groups of particularly low-risk children may be the source of some studies’ significant differences.

Another explanation for the apparent mental health problems of internationally adopted individuals is referral bias. Both parents and professionals have been shown to have a lower referral threshold for adopted children than for biological children (Brodzinsky et al., 1998; Ingersoll, 1997; Miller et al., 2000). Normative developmental challenges for adopted children as they struggle with complex identity issues and adoption stigma and stereotypes may be
incorrectly viewed as pathological (Freeark, 2006; Miller, 2005). Research using parent and teacher reports to measure adjustment are subject to reporter biases. Therefore, the higher levels of problems in adoptees as compared to non-adopted controls could reflect expectations based on stereotypes rather than actual differences.

In summary, although internationally adopted children do show higher incidences of mental health problems than their non-adopted peers in research studies, it is important to consider the clinical significance of the results, the representativeness of both adopted and non-adopted groups, and the validity of problem behavior measures before assuming that sample group differences reflect clinically meaningful population differences. After a thorough review of literature focused on adoptee adjustment, Haugaard (1998) concludes that “based on current research, it would be inappropriate to base practice or policy on the supposition that adoption itself places a child at risk for the development of adjustment problems” (p. 68). Such an assumption could lead to inaccurate expectations for and assessments of adopted children.

There is a general consensus based on the empirical literature that the majority of internationally adopted children develop well and fall within the average range. In fact, Haugaard (1998) reviews some studies that found adoption to be a protective factor in child mental health outcomes, including the development of depression, anxiety, and psychosis. The finding that internationally adopted children have fewer problems than domestically adopted peers, despite greater pre-adoption adversity, has also drawn attention to protective factors within the family. What is it that helps these children to thrive in spite of established risk factors? One possibility is that internationally adoptive parents differ from other parents in protective ways (Juffer & van IJzendoorn, 2005; Levy-Shiff, 1997; Miller, 2005). The present study focuses on how certain parenting behaviors may promote the mental health and optimal adjustment of
internationally adopted children.

**Parenting and Mental Health**

Various parenting characteristics have been consistently associated with positive child adjustment in general. These attributes include high levels of sensitivity, emotional support, and confidence and low levels of detachment and intrusiveness.

*Sensitivity*

Parental sensitivity and involvement have been linked to fewer behavior problems and greater levels of self-control, socially conscious goal-striving, and prosocial behavior (Bradley & Corwyn, 2007; Denham et al., 2000; Eisenberg & Fabes, 1998; Pettit, Laird, Dodge, Bates, & Criss, 2001). Longitudinal research supports the possible causal relationship between parental sensitivity and child characteristics. Stams, Juffer, and van IJzendoorn (2002) found that maternal sensitivity during early childhood predicted better social and cognitive development at age 7. Based on these findings, many researchers have examined the effects of sensitivity-focused interventions. By targeting sensitive parenting, these interventions have improved child attachment security, exploratory competence, and ego-resiliency (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2008; Riksen-Walraven & Van Aken, 1997). Sensitive parenting, especially from mothers, clearly has implications for child development.

*Emotional Support*

Emotionally supportive parenting has also been related to child mental health. One meta-analysis linked parental emotional support during childhood to positive adjustment outcomes in both childhood and adulthood regardless of gender, race, geography, language, and culture (Khaleque & Rohner, 2002). Emotional support has been especially predictive of externalizing problems. McCarty, Zimmerman, Digiuseppe, and Christakis (2005) found that parental
emotional support as early as 1-2 years of age was negatively related to later externalizing problems. Additionally, parental emotional support at 6 years old was negatively related to child externalizing problems at 8 years old, even when controlling for initial problems. This suggests a causal direction from parental emotional support to fewer behavior problems. However, more conclusive empirical evidence for the benefits of parental emotional support is needed to confirm causality. McCarty et al. (2005) argue that longitudinal research and studies of non-white participants are especially limited.

Parent Confidence

Parent attitudes also seem to have a role in children’s adjustment. In one study, maternal self-efficacy beliefs significantly predicted toddlers’ cognitive development and their behavior in the laboratory (Coleman & Karraker, 2003). Maternal self-efficacy beliefs were positively related to child affection toward mother, compliance, and enthusiasm and negatively related to child avoidance of mother and negativity. Self-efficacy may lead to positive parenting qualities that, in turn, affect child behaviors. Toddlers benefiting from parental confidence are likely to continue to thrive, since such beliefs remain fairly stable over time (Gross, Conrad, Fogg, & Wothke, 1994; Schneewind, 1995).

Intrusiveness

Intrusive parenting is most often associated with dependence and anxiety (Hudson, Comer, & Kendall, 2008; Wood, Kiff, Jacobs, Ifekwunigwe, & Piacentini, 2007). However, it has also been implicated in externalizing problems (Davenport, Hegland, & Melby, 2008). Intrusive parents take control of tasks that their children are capable of completing without help, interfering with their autonomy and independent exploration. Pettit et al. (2001) examined correlates of parental psychological control, which similarly involves attempts to interfere with
children’s self-direction. Higher levels of psychological control were related to more delinquent behavior problems, depression, and anxiety.

**Detachment**

There is some evidence that parental detachment occurs in reaction to fussy or difficult children. In one study by Simonds and Simonds (1981), mothers of children labeled with “difficult” or “slow to warm up” temperaments were more likely to show guilt-inducing and detached parenting styles than mothers of children labeled as “easy.” Parental detachment may then worsen initial problem behavior; in a sample of boys with ADHD, detached parenting behaviors were associated with symptoms of conduct disorder and depression (Drabick, Gadow, & Sprafkin, 2006).

Because studies of parenting are mainly correlational, precise cause-effect relationships are virtually impossible to establish with certainty. Most probably, interactions between child and parent characteristics are responsible for children’s psychological and behavioral adjustment (Rubin, Hastings, Chen, Stewart, & McNichol, 1998; Simonds & Simonds, 1981). In particular, more difficult children may incite negative parenting characteristics, which then lead to further problems. In contrast, children with easy-going temperaments may elicit parenting qualities that promote positive adjustment.

**Internationally Adoptive Parenting**

Internationally adoptive parents generally have certain advantages that may be protective for their children. They tend to have a higher income, level of education, and quantity of psychological and familial resources than other parents (Freeark, 2006; Hellerstedt et al., 2008; Levy-Shiff, Zoran, & Shulman, 1997). These factors may contribute to parenting quality and thus enhance adopted children’s mental health. A substantial body of research supports a link
between socioeconomic status and sensitive, nurturing, responsive parenting (Barnett, 2008).

Additionally, adopting from another country is a complicated process that requires a great deal of time and effort, so these parents tend to be highly invested in their children’s well-being (Levy-Shiff et al., 1997).

Internationally adoptive families have also shown evidence of unique parenting behaviors and attitudes. Levy-Shiff et al. (1997) found that, compared to domestically adoptive parents, internationally adoptive parents used more active problem-solving strategies to cope with difficulties, viewed parenting as more positive and more challenging, were more involved (but also more intrusive) with their children, viewed adoption more positively, and reported more cohesive family and marital relationships. Furthermore, internationally adoptive parents were markedly less concerned with differences between their child’s biological family and their own. It was suggested that these attributes may be partially responsible for the fact that the internationally and domestically adopted children did not differ significantly on any measures of school adjustment, intelligence, psychological well-being, or observed behaviors. Protective parenting characteristics may compensate for international adoptees’ vulnerabilities.

While prior research does highlight the importance of parental qualities in child adjustment, the bulk of parenting research focuses on non-adoptive families. Given the unique histories and characteristics of internationally adoptive families, parenting qualities may play a unique role in these children’s development. In fact, the familial relational network is often considered the most important protective factor for adoptees’ psychological wellbeing (Brodzinsky et al., 1998; Levy-Shiff, 2001; Rosnati, Iafrate, & Scabini, 2007). Positive parenting may buffer against certain risk factors that face these children. Denham et al. (2000) found that parental contributions to their children’s level of behavior problems were most powerful when
children showed behavior problems in the clinical range to begin with. If internationally adopted children begin life at risk for such problems, they are likely to be especially influenced by parenting characteristics. The present investigation aims to clarify the complex pathways from early parenting to later child mental health in internationally adoptive families.

*The Family Stories Project: The Role of Child Openness*

The Family Stories Project (FSP) approaches international adoption from a strengths-based perspective, aiming to learn what family conversations and characteristics are helpful to young children. This study involved the development of a variable drawn from a child interview, labeled child openness, which may be implicated in the relationship between parental characteristics and child mental health. Child openness encompasses the level of comfort and confidence that children convey while discussing adoption, as well as the thoroughness of their responses to interview questions.

Openness during the FSP interview may be reflective of the comfort and confidence of international adoptees more generally, since many of these children mentioned previous adoption-related conversations with individuals outside of their families. Participants spoke of being questioned or teased by peers, presenting information about adoption for class, and conversing with friends and classmates about their unique life stories. Friedlander et al. (2000) interviewed interracially adopted children and similarly found that most were bothered by questions or comments from strangers. It is clear that discussing adoption is a salient part of growing up for many internationally adopted youth. The child openness measure was developed to capture the range of children’s approaches to one such conversation with an FSP interviewer. If certain parenting behaviors early on foster child openness, such openness may in turn promote
adoptive mental health by encouraging positive relationships with others, self-esteem, and identity formation.

The FSP Child Openness Measure and Related Constructs

Before reviewing the adoption literature concerning openness, it is important to distinguish between the construct of child openness and the family-level patterns usually studied. The work of David Kirk (1964) first emphasized the importance of open communication and emotional support among adoptive family members. As the secrecy and confidentiality surrounding adoption decreased throughout the 20th century, openness was also used to describe a structural arrangement involving the exchange of identifying information between birth and adoptive families (Brodzinsky, 2006; Jones & Hackett, 2007). Brodzinsky (2005) differentiated between these two concepts, labeling them communicative and structural openness. Within communicative openness, he further identified three levels: intrapersonal (self-exploration of thoughts and feelings about adoption of child, adoptive parents, and birth parents), intrafamilial (exploration of adoption issues among adoptive family members as well as among birth family members), and interfamilial (exploration of adoption issues between adoptive and birth family members). However, this model does not address the many adoption-related conversations children face outside of their families. Especially as they enter school and confront new individuals and a broader social network on a daily basis, openness in “extrafamilial” conversations may have important consequences as well.

The child openness measure was designed with this gap in mind and focuses on children’s communicative openness in conversation with an unrelated stranger. Openness was viewed solely in terms of the child’s report and observed characteristics because parent and child perceptions of communicative openness have been shown to differ significantly (Hawkins et al.,
2007; Rosnati et al., 2007). Consequently, the child openness construct may better capture adoptees’ comfort with adoption-related conversations than parent-report measures of communication within the family alone.

**Parenting Dimensions and Child Openness**

Recent literature concerning openness within families points to the importance of parental characteristics. Structural openness has traditionally been considered an important predictor of communicative openness (Irhammar & Cederblad, 2000; Wrobel et al., 1998). However, Brodzinsky (2005) has suggested that contact with birth parents may not be as important in determining communicative openness as other factors, such as parental warmth, emotional sensitivity, and support.

If these characteristics are especially prevalent in internationally adoptive parents, their children may be more open to adoption-related discussions than domestic adoptees. In one study, internationally adopted adolescents reported more positive communication with both of their parents than adolescents living in biological and foster families (Rosnati et al., 2007). However, there is little research exploring the relationship between parenting characteristics and communicative openness. One aim of the Family Stories Project is to add to this limited information.

**Openness and Mental Health Outcomes**

A far more substantial body of research examines the impact of communicative openness on adoptee outcomes. There is a general consensus that an open, active, and emotionally attuned dialogue between adoptive parents and their children is beneficial in adoptive families (Jones & Hackett, 2007; Kirk, 1964; Nickman, 1985; Wrobel et al., 2003). It has been associated with greater self-esteem, more positive feelings toward adoptive status, fewer behavior problems, and
fewer identity problems in internationally adoptive children (Brodzinsky, 2006; Hawkins et al., 2007; Stein & Hoopes, 1985). In the study by Brodzinksy (2006), children’s ratings of communicative openness significantly predicted their adjustment in regression analyses, whereas structural openness did not. This was the case even when controlling for age, gender, placement age, type of adoption (domestic versus intercountry), and family racial status (transracial versus inracial).

The benefits of communicative openness appear to continue into adulthood as well; Howe and Feast (2000) found that adult adoptees who grew up in families with greater communicative openness reported being more satisfied with their adoption experience. Similarly, communicative openness has been positively correlated with adult adoptees’ feelings of closeness to their adoptive parents (Sobol, Delaney, & Earn, 1994). Communication about adoption is often an essential aspect of how the family members form connections with one another (Grotevant, Wrobel, van Dulmen, & McRoy, 2001).

Conversely, a lack of communication about adoption-related issues has been theorized to disrupt children’s growth and maturation (Kirk, 1964). Maladjustment may then disrupt subsequent communication. Hawkins et al. (2007) found that internationally adopted adolescents who found it harder to talk about adoption at age 15 were also more likely to have both conduct and emotional problems at age 11 than those who did not find it hard to talk about adoption. The temporal precedence of adjustment problems suggests that they interfere with later communication.

**Gender Considerations**

Though the complex role of gender in the relationships among parenting, communicative openness, and mental health outcomes is beyond the scope of the present study, the implications
of prior research on the subject are important to consider. The gender of parents and children has been linked to differences in adoption dialogue. Rosnati et al. (2007) found that mothers experienced more open communication with their adolescents than fathers and that females communicated better with their mothers than with their fathers in foster, inter-country adoptive, and biological families. Wrobel, Kohler, Grotevant, and McRoy (2003) have called mothers the “communication brokers” in adoptive families.

Gender seems to be particularly important in internationally adoptive families; several studies have posited the feminization of international adoption (Freeark et al., 2005; Rosnati et al., 2007). In other words, family communication about adoption may engage mothers and daughters more than fathers and sons. Freeark et al. (2005) describes how differing communication patterns based on gender may be partially responsible for the fact that female adoptees tend to have fewer adjustment problems than male adoptees. As a whole, these findings suggest that the relationships among early parenting characteristics and later child outcomes in internationally adoptive families may differ with each family’s gender makeup.

Summary of Hypotheses

The relationships among parenting qualities, communicative openness, and child mental health outcomes are undoubtedly complex. The primary goal of this particular investigation is to help clarify the pathways to optimal adjustment in internationally adoptive families. Four hypotheses were tested: (1) parenting quality would be negatively related to child mental health problems; (2) parenting quality would be positively related to child openness during adoption-related conversations; (3) child openness would be negatively related to child mental health problems; and (4) the association between parenting quality and child mental health problems would be mediated by child openness.
Method

Participants

Demographics

Participants included a total of 80 internationally adoptive families from the Midwestern United States. In order to limit the number of confounding variables involved in the present analyses, only the 67 two-parent, heterosexual families with at least one internationally adopted child between ages 4 and 7 years old when first contacted were included. This sample of families also excluded children adopted over 1 year of age and children with developmental delays or other significant problems. These families completed the first wave of FSP measures when target children (31 girls, 36 boys) were between the ages of 4 and 8 years old ($M = 5.54$ years, $SD = 1.21$ years). Their median range of annual family income was $90,000 – $100,000. Target children were adopted between 1 and 36 months ($M = 9.53$ months, $SD = 5.61$ months) from Korea (32.8%), Russia (16.4%), Guatemala (14.9%), China (13.4%), and Vietnam (10.4%). The remaining 12% includes children born in Mexico, Bolivia, India, Kazakhstan, and Colombia.

During a follow-up approximately three years later, 71.6% of these families completed Wave 2 of the study. The target children (21 girls, 27 boys) were between 8.5 and 13.5 years old ($M = 10.62$ years, $SD = 1.22$ years). Attrition analyses did not indicate significant differences between those who completed Wave 2 versus those who did not.

Recruitment

FSP recruited participants through adoption agencies, adoptive parenting workshops, adoptive family support groups, adoption-related talks, newspaper advertisements, and referrals from other participating families. Potential participants were sent recruitment letters, which
provided a project description and contact information. Families who expressed interest were contacted by phone and given more detailed information.

**Eligibility**

To participate in the study, it was required that (a) the family consisted of a two-parent household, (b) at least one child was adopted from outside of the United States, (c) the adopted child was between the ages of 4 and 7 years old, and (d) the child was placed with the family before 1 year of age. To gain a complete understanding of adoptive families’ experiences and perspectives, FSP gathered information from both parents and their adopted children. When families included more than one adopted child, the oldest child in the identified age range who met all eligibility criteria was designated the target child.

**Procedure**

**Wave 1**

Families who agreed to be involved were mailed a series of self-report questionnaires to be returned during a laboratory visit. Each parent received a separate questionnaire packet to complete independently, which required about one hour. These packets included parent-report measures of family demographic information and target child characteristics.

Families attended a two- to three-hour laboratory assessment, which took place at one of two sites in Michigan. Non-target siblings were encouraged (though not required) to participate. First, parents signed informed consent documents for themselves and participating children, who provided verbal assent. Next, families participated in a warm-up drawing activity that served to acclimate participants to the research staff and laboratory setting. Following the drawing activity, the parents and target child were interviewed in two separate rooms. Staff supervised any non-
target siblings while these interviews took place. Upon completion of the interviews, family
members reunited for a five- to ten-minute snack time that was videotaped and coded.

The final activity was the Family Drawing Task, which was introduced immediately
following the snack and included all family members at the laboratory. A trained research
assistant read the following instructions to the family:

*We would like all of you to do a drawing together. We’d like you to make a drawing that
tells the story of how your family began. Most families have lots of stories about how
their family began. Some are happy, some are funny, and some are about times that
weren’t so easy. We would like you to talk together about some of your family’s stories
and draw a picture that goes with one of them. You’ll probably remember lots of stories
so you’ll have to decide together about which one you want to draw. You may use the
large blank paper and markers for your drawing. Please try to work on the picture
together with everyone helping. Although we only need a picture of one story, we hope
you’ll feel free to talk about more than just one.*

The family was left alone in the room for fifteen minutes with the activity materials and a copy
of the instructions. The interaction was videotaped and coded.

*After completing the Family Drawing Task, the family was debriefed and given time to
voice any questions or concerns. Two Polaroid photographs were then taken of the family with
their completed drawing. The family received one of these photographs, a certificate of
participation, and a resource packet before departing.*

*Wave 2*

Wave 2 of the study occurred approximately three years later and consisted of one home
visit and one follow-up telephone interview with each parent. Families who consented to be
contacted again were provided with information about the second wave of data collection, and those who agreed to participate scheduled a two-hour home visit. The home visit included parent questionnaire packets and a target child interview. Parents were sent interview questions ahead of time and given the opportunity to choose any that they preferred the child interviewer to skip.

At the scheduled time, two research assistants (a family interviewer and a child interviewer) visited the family’s home. The family interviewer reviewed consent forms with both parents and addressed any questions or concerns before the home visit activities began. After parental consent was obtained, the child interviewer asked the family members to choose a somewhat private location where the target child would be most comfortable for his/her interview. This interview was videotaped and later coded by two trained research assistants. While the child interview took place, the family interviewer remained with parents to answer any questions as they each filled out separate parent questionnaires. These packets took approximately one hour to complete and included a range of questions regarding target child behavior, parenting and family experiences, and feelings family members may have about adoption.

Next, the family reunited to participate in two, ten-minute family activities: the same Family Drawing Task completed during Wave 1 and a family discussion about the joys and challenges of international adoption. Both of these activities were videotaped for later coding, but not included in the present study. The family interviewer then took two Polaroid photographs of the family holding their drawing. The target child and any siblings were asked to choose one photograph to keep and a small prize each for their participation. The child interviewer scheduled parent phone interviews and the team departed. Wave 2 participation was finished.
after each parent completed a thirty-minute, audio-recorded telephone interview that focused on parents’ perceptions of the home visit activities.

**Measures**

*Parenting Behaviors*

Parenting behaviors were rated as part of the Wave 1 family interaction coding, completed by one graduate student and four advanced undergraduate students. Using a uniform coding manual, these research assistants scored interaction behaviors independently during the unstructured snack time and Family Drawing Task. Coders were trained to achieve reliability on 20% of the total sample and subsequently conducted periodic double coding to minimize rater drift. There were high levels of agreement on all family interaction behavior codes. See Table 1 for kappas of agreement.

A total of 16 behavioral dimensions were scored. These included 8 family level dimensions (Sensitivity, Positive Affect, Detachment, Intrusiveness, Negative Affect, Facilitation of the Child’s Understanding of Their Life Story, Cohesiveness, and Quality of Sibling Relationships); 2 dyadic level dimensions (Cooperation and Warmth between Partners); 2 individual parent dimensions (Confidence and Emotional Support toward Child); and 4 target child dimensions (Compliance, Enthusiasm, Anger & Frustration, and Withdrawal) (Cox, 1998; Freeark & Rosenblum, 2005; Lindahl & Malik, 2000; McHale, 1999). Higher scores indicated a higher level of the dimension. The 7-point Sensitivity, Positive Affect, Detachment, Intrusiveness, Negative Affect, Parental Confidence, and Enthusiasm rating scales created by Cox were modified to 4-point scales to increase reliability and better capture the range of behaviors observed in this low-risk sample. The present paper focuses on dimensions that most directly reflected parenting behaviors.
Sensitivity. High scores on sensitivity reflect highly child-centered parents (Cox, 1998). This involves an awareness of the child’s needs, moods, interests, and capabilities and the use of this awareness to guide interactions with the child. Sensitive parents provide a balance of support and independence so that the child can experience success and develop self-regulatory skills. When the child appears disengaged, bored, or frustrated, sensitive parents make an effort to involve the child in a manner that shows an awareness of the child’s mood and preferences. However, when the child is effectively engaged, sensitive parents allow him/her as much choice, control, and autonomy as possible. Insensitive parents rarely if ever respond appropriately to the child’s cues or show awareness of the child’s needs. Interactions are often poorly timed or inappropriate.

Sensitivity ratings were based on the quality and quantity of the following behaviors: (a) acknowledging the child’s affect, (b) caregiver conversation that is responsive to the content of the child’s talk or activity, (c) facilitating, but not overcontrolling, the child’s play, (d) appropriate timing of activities to reflect child’s interest, (e) changing the pace when the child appears understimulated, overexcited, or tired, (f) picking up on the child’s interest in objects, (g) shared positive affect, (h) providing an appropriate level of stimulation and appropriate range of activities, (i) timely discipline that matches the nature of the violation under consideration and the child’s ability to understand and benefit from the reprimand, and (j) general flexibility in handling compliance and autonomy issues. Sensitivity was scored on a 4-point scale from 1 (not at all characteristic) to 4 (highly characteristic).

Facilitation of child’s understanding of their life story. Scores on this scale reflect the extent to which fostering the child’s understanding of adoption and his/her life story is a family goal (Freeark & Rosenblum, 2005). Behaviors characterizing facilitating parents include (a)
discussing aspects of the child’s early family history in a manner that is accessible to the child, (b) focusing the child’s attention on the unique aspects of his/her story, (c) asking the child questions to elicit his/her understanding of his/her family story, (d) verbally responding to and expanding on the child’s verbalizations, (e) encouraging the child’s active participation in the drawing activity and the accompanying narration, (f) giving the child opportunities to share his/her perspective on the family story, (g) asking the child questions regarding his/her experiences and memories, and (h) labeling and interpreting these experiences. Facilitation of the Child’s Understanding of Their Life Story was scored on a 4-point scale from 1 (not at all characteristic) to 4 (very characteristic).

**Parent confidence.** This scale indicates how strongly parents seem to believe they can work successfully with the child during the task at hand (Cox, 1998). Confident parents are not afraid that the child will embarrass them if they try to engage him/her in the tasks. They do not take special precautions to ensure that the child will behave in an acceptable manner and seem relaxed about the quality of interactions that take place. In addition, confident parents believe that they can handle any potential difficulties that arise. Parents who lack confidence in their abilities may act depressed, passive, or tentative about making demands on the child.

High scores on parent confidence were given to parents who rarely, if ever, (a) interacted with the child in a tentative or appeasing manner, (b) controlled the activity so as to give the child no opportunities for deviation or problematic behavior, and (c) used tactics that distracted from rather than dealt with issues that arose. Parent confidence was scored on a 4-point scale from 1 (not at all characteristic) to 4 (highly characteristic).

**Emotional support toward child.** This dimension encompasses parents’ ability to (a) recognize and (b) meet the child’s emotional needs (Lindahl & Malik, 2000). Emotionally
supportive parents provide comfort and reassurance either verbally or through their actions. They are able to respond to their child’s distress in helpful and nurturing ways. For example, an emotionally attuned parent may soften his/her voice, lean over and touch the child, or otherwise modify his/her behavior to indicate an awareness of the child’s affective state. Parents who are not emotionally supportive show behavior that does not match the child’s needs or affect. These parents seem oblivious to the child’s emotional states. Emotional support was scored on a 5-point scale from 1 (very low) to 5 (high).

**Detachment.** This dimension indicates the extent to which family members seem uninvolved with one another (Cox, 1998). This is usually evident in parents who are unaware of a child’s need to facilitate involvement with the task or with people. Detached parents do not react contingently to children’s vocalizations or actions. The detached family shows passivity, lacks emotional engagement, and appears uninterested in each other.

High detachment scores characterize families who (a) face away from each other as they work without visually checking in, (b) present objects to each other without first engaging the other person, (c) rarely make eye contact or speak with each other, (d) do not respond to others’ vocalizations, smiles, or other behaviors, and (e) ignore interesting things that other family members are doing. A family that interacts with one another consistently, but in a perfunctory or indifferent manner would also be rated as high on detachment. Detachment was scored on a 4-point scale from 1 (not at all characteristic) to 4 (highly characteristic).

**Intrusiveness.** Intrusive interaction involves parents imposing their own agenda on children (Cox, 1998). Intrusive parents insist on particular uses for toys and props when such use is not necessary for safety or respect. They may violate a child’s space or right to control his/her own body. During the Family Drawing Task, intrusiveness may manifest as an extreme concern
for completing the task correctly. The proper completion of the task becomes more important the child’s need for autonomy and control. Parents may intrude harshly or with affection. If the parent does not acknowledge the child’s intentions as valid and communicates the superiority of parental directions, then the interaction is considered intrusive. Punishments by intrusive caregivers are not likely to fit the seriousness of the misbehavior and may reflect inappropriate expectations. In contrast, families who score low on intrusiveness include parents who are highly respectful of the child’s autonomy. They acknowledge child perspectives as important and negotiate fairly.

Specific behaviors characterizing intrusive interactions include (a) excessive talk, (b) not allowing the child to select activities or toys, (c) changing activities while the child appears interested without preparing the child for a transition, (d) insisting that the child do something in which he/she is not interested, (e) not allowing the child to make choices, (f) excessively or abruptly disciplining the child, and (g) physically invading the child’s space by removing objects from their hands, changing their body position, or leaning over the child in such a way that the child loses access to his/her space. Intrusiveness is scored on a 4-point scale from 1 (not at all characteristic) to 4 (highly characteristic).

On the rating scales for parent confidence and emotional support toward child, each parent was assigned an individual score. On the rest of the parenting dimensions, only one score was assigned that took the behavior of both parents into account.

Child Openness

The “You Are the Expert” Child Interview was developed for this research and used during Wave 2 to measure child openness while discussing adoption (See Appendix). During this interview, target children were asked for their advice to another internationally adopted child of
the same gender but two years younger, as well as to his/her parents, peers, and teachers. Additionally, they were asked about their own experiences discussing adoption with others and current understanding and curiosities about their adoption. After a careful viewing of 10 recorded child interviews, a coding system was developed to capture themes and variations across participants. All remaining interviews were then viewed and coded. Adjustments were made as coding progressed to fully account for the range of data. When these were completed, a trained graduate student coded 20% of the interviews to establish reliability. See Table 2 for the percentages of interrater agreement.

For the present study, the construct of openness is considered to include (a) comfort and confidence during adoption-related conversations and (b) comprehensive and detailed contributions to adoption-related conversations. The following 5 rating scales in the Child Interview Coding System were used to operationalize child openness: shyness, fullness of responses, number of questions declined, extent of previous conversations, and addition of further information. The questions about the child’s extent of previous conversations were not asked when children declined to give advice, limiting scores on this dimension to only a portion of the sample. As a result, it was excluded when computing reliability among these measures. Reliability computed across the other four dimensions of openness used was adequate (Cronbach’s $\alpha = .72$). The dimensions of shyness, fullness of responses, and number of questions declined were highly intercorrelated (Cronbach’s $\alpha = .80$).

Shyness. This 3-point scale was developed to account for differences in child demeanor throughout the interview, regardless of verbal content. Based on the entire interview, the child was rated on the statement “Child seems shy/apprehensive” with a 0 (No), 1 (Somewhat), or 2 (Yes). Indicators of shyness/apprehension included (a) an extremely quiet voice, (b) looking
down or otherwise away from the interviewer, (c) fiddling excessively with fingers, clothing, or another object, (d) inappropriate laughter, and (e) stumbling over one’s words or using excessive fillers (i.e. “um,” “uh,” “you know”). Children receiving a 0 rarely, if ever, displayed these behaviors. They gave an impression of confidence and comfort. Children scoring a 1 displayed these behaviors occasionally throughout the interview or excessively only during certain questions. Children who received a 2 seemed highly uncomfortable, exhibiting extreme shyness and/or apprehension throughout the majority of the interview.

*Fullness of responses.* This 3-point scale assesses the quality and quantity of verbal responses to interview questions, disregarding the manner in which they are given. Children were rated on the statement “Child seemed very open and responded fully to questions” with 0 (No), 1 (Somewhat), or 2 (Yes). Children who responded to all (or almost all) of the questions with relevant and detailed answers received a score of 2. Those who answered around half of the questions with relevant and detailed answers received a 1. Children who declined to answer most questions or frequently provided vague and/or irrelevant responses were assigned a 0 on this scale.

*Number of questions declined.* Children were given the option to say, “pass” and skip over any question. This quantitative measure accounts for the number of questions a child chose to pass or answered only with “I don’t know.” Only questions 1-4 of the interview were considered in this measure because later questions varied based on child responses and parent preferences.

*Extent of previous conversations.* Interviewers followed up on children’s responses to questions 1 - 4 by asking them about past adoption-related conversations. Children were asked if they spoke with anyone about their responses to question 1, with their parents about their
responses to question 2, with their friends about their responses to question 3, and with anyone at their school about their responses to question 4. Question 4 was intended to assess conversations with teachers and other school staff members. However, because many children interpreted it to include peers, follow-ups to question 4 were not coded. The number of times (0 – 3) that children answered yes to these follow-ups was used to measure the child’s report of the extent of previous adoption-related conversations. Children were also grouped according to their answer to each question. Children who answered “Sort of” or “Yes” to the question were compared with those who answered “No.” Having spoken previously about adoption with others is thought to reflect child openness to such discussions.

Addition of further information. At the end of the interview, the interviewer asked, “Is there anything else you’d like to tell me about being adopted?” The addition of further information at this point was considered to reflect greater child openness, since highly uncomfortable children are probably eager to end the interview. Adding information here also indicates greater child openness by contributing to the fullness of their responses. Children who declined to add further information or added information entirely unrelated to adoption received a score of 0 and children who contributed additional information received a 1.

Child Mental Health Problems

Mental health was assessed at both waves of the study through parent report using the Child Behavior Checklist (CBCL; Achenbach, 1991). The CBCL/4-18 measures a wide range of behavior problems in children ages 4 to 18 years. Each behavior is rated on a 3-point scale, from 0 (not true) to 2 (very true/often true). For this investigation, maternal reports of internalizing, externalizing, and total behavior problems were used to operationalize child mental health. The
internalizing score reflects problems of withdrawal, anxiety, and depression whereas the
externalizing score captures problems of delinquency and aggression.

Data Analysis

An alpha level of .05 was used for all statistical analyses, though an alpha level of .10
was used to indicate trend level relationships. Preliminary t-test analyses did not indicate any
significant gender differences that might impact results. To examine the associations among
early parenting characteristics, child openness during adoption-related conversations, and
subsequent child mental health, correlations were computed among these variables. Correlations
were also examined between these variables and child mental health at Wave 1, age at both
waves of the study, and the time between waves, in order to identify other variables that could be
involved in these relationships. T-tests were used to examine the mean differences on each of the
continuous variables between children who reported having spoken about their advice in the past
and those who had not and between children who chose to add further information at the end of
their interview and those who did not.

Variables that were significantly correlated with Wave 2 measures of mental health were
then entered into hierarchical regression equations. Similar regressions were used to predict child
openness at Wave 2. To support the hypothesis that the relationship between parenting and child
mental health problems is mediated by child openness, three relations would need to emerge in
these analyses (Baron & Kenny, 1986): (1) Certain parenting characteristics at Wave 1 would
significantly predict child mental health problems at Wave 2; (2) These same parenting
characteristics would also significantly predict child openness at Wave 2; and (3) child openness
would significantly predict child mental health problems at Wave 2 while controlling for
parenting characteristics. A mediational model is supported if the contribution of parenting to child mental health outcomes is reduced after taking child openness into account.

Results

As a first step, descriptive statistics were computed for each of the study variables. All means and standard deviations are reported in Table 3. Results indicated variability in family interaction scores, children's responses, and parental ratings across each of these domains.

**Parenting and Mental Health**

Several significant relationships emerged between parenting characteristics at Wave 1 and child mental health at Wave 2. These correlations are presented in Table 4. Intrusive parenting was significantly and positively related to internalizing, externalizing, and total behavior problems. Sensitivity was significantly and negatively associated with externalizing problems. Paternal characteristics seemed to be especially important in child adjustment outcomes. Fathers’ confidence and emotional support were significantly and negatively related to internalizing problems. Additionally, fathers’ confidence showed a trend level association with total mental health problems in the negative direction. There were also positive, trend level associations between facilitation of the child’s understanding of his/her life story and both externalizing and total problems.

Parenting variables that were significantly correlated with Wave 2 measures of mental health were entered into hierarchical regression analyses with control variables in three steps. At the first step, child age at both waves of the study was entered so that neither parenting behaviors (Wave 1) nor mental health problems (Wave 2) were confounded with variations in developmental sophistication based on age. At the second step, child behavior problems at Wave 1 were added to control for baseline problems. In the third and final step, parenting
characteristics were entered as predictors. The final models of three separate regressions to child internalizing, externalizing, and total mental health problems at Wave 2 are presented in Tables 5 – 7.

In the first of these analyses, greater intrusiveness remained a significant predictor of internalizing problems in the final model, which was significant and accounted for about half of the variance in internalizing problems ($R^2 = .50), F(2,33) = 4.91, p < .05$. In the regression to externalizing problems, both intrusiveness and facilitation of the child’s understanding of his/her life story continued to make independent contributions in the final model, which accounted for almost 60% of the variance in externalizing problems, $R^2 = .59, F(6, 29) = 5.71, p < .01$. Finally, intrusiveness and facilitation of the child’s understanding of his/her life story were also significant predictors in the final model of the regression to total mental health problems, $R^2 = .62, F(6, 28) = 7.89, p < .01$.

**Parenting and Child Openness**

Certain parenting behaviors were also predictive of child openness during the interview at Wave 2. Facilitation of the child’s understanding of his/her life story was significantly and negatively related to shyness, $r(42) = -.49, p < .01$. In contrast, parental intrusiveness was significantly and positively related to shyness, $r(42) = .31, p < .05$. Several maternal, but not paternal, parenting characteristics were also associated with various measures of child openness. Mothers’ emotional support was significantly and negatively related to the child’s fullness of responses, $r(41) = -.31, p < .05$, and positively related to the number of questions passed by the child during the interview, $r(41) = .32, p < .05$. Maternal confidence was positively related to the number of questions passed at trend level, $r(41) = .29, p = .06$. 
Although parental detachment scores were not significantly correlated with any continuous measures of child openness, children who chose to add further information at the end of their interviews had significantly lower family detachment scores ($M = 1.29$, $SD = .18$) than those who chose not to ($M = 1.86$, $SD = .10$), $t(41) = 2.41$, $p = .021$. Another t-test showed that children who reported talking previously with someone about their advice in question 1 had parents with significantly lower detachment scores ($M = 1.58$, $SD = .58$) than children who said that they had never previously talked about these things with anyone ($M = 2.07$, $SD = .48$), $t(31.57) = 2.91$, $p < .01$.

Several of these parenting variables remained significant predictors of child openness in regression analyses. Because measures of child openness were developed specifically for an interview that took place only at Wave 2 of the study, no comparable measures existed for Wave 1 data. As a result, variables predicting to measures of openness in regression analyses were entered in two steps. First was child age at both waves to control for its possible relationships with both parenting (Wave 1) and openness (Wave 2), followed by the parenting variables that were significantly correlated with the dependent variable. In preliminary correlations, family income showed a significant, negative relationship with the child’s fullness of responses, $r(43) = -.31$, $p < .05$. As a result, this variable was also included in the first step of the regression to fullness of responses.

Even when controlling for the effects of income and child age at both waves of the study, maternal emotional support made a significant contribution to fullness of responses in the negative direction. Income also continued to contribute significantly, with lower income predicting greater fullness of responses. The final model was significant, $R^2 = .23$, $F(4, 38) = 2.89$, $p < .05$ (See Table 8). In predicting shyness, facilitation of the child’s understanding of
his/her life story was a significant predicting variable in the negative direction. Parental intrusiveness also made a trend level contribution to shyness, but in the positive direction. The final model was significant, $R^2 = .37$, $F(4, 39) = 5.74$, $p < .01$ (See Table 9). Lastly, in predicting to the number of questions declined during the Wave 2 interview, age at both waves of the study was non-significant in the first step of the regression. Though initially correlated with the number of questions declined, the addition of maternal confidence and emotional support did not result in a significant model, $R^2 = .12$, $F(4, 38) = 1.26$, $p = .30$. Neither variable significantly predicted the number of questions a child chose not to answer.

**Openness and Mental Health Outcomes**

None of the child openness variables were significantly correlated with the child mental health measures. As a result, these were not entered into regression analyses to child mental health at Wave 2.

**Discussion**

This research contributes to the current understanding of the pathways to child mental health in internationally adoptive families. Parenting characteristics during early childhood were expected to predict child mental health outcomes. However, it was anticipated that this relationship would be mediated by child openness. Specifically, we hypothesized that parenting quality would be positively related to child openness, that child openness would be negatively related to child mental health problems, and that these relationships would account for the association between parenting quality and child mental health outcomes.

Results were somewhat consistent with expectations. Certain parenting characteristics were related to both mental health outcomes and child openness in the anticipated directions. Interestingly, paternal but not maternal characteristics were significantly related to child mental
Parenting health outcomes. Fathers’ confidence and emotional support were both associated with fewer internalizing problems and fathers’ confidence was related to fewer total problems at trend level. This finding may be the result of greater variability in father involvement than in mother involvement. Though paternal characteristics did not continue to predict mental health problems in regression analyses, correlations suggest that the role of fathers in internationally adoptive families may be a fruitful topic for future research. Much of the parenting literature emphasizes the importance of maternal characteristics in child outcomes (Coleman & Karraker, 2003; Hudson et al., 2008; Kiang, Moreno, & Robinson, 2004). The findings from this study suggest that the relationships between father involvement and child adjustment warrant further investigation.

Parental intrusiveness at Wave 1 was also implicated in child mental health problems at Wave 2. Even when controlling for Wave 1 problems and child age at both waves of the study, intrusiveness was a significant predictor of internalizing, externalizing, and total problems. These relationships were in the positive direction, with greater parental intrusiveness contributing to greater levels of problem behavior. Parental intrusiveness at Wave 1 was also a significant predictor of the child’s level of shyness during the Wave 2 interview, with greater intrusiveness predicting greater shyness. This finding is consistent with prior research on the general population that has established the harmful effects of parental intrusiveness on child mental health.

Additionally, t-tests showed that children who reported having spoken previously with someone about their advice to other children had significantly lower family detachment scores at Wave 1 than children who reported never having spoken with anyone. Similarly, children who chose to add further information at the end of the interview showed significantly lower family
detachment scores than children who did not. One possible interpretation of these results is that engaged parenting encourages child openness and that detachment is a barrier to it. It is possible that highly engaged parents respond to their children’s contributions to adoption-related conversations and thereby scaffold the child’s grasp of the information and increase the likelihood that children will participate actively in such conversations with others. However, the correlational nature of this research makes such a cause-and-effect relationship impossible to establish definitively. Further research is needed to confirm the negative effects of parental detachment on child communicative openness.

None of the child openness variables were significantly correlated with any of the mental health variables. These results are inconsistent with expectations based on prior research that support a positive relationship between communicative openness and mental health (Brodzinsky, 2006; Hawkins et al., 2007; Stein & Hoopes, 1985). The focus on extrafamilial rather than intrafamilial communicative openness in this investigation may be partially responsible for these divergent findings. The present results indicate that, though parenting is an important predictor of both mental health and child openness, the relationship between parenting and mental health is not mediated by child openness as predicted. Still, extrafamilial openness is a desirable outcome in itself, encompassing mastery of the adoption story and levels of confidence, verbal skills, and social skills related specifically to discussing international adoption. Its role in child adjustment should be further explored with measures of mental health other than the CBCL. It seems reasonable that a measure with more items designed to measure positive mental health variables rather than problems may better capture correlates of child openness. Child openness and the more elaborated discussions that result may enhance mental health in ways that do not decrease the likelihood of behavior problems. This more complex understanding of the relationship
between integrating a complex life story, sharing one’s thoughts and questions with others and exacerbations in problem behavior are not fully captured by the CBCL as a sole outcome measure.

Several relationships emerged that were significant, but in an unexpected direction. First, though facilitating the child’s understanding of his/her life story significantly predicted shyness in the negative direction, it also contributed to both externalizing and total problems in the positive direction. In other words, the results indicate that parental facilitation of the child’s understanding of his/her life story at Wave 1 is predictive of the development of behavior problems at Wave 2. This finding is counterintuitive, but there are several possible explanations for such a finding. The absence of a correlation between facilitation and intrusiveness suggests that parents who facilitate are not necessarily intrusive.

First, parents who are especially facilitating of their child’s understanding of his/her adoption story may also be more likely to acknowledge the complexity of the child’s emotional experience as well as the problem behaviors that their children show. Conversely, parents who tend to minimize the importance of their child’s adoption story and therefore provide less facilitation of their child’s understanding may also tend to minimize the existence of behavior problems in order to perceive their child as untroubled by his/her adoption. Because both facilitation and shyness were based on researcher observation, rather than parent report, the relationship between these variables would not be affected by the third variable of parent acknowledgement or minimization of difficulties. This might explain the differing directions of the relationships of facilitating the child’s understanding with shyness and behavior problems.

A second possible way to understand the association between facilitation at Wave 1 and behavior problems at Wave 2 relates to the observation that behavior problems in adopted
children may reflect normative challenges or crises as children come to terms with the losses inherent in adoption (e.g., birthfamily, birthcountry) and not significant psychopathology (Juffer & van IJzendoorn, 2005; Miller, 2005). Several aspects of the meta-analytic findings may be relevant here. Meta-analytic results (Juffer & van IJzendoorn, 2005) revealed that internationally adopted children appear to struggle with identity at a younger age than their peers; rather than the more typical turbulence during adolescence, there were more issues in early and middle childhood. We also know that as children move into middle childhood their cognitive sophistication allows them to grasp the relinquishment side of their adoption story in a way that many children do not during the preschool years. Children who live in families where adoption is straightforwardly addressed may act up in the course of coming to terms with the complexity of their life story.

A third possibility is the existence of a minority of children who have especially high scores on the CBCL. Given that Wave 1 problems were significant predictors of later problems as well, parents of these difficult children may have attempted to help them by means of facilitating their understanding of their life stories. Haugaard (1998) demonstrates how the presence of a minority of seriously disturbed adopted children can make adoption appear to be a general risk factor when this is not the case. Similarly, several children with high levels of behaviors problems and highly facilitating parents could lead facilitation to appear to be a risk factor when it is not. Scatterplots of the relationships between facilitation and both externalizing and total problems supports this interpretation. The presence of two to three outliers in the fairly small sample (N = 48) could result in a relationship that appears to apply to the entire sample. Further research is needed to determine which of these possible scenarios best explains the observed positive relationship between facilitating the child’s understanding of his/her life story.
and subsequent behavior problems. The significant contribution of the facilitation variable to later shyness in the negative direction does point to its possible benefits to child openness. Children who have highly facilitating parents are likely to have a greater grasp on their adoption story and, as a result, may be more open to discussing it with others. Again, future research focusing on family processes with larger samples is needed to confirm this speculation.

Another interesting finding was that maternal emotional support significantly predicted the child’s fullness of responses in the negative direction. Preliminary analyses at Wave 1 of this study showed that maternal, but not paternal, support was dependent upon the age and verbal skills of the child. Mothers tended to be especially encouraging and supportive of children who were younger and less verbal. This finding seemed to hold at Wave 2 as well. Mothers who provided high levels of emotional support during the family drawing task at Wave 1 had children who elaborated less on their responses in an individual interview at Wave 2. It is possible that mothers’ tendency to provide extra support to reticent children may inhibit the child’s self-sufficient mastery of the content. This may be a case where “less is more” and where mothers’ titrating of their support and scaffolding for the child is a very nuanced process that allows the child to make the information his/her own. It will remain for future investigations to identify the role of maternal support in the child’s mastery of his/her own perspective on adoption.

The significance of income as a predictor of fullness of responses showed that children from lower income families tended to be more open during the child interview than children from wealthier families. In interpreting this finding, it is important to remember that the range of annual income represented in this sample is limited and that most families are well off financially. As a result, this finding seems to show that children from wealthy families tend to be less open than those from middle-class families. This relationship may be mediated by the
demand of parental occupations, parents’ reasons for choosing to adopt, family involvement in the child’s birth culture, or a number of other possibilities that would be interesting and productive to explore in future studies.

Taken as a whole, the results of this investigation emphasize the importance of parenting characteristics in the optimal adjustment of internationally adopted children. Intrusiveness seems to be a detrimental characteristic for this population of children and, according to Levy-Shiff et al. (1997), a common one. If parents adopt with the expectation of problems, they may work especially hard to buffer against them. As a result, they may unintentionally behave intrusively and interfere with their child’s autonomy and potential learning experiences. Prior research has linked intrusiveness with dependence and anxiety (Wood et al., 2007; Hudson et al., 2008), externalizing problems (Davenport et al., 2008), delinquent behavior, and depression (Pettit et al., 2001). These results indicate that the negative stereotyping of international adoption may not only be unwarranted, but harmful to child mental health. Haugaard (1998) warns:

If adoption is not a risk factor for adjustment problems, or if only subgroups of the adopted population are at increased risk, then the continued acceptance of the link between adoption and adjustment problems could be harmful. Inaccurate beliefs about increased risk could adversely influence parenting styles, family processes, and individual expectations. (p. 48)

The present findings add to this body of research and help to highlight the role of intrusiveness in internationally adoptive families more specifically.

These findings have important implications in the development and improvement of resources provided to internationally adoptive parents. Instructors in parenting classes, mental health professionals, adoption agency staff, and any other specialists working with this
population should aim to disseminate accurate information about the link between adoption and mental health problems and emphasize the importance of child independence and autonomy. Given the wide range of problems associated with intrusiveness in this study, mental health professionals working with internationally adopted children should be sure to address intrusive parent-child interactions in therapy. Encouraging parents to facilitate their child’s understanding of his/her life story and to feel comfortable in their choices to share it or decline to do so may also be important in promoting child openness and comfort in adoption-related discussions as they enter school and are faced with questions from others.

There were several important limitations to this investigation. First and foremost, the non-experimental method used makes cause-and-effect relationships impossible to establish with certainty. Only suggestions of causal direction can be made, based on temporal precedence and significant change while controlling for Wave 1 variables. However, the lack of openness measures at Wave 1 further compromised our ability to draw conclusions about predictors of these variables. Longitudinal research that measures openness is needed to substantiate the possible causal relationships between parenting characteristics and child outcomes discussed in this study.

Furthermore, this study was carried out with a fairly small sample size and low-risk group of families (two-parent households with a child adopted prior to 1 year of age and a median yearly income of $90,000 – $100,000). Consequently, generalizing from these findings to the wider population of adoptive families would be unwise. Future research should aim to capture families with a more inclusive range of demographics in a larger sample. Intervention research with such a sample could provide more convincing evidence for the harmful effects of intrusiveness over time and the benefits of reducing its occurrence in internationally adoptive
Finally, biases in parent-reports may have resulted in the apparent positive relationship between facilitation of the child’s understanding of his/her life story and subsequent behavior problems. If parental reports do not accurately reflect their children’s problems, coded interactions and teacher-reports may provide more valid measures of child behavior problems in the future.

Despite these weaknesses, the present study provides evidence that intrusive parenting is an important risk factor for the development of behavior problems in at least a low-risk subgroup of internationally adoptive families. Research examining the effectiveness of programs aimed at decreasing intrusiveness would be beneficial in the development of resources for internationally adoptive families. By improving the evidence on which parenting resources and interventions are based, this study and related research can promote the optimal development of internationally adopted children.
References


Appendix

"You Are the Expert" Child Interview

The Child Interview is a semi-structured interview designed to assess children's thoughts and feelings about adoption. Prior to interview get child’s verbal assent to participate (see child assent document for text).

"As you know, the Family Stories Project is learning from kids and families about adoption. We talked with kids when they were a couple of years younger, like we talked with you. Now we're talking with them again when they are older to find out what kinds of "expert" advice they would have for younger kids who were also adopted."

If child expresses concerns regarding confidentiality, remind them of the information shared with them when they gave verbal assent. We will not tell others what they said, but we'll get the feedback from all the kids together and share the important ideas that they all came up with- maybe in a newsletter for younger kids. We won't use names; no one will know what they said, in particular.

WARM-UP Questions

"First, I’d like to know a little bit more about you, what you are like as a person, and things you like to do."

A. “What things do you like to do for fun?”

B. “What do you want to do when you grow up”

C. “What do you think your parents would like to see you do”

D. “Who is your best friend?”

E. “What do you do with your friends?”

F. “How do you like school?”

G. “How do you do at school?”
YOU ARE THE EXPERT Questions

1. "So, I'd like to talk about a (GIRL/BOY), (JULIA/JOHN), who is (X)-years-old. (Interviewer will say age is 2 years younger than child being interviewed). S/he was born in another country and was adopted when s/he was a baby. Because Julia/John is younger, s/he could use your advice. If JULIA/JOHN asked you, what would you say are three things you think every kid should know about adoption?"

1) ______________________________________________________________________
2) ______________________________________________________________________
3) ______________________________________________________________________

2. "Sometimes parents also have questions about what kids think. JULIA/JOHN’s parents wonder what other kids would say are some important things they should know about adoption? Could you tell me 3 things you think they should know?"

1) ______________________________________________________________________
2) ______________________________________________________________________
3) ______________________________________________________________________

3. "Julia/John will soon be in the (X) grade (Interviewer will choose grade 1 year behind child). She's getting to know lots of kids at school. What do you think are three things that the other kids at school, especially those who were not adopted, should know about adoption?"

1) ______________________________________________________________________
2) ______________________________________________________________________
3) ______________________________________________________________________

4. "Sometimes kids wish their teachers knew some things about adoption as well. Can you tell me 3 things you think that Julia/John's teachers should know about adoption?"
YOU ARE THE EXPERT Follow-up Questions:

A) "Great! So--now I'd like to go back and look at some of the things you told me. For example, you said that you think John/Julia should know (read 3 responses to Q1).

"Did anyone talk with you about these things?" "Who?" (ask for examples)

"What did they say?"

"What happened that brought it up?"

"What did you think about it then?"

"How did you feel?"

_if no:_ “Do you think there’s a reason that they didn’t?” or “Why not?”

"Would it have helped if someone had talked with you about these things?"

B) Then you told me you thought Julia/John's parents should know (read 3 responses to Q2).

"Did you ever talk with your parents about these things?"

"Can you remember a specific time?"

“What did they say?”

“What did you think?”

“Do you remember how you felt?”

"How did that go?" (ask regarding what happened & feelings child had)

_if no:_ “Do you think there’s a reason that you didn’t?”

"Do you think it would have been helpful if you had?"

C) Then you said that the kids at Julia/John's school should know (read 3 responses to Q3).
"What did kids at your school think about adoption?"

"Do you ever talk with any of your friends about these things?"

"Can you remember a specific time?"

“What did they say?”

“What did you think?”

“How did that go?”

if no: “Do you think there’s a reason that they didn’t?”

"Do you think it would have been helpful if they had?"

D) You also mentioned that Julia/John's teachers should know (read 3 responses to Q4).

"Did anyone at your school ever talk about adoption?"

if yes: "When did it come up?"

"Can you remember a specific time?"

“What did they say?”

“What did you think?”

“Do you remember how it felt?”

if no: “Do you think there’s a reason that they didn’t?”

"Do you think it would have been helpful if they had?"

CONCLUDING QUESTIONS

Now I want to ask you a few more questions about your adoption and how you feel about being adopted.

E) What does the word adopted mean to you?

F) Do you know any other children who were adopted? Who? (get the relationship to the child)

G) How does it feel to be adopted?

H) What have your parents said to you about your adoption?
I) What do you know about your birthparents?

J) Would you like to know more? (if yes:) What kinds of things would you like to know?

K) Is there anything else you’d like to tell me about being adopted?

   Thank you! Your answers to those questions were really helpful!

   Now we’ll go on to our next activity (Introduce Harter scale).
Author Note

Kayla M. Frick, Department of Psychology, University of Michigan, Ann Arbor.

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Correspondence concerning this article should be sent to Dr. Katherine Rosenblum, University of Michigan, The Center for Human Growth and Development, North Ingalls Building, Room 1031 NW, Ann Arbor MI, 48109.
Table 1

*Interrater Reliability: Family Drawing Task Interaction Behaviors*

<table>
<thead>
<tr>
<th>Code Name</th>
<th>Raw Kappa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>.69</td>
</tr>
<tr>
<td>Facilitation of Understanding Life Story</td>
<td>.79</td>
</tr>
<tr>
<td>Emotional Support – Mother</td>
<td>.55</td>
</tr>
<tr>
<td>Emotional Support – Father</td>
<td>.64</td>
</tr>
<tr>
<td>Parent Confidence – Mother</td>
<td>.53</td>
</tr>
<tr>
<td>Parent Confidence – Father</td>
<td>.54</td>
</tr>
<tr>
<td>Intrusiveness</td>
<td>.74</td>
</tr>
<tr>
<td>Detachment</td>
<td>.90</td>
</tr>
</tbody>
</table>

Note: All kappas p < .05

< .4: poor

.4 - .69: good

> .7: excellent
Table 2

*Interrater Reliability: Child Interview*

<table>
<thead>
<tr>
<th>Code Name</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Follow-up Questions: Advice to Other Children</strong></td>
<td></td>
</tr>
<tr>
<td>Did anyone talk with you about these things</td>
<td>.9</td>
</tr>
<tr>
<td>Who</td>
<td>1.0</td>
</tr>
<tr>
<td>What happened that brought it up</td>
<td>.8</td>
</tr>
<tr>
<td>Child Impression</td>
<td>.8</td>
</tr>
<tr>
<td>Reason didn't talk</td>
<td>1.0</td>
</tr>
<tr>
<td>Would it have helped</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Follow-up Questions: Advice to Parents</strong></td>
<td></td>
</tr>
<tr>
<td>Did you ever talk with your parents about these things</td>
<td>.8</td>
</tr>
<tr>
<td>Can you remember a specific time</td>
<td>1.0</td>
</tr>
<tr>
<td>Elaboration of example</td>
<td>1.0</td>
</tr>
<tr>
<td>Child Impression</td>
<td>.9</td>
</tr>
<tr>
<td>Reason didn't talk</td>
<td>1.0</td>
</tr>
<tr>
<td>Would it have helped</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Follow-up Questions: Advice to Kids at School</strong></td>
<td></td>
</tr>
<tr>
<td>What did kids at your school think about adoption</td>
<td>.7</td>
</tr>
<tr>
<td>Do you ever talk with friends about these things</td>
<td>.7</td>
</tr>
<tr>
<td>Can you remember a specific time</td>
<td>1.0</td>
</tr>
<tr>
<td>Elaboration of example</td>
<td>1.0</td>
</tr>
<tr>
<td>Child impression</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Reason didn't talk & .8  
Would it have helped & 1.0  

Concluding Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know other children who were adopted</td>
<td>1.0</td>
</tr>
<tr>
<td>Know about birthparents</td>
<td>.7</td>
</tr>
<tr>
<td>Like to know more</td>
<td>1.0</td>
</tr>
<tr>
<td>What things</td>
<td>.9</td>
</tr>
<tr>
<td>Anything else</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Overall Rating Scales

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of questions declined</td>
<td>1.0</td>
</tr>
<tr>
<td>Terms used for birth parents</td>
<td>.7</td>
</tr>
<tr>
<td>Shy / Nervous</td>
<td>.7</td>
</tr>
<tr>
<td>Responded Fully</td>
<td>.7</td>
</tr>
</tbody>
</table>

**Note:** For each code, this table presents the proportion of interviews, out of ten, in which two coders agreed. Some items involved fairly straightforward responses (i.e. No, Sort of, Yes), which resulted in several agreements of 1.0.

.7 = satisfactory  
.8 - .9 = good  
1.0 = excellent
Table 3

Descriptive Statistics for Study Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child Mental Health – Wave 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalizing Problems</td>
<td>64</td>
<td>.16</td>
<td>.15</td>
</tr>
<tr>
<td>Externalizing Problems</td>
<td>63</td>
<td>.25</td>
<td>.21</td>
</tr>
<tr>
<td>Total Problems</td>
<td>60</td>
<td>.20</td>
<td>.16</td>
</tr>
<tr>
<td><strong>Parenting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td>66</td>
<td>2.83</td>
<td>.71</td>
</tr>
<tr>
<td>Facilitation of Understanding Life Story</td>
<td>66</td>
<td>2.29</td>
<td>.89</td>
</tr>
<tr>
<td>Emotional Support – Mother</td>
<td>64</td>
<td>3.45</td>
<td>1.03</td>
</tr>
<tr>
<td>Emotional Support – Father</td>
<td>64</td>
<td>3.03</td>
<td>1.05</td>
</tr>
<tr>
<td>Parent Confidence – Mother</td>
<td>64</td>
<td>3.03</td>
<td>.93</td>
</tr>
<tr>
<td>Parent Confidence – Father</td>
<td>64</td>
<td>2.84</td>
<td>.86</td>
</tr>
<tr>
<td>Intrusiveness</td>
<td>66</td>
<td>1.97</td>
<td>.96</td>
</tr>
<tr>
<td>Detachment</td>
<td>66</td>
<td>1.88</td>
<td>.67</td>
</tr>
<tr>
<td><strong>Child Openness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shyness</td>
<td>45</td>
<td>.76</td>
<td>.71</td>
</tr>
<tr>
<td>Fullness of Responses</td>
<td>45</td>
<td>1.38</td>
<td>.78</td>
</tr>
<tr>
<td>Number of Questions Declined</td>
<td>45</td>
<td>.44</td>
<td>.78</td>
</tr>
<tr>
<td>Extent of Previous Conversations</td>
<td>27</td>
<td>3.89</td>
<td>2.01</td>
</tr>
<tr>
<td>Child Mental Health – Wave 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Addition of Further Information</td>
<td>44</td>
<td>.16</td>
<td>.37</td>
</tr>
<tr>
<td>Internalizing Problems</td>
<td>41</td>
<td>.19</td>
<td>.17</td>
</tr>
<tr>
<td>Externalizing Problems</td>
<td>40</td>
<td>.23</td>
<td>.25</td>
</tr>
<tr>
<td>Total Problems</td>
<td>40</td>
<td>.23</td>
<td>.22</td>
</tr>
</tbody>
</table>
Table 4

*Correlations Between Wave 1 Parenting Dimensions and Wave 2 Child Mental Health Problems*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Internalizing Problems</th>
<th>Externalizing Problems</th>
<th>Total Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>-0.19</td>
<td>-0.39*</td>
<td>-0.26</td>
</tr>
<tr>
<td>Facilitation of Understanding Life Story</td>
<td>0.16</td>
<td>0.31†</td>
<td>0.31†</td>
</tr>
<tr>
<td>Emotional Support – Mother</td>
<td>0.05</td>
<td>0.01</td>
<td>0.07</td>
</tr>
<tr>
<td>Emotional Support – Father</td>
<td>-0.36*</td>
<td>-0.09</td>
<td>-0.20</td>
</tr>
<tr>
<td>Parent Confidence – Mother</td>
<td>-0.20</td>
<td>-0.17</td>
<td>-0.23</td>
</tr>
<tr>
<td>Parent Confidence – Father</td>
<td>-0.35*</td>
<td>-0.16</td>
<td>-0.31†</td>
</tr>
<tr>
<td>Intrusiveness</td>
<td>0.33*</td>
<td>0.52**</td>
<td>0.50**</td>
</tr>
<tr>
<td>Detachment</td>
<td>0.09</td>
<td>0.02</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

†p < .10

*p < .05

**p < .01
Table 5

*Hierarchical Regression Predicting to Internalizing Problems*

<table>
<thead>
<tr>
<th>Step</th>
<th>$R^2 / R^2_\Delta$</th>
<th>Predictor Variables</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.14$^\dagger$</td>
<td>1. Child Age at W1</td>
<td>-.05</td>
<td>.03</td>
<td>-.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>-.001</td>
<td>.003</td>
<td>-.09</td>
</tr>
<tr>
<td>II</td>
<td>.27/.13*</td>
<td>1. Child Age at W1</td>
<td>-.07</td>
<td>.03</td>
<td>-.41*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>&lt;.001</td>
<td>.002</td>
<td>-.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Internalizing Problems at W1</td>
<td>.58</td>
<td>.24</td>
<td>.37*</td>
</tr>
<tr>
<td>III</td>
<td>.50/.24**</td>
<td>1. Child Age at W1</td>
<td>-.05</td>
<td>.03</td>
<td>-.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>-.002</td>
<td>.002</td>
<td>-.13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Internalizing Problems at W1</td>
<td>.51</td>
<td>.21</td>
<td>.33*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Intrusiveness</td>
<td>.07</td>
<td>.03</td>
<td>.35*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Parent Confidence – Father</td>
<td>-.01</td>
<td>.04</td>
<td>-.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Emotional Support – Father</td>
<td>-.05</td>
<td>.04</td>
<td>-.23</td>
</tr>
</tbody>
</table>

$^\dagger$ $p < .10$

* $p < .05$

** $p < .01$
Table 6

Hierarchical Regression Predicting to Externalizing Problems

<table>
<thead>
<tr>
<th>Step</th>
<th>R² / ΔR²</th>
<th>Predictor Variables</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.06</td>
<td>1. Child Age at W1</td>
<td>-.08</td>
<td>.05</td>
<td>-.31</td>
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<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>.003</td>
<td>.004</td>
<td>.18</td>
</tr>
<tr>
<td>II</td>
<td>.33/.27**</td>
<td>1. Child Age at W1</td>
<td>-.08</td>
<td>.04</td>
<td>-.32†</td>
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<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>.003</td>
<td>.003</td>
<td>.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Externalizing Problems at W1</td>
<td>.65</td>
<td>.18</td>
<td>.52**</td>
</tr>
<tr>
<td>III</td>
<td>.59/.26**</td>
<td>1. Child Age at W1</td>
<td>-.02</td>
<td>.04</td>
<td>-.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>&lt;.001</td>
<td>.003</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Externalizing Problems at W1</td>
<td>.40</td>
<td>.16</td>
<td>.32*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Intrusiveness</td>
<td>.11</td>
<td>.05</td>
<td>.36*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Sensitivity</td>
<td>-.08</td>
<td>.06</td>
<td>-.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Facilitation of Understanding Life Story</td>
<td>.08</td>
<td>.04</td>
<td>.31*</td>
</tr>
</tbody>
</table>

† p < .10

* p < .05

** p < .01
### Table 7

*Hierarchical Regression Predicting to Total Problems*

<table>
<thead>
<tr>
<th>Step</th>
<th>$R^2$ / $R^2_A$</th>
<th>Predictor Variables</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
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<td>1. Child Age at W1</td>
<td>-.09</td>
<td>.04</td>
<td>-.44*</td>
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<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>.01</td>
<td>.003</td>
<td>.29</td>
</tr>
<tr>
<td>II</td>
<td>.32/.20**</td>
<td>1. Child Age at W1</td>
<td>-.08</td>
<td>.04</td>
<td>-.41*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>.004</td>
<td>.003</td>
<td>.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Total Problems at W1</td>
<td>.79</td>
<td>.27</td>
<td>.45*</td>
</tr>
<tr>
<td>III</td>
<td>.64/.31**</td>
<td>1. Child Age at W1</td>
<td>-.04</td>
<td>.03</td>
<td>-.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>.002</td>
<td>.002</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Total Problems at W1</td>
<td>.67</td>
<td>.21</td>
<td>.37**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Intrusiveness</td>
<td>.13</td>
<td>.03</td>
<td>.52**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Parent Confidence – Father</td>
<td>-.02</td>
<td>.04</td>
<td>-.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Facilitation of Understanding Life Story</td>
<td>.07</td>
<td>.03</td>
<td>.28*</td>
</tr>
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</table>

* $p < .05$

** $p < .01$
### Table 8

**Hierarchical Regression Predicting to Fullness of Responses at Wave 2**

<table>
<thead>
<tr>
<th>Step</th>
<th>( R^2 / \Delta R^2 )</th>
<th>Predictor Variables</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.11</td>
<td>1. Child Age at W1</td>
<td>.04</td>
<td>.14</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>-.002</td>
<td>.01</td>
<td>-.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Income</td>
<td>-.11</td>
<td>.06</td>
<td>-.31†</td>
</tr>
<tr>
<td>II</td>
<td>.23/.13*</td>
<td>1. Child Age at W1</td>
<td>.01</td>
<td>.13</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>&lt;.001</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Income</td>
<td>-.13</td>
<td>.05</td>
<td>-.37*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Emotional Support - Mother</td>
<td>-.32</td>
<td>.13</td>
<td>-.36*</td>
</tr>
</tbody>
</table>

† \( p < .10 \)

* \( p < .05 \)
### Table 9

*Hierarchical Regression Predicting to Shyness at Wave 2*

<table>
<thead>
<tr>
<th>Step</th>
<th>$R^2 / R^2\Delta$</th>
<th>Predictor Variables</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
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<td>1. Child Age at W1</td>
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<td>1.0</td>
<td>.02</td>
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<td></td>
<td>2. Child Age at W2</td>
<td>.01</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>II</td>
<td>.37/.36**</td>
<td>1. Child Age at W1</td>
<td>-.18</td>
<td>.12</td>
<td>-.27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Child Age at W2</td>
<td>.01</td>
<td>.01</td>
<td>.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Intrusiveness</td>
<td>.22</td>
<td>.11</td>
<td>.26†</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Facilitation of Understanding Life Story</td>
<td>-.44</td>
<td>.11</td>
<td>-.59**</td>
</tr>
</tbody>
</table>

† $p < .10$

** $p < .01$