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Stress and Coping in Adopted Children: A Developmental Study

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Examined appraisal of adoption and self-reported adoption related coping in eighty-five 6- to 17-year-old adoptees. Subjects were asked to rate their feelings about being adopted, the frequency with which they experienced intrusive thoughts about adoption, and their manner of coping with adoption-related stress. Older children expressed less positive affect and greater ambivalence about being adopted; younger children reported more intrusive adoption-related thoughts. No age differences emerged for adoption-related coping. Negative and ambivalent feelings about adoption were associated with avoidant coping; intrusive thoughts were associated with assistance seeking, cognitive-behavioral problem-solving, and behavioral avoidant coping. Results are discussed in terms of a stress and coping model of adoption adjustment.

Although adopted children raised by nonbiological relatives account for only 1 to 2% of the population of children in the United States (Zill, 1985), mental health facilities report disproportionately large referral rates for this group of individuals. In outpatient facilities, approximately 5% of the children are adopted (Mech, 1973), whereas the corresponding figure for inpatient psychiatric facilities and residential treatment centers is between 10 and 15% (K. Donley, personal communication, April 1989; Piersma, 1987; Rogeness, Hoppe, Macedo, Fischer, & Harris, 1988). Adoptees also have been found to be overrepresented among various special education populations (Brodzinsky & Steiger, 1991) and to manifest a higher than expected rate of learning problems, including those associated with attention-deficit hyperactivity disorder (Deutsch et al., 1982; Kenny, Baldwin, & Mackie, 1967; Silver, 1970, 1989). In addition, when adopted children present clinical symptoms, research suggests a disproportionate rate of externalizing behaviors such as aggression, defiance, lying, stealing, running away, and other disruptive disorders (Austad & Simmons, 1978; Brodzinsky, Hitt, & Smith, 1993; Brodzinsky, Radice, Huffman, & Merkler, 1987; Fullerton, Goodrich, & Berman, 1986; Kotsopoulos et al., 1988). Even among the general, nonclinical population, adopted children have been shown to have more problems in academic performance and personality adjustment compared to their nonadopted peers (Bohman, 1970; Brodzinsky et al., 1987; Brodzinsky, Schechter, Braff, & Singer, 1984; Hoopes, 1982; Lindholm & Touliatos, 1980; Ternay, Wilborn, & Day, 1985; Zill, 1985). This pattern, however, has not always been replicated, especially among adolescents (Bohman, 1970; Marquis & Detweiler, 1985; Stein & Hoopes, 1985).

A number of theoretical perspectives have been offered to explain the increased vulnerability of the adopted child. Kirk's (1964) social-role theory holds that the inability of adoptive parents to manage various "role handicaps" intrinsic to adoptive family life is the primary factor responsible for dysfunctional family patterns and symptomatic behavior among children. Other researchers and clinicians have drawn upon Bowlby's (1969, 1973, 1980) attachment theory, with its emphasis on early separation and loss in the parent–child relationship, to explain the problems of adoptees, especially those youngsters placed beyond 6 to 12 months of age and those experiencing multiple placements prior to the adoption finalization (Steinhauer, 1983; Yarrow & Goodwin, 1973; Yarrow, Goodwin, Manheimer, & Milowe, 1973). By contrast, psychodynamic theorists have emphasized those aspects of the adoption experience that complicate coping with object loss, the resolution of the oedipal conflict, and the development of a mature and stable ego identity (Brinich, 1990; Brodzinsky, 1987; Nickman, 1985; Schechter, 1960; Schechter & Bertocci, 1990; Sorosky, Baran & Pannor, 1975). Cognitive-developmental factors also have been tied to aspects of the adoption adjustment process, particularly as they relate to the child's growing awareness of the meaning and implications of being adopted (Brodzinsky, 1990a;

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Brodzinsky, Singer, & Braff, 1984; Brodzinsky, Schechter, & Brodzinsky, 1986). Finally, biogenetic researchers have suggested that the problems of adopted children have a biological origin associated with increased genetic vulnerability (Cadoret, 1990; Loehlin, Willerman & Horn, 1982) and/or complications during the prenatal period (Bohman, 1970; Losbough, 1965; Schechter, Carlson, Simmons, & Work, 1964).

Recently, Brodzinsky (1990b) presented a multidimensional perspective of children's adjustment to adoption, based primarily on previous cognitive-developmental and psychosocial models of adoption adjustment (Brodzinsky, 1984, 1987, 1990a; Brodzinsky et al., 1986) and the theoretical and empirical work on stress and coping developed by Lazarus and his colleagues (Lazarus, DeLongis, Folkman, & Gruen, 1985; Lazarus & Folkman, 1984). The central assumption of this cognitive-phenomenological model is that children's adjustment to adoption is mediated by the way they understand and appraise the adoption experience and by the types of coping patterns they use to deal with adoption-related stress. Children's appraisal of adoption, in turn, is thought to be affected by a host of person-related variables, including cognitive status, temperament, self-esteem, locus of control, self-efficacy, interpersonal trust, values, and so on. In addition, the child's adjustment is tied to two sets of contextual variables. The first are those biological factors associated with genetic history and reproductive experiences; the second are those interpersonal and cultural factors associated with growing up in a specific family, community, and society, within a specific historical period (cf. Brodzinsky, 1990b).

Within this model, the development of adoption-related problems hinges on the child's appraisal of adoption as being threatening, stigmatizing, or as involving loss. Such appraisals lead to heightened distress that, in turn, activates various coping efforts on the part of the child. Many of these coping efforts are likely to be beneficial and lead to feelings of well-being, whereas others prove to be ineffective and lead eventually to patterns of maladjustment.

In reviewing the literature on children's adoption adjustment, Brodzinsky (1987, 1990b, 1993) noted that the vulnerability among infant-placed adopted children typically does not emerge until the child is 5 to 7 years of age. Prior to that time, adopted and nonadopted children appear quite similar in patterns of adjustment. In explaining this developmental pattern, Brodzinsky speculated that children's growing cognitive sophistication during this period allowed them to comprehend the meaning and implications of being adopted in new and more profound ways. For example, he suggested that as children develop the capacity for logical reciprocity, they become more aware that, to have been adopted, one first had to have been relinquished. This realization leads children to begin viewing adoption not only in terms of family-building but also in terms of family loss. For many children this new perspective leads to feelings of distress and to the emergence of adjustment problems.

To date, Brodzinsky's cognitive-phenomenological model remains largely untested. Although previous research has documented clear developmental trends in children's understanding of adoption (Brodzinsky et al., 1984), as well as patterns of adjustment among adoptees (Brodzinsky et al., 1984; Brodzinsky et al., 1987), no effort has been made to examine the specific assumptions of the model.

One of the primary assumptions of the model is that adoption is experienced as stressful by many adoptees, which, in turn, leads to a series of coping efforts that mediate patterns of adjustment. In keeping with this assumption, the present study explored the extent to which children appraise adoption as stressful and the various types of coping responses they report in dealing with adoption-related stress. To assess stress appraisal, children were asked to characterize their feelings about adoption in both positive and negative domains. Also examined were children's recurring or intrusive thoughts about adoption. Assessing intrusive thought is one way of measuring preoccupation with a particular subject or event (Horowitz, Wilner, & Alvarez, 1979). In this context, intrusive thoughts were also assumed to indicate increased adoption-related stress. Adoption-related coping was assessed with a new self-report measure: the Coping Scale for Children and Youth (CSCY; Brodzinsky, Elias, et al., 1992). This instrument allowed us to examine developmental trends in adoption-related coping, as well as the relation between appraisal of adoption and patterns of coping.

Method

Subjects

Eighty-five adopted children and adolescents ranging from 6 to 17 years of age participated in the study. Subjects were grouped into three age categories: 6 to 9 years (14 males, 19 females), 10 to 13 years (11 males, 9 females), and 14 to 17 years (16 males, 16 females). All children had been placed with their adoptive families before their second birthday, with a mean age of placement of 5.5 months. Twenty-eight percent were placed within 1 week of birth, 49% within the first 2 months, 62% within 6 months, and 88% within 1 year. All children had been informed of their adopted status by their parents, typically in the preschool years.

Families were recruited through various adoption agencies and adoptive parent support groups, as well as by word of mouth. An effort was made to recruit subjects from a wide array of sources so as to reduce

subject selection bias inherent in a single data source. The sample contained 45 Caucasian children living with Caucasian adoptive parents, 4 African-American children living with African-American adoptive parents, and 36 non-Caucasian children living with Caucasian adoptive parents. Of the latter interracial adoptees, 24 were Asian, 6 were African-American, 5 were Hispanic, and 1 was from a mixed racial background (one parent was African-American and the other was Caucasian). Families were predominantly from middle to upper middle class backgrounds, with parents averaging 15 years of education. Children with clear mental or physical handicaps were excluded from the study, as were all children who had experienced a significant family disruption (e.g., divorce, parental death) within the past year.

Procedure

Data were collected during a semistructured interview, either in the family's home or in an office environment. Demographic data were obtained with both the child and a parent present (usually the mother). The purpose and procedure of the interview was explained and parental and child consent were obtained. The interviewer then met individually with the child while the parent filled out several questionnaires in another room. Both the child and parent provided some information that was not of interest in the present study, but that is part of a larger study on children's adjustment to adoption.

Measures

Appraisal of adoption was assessed by two self-report measures, the Thoughts and Feelings Scale (TFS; Horowitz et al., 1979) and the Emotional Reaction Scale (ERS). The TFS is an adaptation of the Impact of Event Scale (Horowitz et al., 1979), a 15-item questionnaire assessing level of intrusive thought and avoidance associated with a particular event. In the present study, we chose to use only those 7 items measuring intrusive thought, because we wanted to operationalize stress appraisal independent of the person's response to the stress—that is, the extent to which he or she avoided the event. Each of the intrusive thought items comprising the TFS was reworded to focus specifically on adoption (e.g., "Pictures about being adopted, or about my birth parents, popped into my mind," "I had dreams about being adopted or about my birth parents," "I thought about being adopted or about my birth parents even though I didn't plan to."). Subjects were asked to indicate on a four-point scale ranging from *never* (0) to *very often* (3) the extent to which they experienced such intrusive thoughts and feelings about their adoption within the past few months. Good internal reliability (.84) was obtained on the TFS.

The ERS is a 10-item instrument, developed for this study, in which subjects are asked to indicate on a four-point scale ranging from *never* (0) to *very often* (3) the extent to which various emotion adjectives (e.g., happy, sad, loved, confused) apply to their current feelings about being adopted. Half of the items are positively valenced, half negatively valenced. Separate scores for positive and negative feelings were calculated, as well as an ambivalence score, to represent the balance of positive to negative feelings. The latter score was calculated by subtracting the mean for positive feelings from the mean for negative feelings, and adding three. Thus, a completely negative score would be six and a completely positive score would be zero. The internal reliability for the ERS also was adequate (.69 for positive affect, .74 for negative affect).

Adoption-related coping behavior was assessed by means of the CSCY (Brodzinsky, Elias et al., 1992). The CSCY consists of 29 items, factor-analyzed into four general coping categories: Assistance Seeking (ASK), Cognitive-Behavioral Problem-Solving (PROB), Cognitive Avoidance (CAV), and Behavioral Avoidance (BAV). ASK strategies include asking family members or friends for help or advice, as well as sharing feelings with others. PROB items reflect attempts to generate and enact possible resolutions to the problem or to reframe the problem in a less disturbing way. CAV strategies consist primarily of wishful thinking and thought suppression, whereas BAV items involve active attempts to avoid reminders of the problem. Acceptible internal reliability and test–retest reliability, as well as construct validity, have been established for the CSCY (Brodzinsky, Elias et al., 1992; Hitt & Brodzinsky, 1991). In the present study, the CSCY instructions were modified to pertain specifically to adoption. Subjects were asked to indicate on a four-point scale ranging from *never* (0) to *very often* (3) the extent to which they use each coping strategy in dealing with issues related to their adoption.

Results

Preliminary Analyses

Because the sample contained a sizeable number of interracial adopted children, preliminary analyses were conducted to determine whether these individuals differed from the group of intraracial adopted children on any of the dependent variables. Because the number of non-Asian children was relatively small, all interracial adoptees were treated as a single group.

Separate 3 (Age) × 2 (Race) × 2 (Sex) analyses of variance (ANOVAs) for the two stress measures and a multivariate analysis of variance (MANOVA) for the

four coping subscales indicated no significant main effects, or interaction effects, for race. As a result, intraracial and interracial adopted children were grouped together, and the race variable was dropped from further analyses. That interracial adoptees showed comparable adjustment to intraracial adoptees is supported by the bulk of the literature (Silverman, 1993).

Age and Sex Differences in Adoption-Related Appraisal

A 3 (Age) × 2 (Sex) × 2 (Affect Type) repeated measures ANOVA was computed on the positive and negative ERS scores. Affect Type (i.e., positive and negative affect scores) was treated as a within-subject variable. Although the main effect for age was not significant, the effects for sex, $F(1, 79) = 5.79, p < .02$, and affect type, $F(1, 79) = 69.15, p < .0001$, were significant. Duncan's tests revealed that girls had higher ERS ratings than boys (Ms = 1.50 and 1.37, repsectively). In addition, children rated their experience of adoption more positively ($M = 2.01$) than negatively ($M = 0.95$). These main effects were qualified, however, by a significant Age × Affect Type interaction, $F(2, 79) = 3.30, p < .05$, and a significant Sex × Affect Type interaction, $F(1, 79) = 6.65, p < .02$. Post hoc tests revealed that 14- to 17-year-olds were significantly less positive about being adopted than 6- to 9-year-olds and 10- to 13-year-olds. On the other hand, no age differences were found for negative affect associated with being adopted (see Table 1). Finally, although girls expressed more positive affect about being adopted than boys (Ms = 2.13 versus 1.70), no sex difference was found for negative adoption-related affect (see Table 2).

As noted previously, a third variable from the ERS was calculated, which represents the degree of ambivalence that children have regarding being adopted. A separate 3 (Age) × 2 (Sex) ANOVA was conducted on this variable. Results indicated significant main effects for age, $F(2, 79) = 3.80, p < .05$, and sex, $F(1, 79) = 6.64$, $p < .02$, but not for their interaction. Overall, 14- to 17-year-olds showed greater ambivalence about being adopted than either 6- to 9-year-olds or 10- to 13-year-olds (see Table 1), whereas girls showed less ambivalence about adoption than boys (see Table 2).

Age and sex differences regarding intrusive thoughts about adoption were examined by means of a 3 (Age) × 2 (Sex) ANOVA on the mean TFS score. The main effect for age was significant, $F(2,79) = 4.77, p < .02$. Duncan's test indicated that 6- to 9-year-old children reported significantly greater frequency of intrusive thoughts and feelings about their adoption than either of the two older groups of children (see Table 1). Neither a sex difference nor an Age × Sex interaction was observed for intrusive thought.

Age and Sex Differences in Adoption-Related Coping

Mean coping scores as a function of age and sex are presented in Tables 1 and 2, respectively. A 3 (Age) × 2 (Sex) × 4 (Coping Type) repeated measures ANOVA was performed on the coping data. Coping Type was treated as a within-subject variable. Although the main effects for age and sex, as well as all interaction effects, were not significant, the main effect for coping type was significant, $F(3, 237) = 16.12, p < .0001$. Post hoc tests indicated that subjects endorsed a higher level of ASK ($M = 1.17$) than of PROB ($M = 0.86$) or BAV ($M = 0.56$), but not of CAV ($M = 0.95$). In addition, subjects reported using more CAV than BAV.

Correlations Between Appraisal and Coping Measures

To examine the relation between children's appraisal of adoption and their efforts to cope with this aspect of their lives, Pearson Product correlations were computed between the scores for the various appraisal and coping measures (see Table 3).[1]

Inspection of Table 3 indicates that positive affect scores on the ERS were inversely related to negative affect ERS scores ($r = -.49, p < .001$). In addition, children who experienced more intrusive thought about adoption also viewed adoption more negatively on the ERS ($r = .44, p < .001$), as well as more ambivalently ($r = .26, p < .05$). No relation was found between intrusive thoughts and positive affect scores on the ERS.

Children's affect scores related to adoption on the ERS were correlated with their coping behavior. Specifically, positive affect scores were negatively related to both BAV ($r = -.36, p < .001$) and CAV ($r = -.26, p < .01$). In contrast, negative affect scores on the ERS were positively related to BAV ($r = .59, p < .001$), CAV ($r = .45, p < .001$), and PROB ($r = .33, p < .001$). Similarly, children's ambivalence scores on the ERS were positively related to BAV ($r = .53, p < .001$) and CAV ($r = .41, p < .001$).

Adoption-related intrusive thought also was corre-

[1] An examination of the correlation patterns within each age group generally confirmed the pattern found for the total sample, although not all relations were significant because of the corresponding reduction in sample size. A few exceptions were noted, though. For the 6- to 9-year-olds, positive ERS scores were unrelated to CAV, and intrusive thought was unrelated to ASK. For the 10- to 13-year-olds, negative ERS scores and ambivalence scores were unrelated to CAV. Finally, for the 14- to 17-year-olds, PROB was negatively correlated with positive ERS scores ($r = -.36, p < .05$) and positively correlated with the ambivalence score ($r = .45, p < .01$). An examination of the correlations for boys and girls separately indicated very similar patterns to those found for the total sample.

Table 1. *Means for Stress Appraisal and Coping Scores as a Function of Age*

	Stress Appraisal				Coping			
Age	ERS+	ERS−	AMB	TFS	ASK	PROB	CAV	BAV
6–9	2.08_a	0.88_a	1.79_a	1.15_a	1.35_a	1.00_a	0.88_a	0.61_a
10–13	1.92_a	0.95_a	1.76_a	0.88_b	1.17_a	0.86_a	0.95_a	0.55_a
14–17	1.68_a	1.11_a	2.43_a	0.67_b	0.97_a	0.72_a	0.96_a	0.53_a

Notes: Means in each column with the same subscript are not significantly different from each other. ERS+ = positive ERS scores, ERS− = negative ERS scores, AMB = ambivalent ERS scores.

Table 2. *Means for Stress Appraisal and Coping Scores as a Function of Sex of Subject*

	Stress Appraisal				Coping			
Sex	ERS+	ERS−	AMB	TFS	ASK	PROB	CAV	BAV
Male	1.70_a	1.04_a	2.35_a	0.87_a	1.08_a	0.84_a	1.09_a	0.65_a
Female	2.13_b	0.86_a	1.72_b	0.88_a	1.25_a	0.87_a	0.82_a	0.45_a

Notes: Means in each column with the same subscript are not significantly different from each other.

Table 3. *Correlations Between Stress Appraisal and Coping Scores for the Total Sample*

	Scale						
Scale	ERS−	AMB	TFS	ASK	PROB	CAV	BAV
ERS+	−.49***	−.87***	.03	.16	.03	−.26**	−.36***
ERS−		.85***	.44***	−.01	.33***	.45***	.59***
AMB			.26*	−.09	.17	.41***	.53***
TFS				.38***	.68***	.04	.31**
ASK					.53***	−.37***	−.24*
PROB						.08	.27**
CAV							.73***

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

lated with children's coping behavior. Specifically, scores on the TFS measure were positively related to ASK ($r = .38, p < .001$), PROB ($r = .68, p < .001$), and BAV ($r = .31, p < .01$).

Last, correlations among children's coping-behavior scores indicated that ASK was negatively related to BAV ($r = -.24, p < .05$) and CAV ($r = -.37, p < .001$), and positively related to PROB ($r = .53, p < .001$). On the other hand, BAV was strongly positively related to CAV ($r = .73, p < .001$), but only weakly positively related to PROB ($r = .27, p < .05$). No relation was found between CAV and PROB.

Predictors of Coping

To clarify the relations among the appraisal and coping variables, four separate regression analyses were conducted, with the four coping categories as the criterion variables. For each analysis, age was entered as the first predictor variable to control for possible age effects. Next, ERS positive and negative affect scores and the TFS score were entered as a block to determine the unique contribution of each of these variables to children's coping. The ambivalence score was not entered in the regression analyses because it is a composite of the ERS positive and negative scores.

All four regression equations accounted for a significant amount of variance in children's coping. For ASK, 19.5% of the variance is accounted for by the predictor variables, $F(1, 83) = 4.84, p < .002$. Of the four predictors, though, only the TFS score contributed uniquely to ASK behavior ($\beta = .37, t = 3.00, p < .01$). For PROB, 48.3% of the variance is accounted for by the predictor variables, $F(1, 83) = 18.66, p < .0001$. Once again, though, only the TFS score contributed uniquely to this coping behavior ($\beta = .63, t = 6.27, p < .0001$). For CAV, 24.4% of the variance is accounted for by the predictor variables, $F(1, 83) = 6.44, p < .001$. In this case, only negative affect from the ERS contributed uniquely to children's coping ($\beta = .55, t = 4.25, p < .0001$. Last, for BAV, 39.7% of the variance is accounted for by the predictor variables. Once again, only ERS negative affect contributed uniquely to children's avoidant behavior ($\beta = .54, t = 4.59, p .0001$).

Discussion

Although adoption was generally appraised as more positive than negative by the current sample of children, inspection of mean TFS and ERS scores indicates that, on average, most children reported at least low levels of intrusive thought and negative or ambivalent affect related to their adoption experience. Although one might argue that the level of intrusive thought and negative or ambivalent affect described by the children does not represent a significant degree of stress, it should be emphasized that these data were obtained from a community-based sample of adoptees who were placed with their middle class families during infancy. That these children occasionally experienced adoption as stressful is noteworthy in itself, especially in light of the frequent assumption that these children are protected from feelings of loss and other adoption-related stress because of their early placement. Clearly, this is not necessarily true. Moreover, it seems safe to assume that had we included a clinical population of adoptees, or children adopted at older ages, the degree of adoption-related stress reported by subjects would have been greater.

With regard to appraisal of adoption, the results of this study indicate that, as children get older, they are less likely to view adoption as positive and more likely to report ambivalent feelings about being adopted. These results are understandable in the context of earlier findings dealing with developmental changes in children's beliefs about, and understanding of, adoption (Brodzinsky et al., 1984; Brodzinsky et al., 1986; Singer, Brodzinsky, & Braff, 1982). Previous research suggests that young children have a limited ability to understand the realities of their family status. Because of their cognitive immaturity, they often view adoption in unrealistically positive ways (Singer et al., 1982). As they mature cognitively, though, they become more aware of the implications of being adopted, including the loss of biological family members, cultural and ethnic ties, and even the loss of part of themselves (Brodzinsky, 1987; Brodzinsky et al, 1992; Nickman, 1985; Reitz & Watson, 1992; Schechter & Bertocci, 1990). As a result, a sense of ambivalence about being adopted begins to emerge for many children, and continues to grow into adolescence.

Our data indicate, though, that the growing ambivalence is coupled with a decline in intrusive thoughts and feelings about being adopted. Although the TFS and ERS instruments were included in the study to assess adoption-related stress, they clearly are measuring different aspects of the adoption experience. The ERS ostensibly measures the appraisal of adoption-related affect. In contrast, the TFS appears to be a measure of the child's preoccupation with, and/or curiosity about, the facts and circumstances of his or her relinquishment and subsequent adoption.

Children in the early elementary school years are just beginning to develop a realistic understanding of adoption (Brodzinsky et al., 1984). This is a time of heightened curiosity and questioning about their adoptive status. Children typically spend a great deal of time during this period thinking about their birth family and why they were placed for adoption (Brodzinsky et al., 1992). This is also a time in which children appear to be less self-conscious about being adopted, especially in comparison to older children. It makes sense, therefore, that younger children should not only experience a greater amount of intrusive thought about adoption but that they should be willing to report it as well. With increasing age, however, two factors are believed to result in children reporting less intrusive thought about adoption. First, as children get older, they develop a more complete understanding of their family status. Consequently, many of the questions that intruded into their awareness during earlier years have now been answered. Second, as we have seen, children experience a growing ambivalence about being adopted with increasing age. Clinically, we also see greater self-consciousness about adoption in older children and adolescents, as well as greater awareness of, and sensitivity to, status loss associated with being adopted (Brodzinsky et al., 1992). These changes are likely to lead to suppression of adoption-related thoughts and feelings, or at least to greater resistance to sharing them with others. If this is true, we must guard against the potentially false assumption that children—particularly older children—who report few intrusive and ruminative thoughts about adoption have necessarily ceased thinking about this aspect of their life, or reconciled their feelings regarding their family status. Many of these children may simply be denying or avoiding all thoughts and feelings associated with their birth family and the circumstances related to their relinquishment.

In this study, no age differences were found regarding adoption-related coping. This finding contrasts with other studies on children's coping behavior, which have reported age-related differences in the use of various types of coping strategies, or in the number of strategies employed, in response to different stressors (Altshuler & Ruble, 1989; Band & Weisz, 1988; Brodzinsky et al., 1992; Compas, Malcarne, & Fondacaro, 1988). One possible explanation for the current finding has to do with the nature of the adoption situation. A number of researchers have emphasized the importance of perceived control in determining coping efforts (cf., Lazarus & Folkman, 1974). Although it is likely that perceived controllability of adoption varied somewhat across subjects in this study, it is also likely that the majority of children viewed their adoption status as a relatively stable, permanent, and therefore, uncontrollable aspect of their life. To the extent that this

is true, there would little reason to expect age differences in adoption-related coping, at least in a general sense. It is quite probable, though, that specific aspects of adoption (e.g., the amount of information one has about the birth family, feelings about searching for the birth family, etc.) are dealt with differently at varying ages. We are currently exploring some of these issues in related research.

Although we found no age differences in adoption-related coping, children's coping behavior did vary as a function of adoption-related stress. Children who appraised their adoption experience more negatively or who experienced greater ambivalence regarding their adoption, reported more frequent use of BAV and CAV strategies. These results are generally in line with other studies of children's coping. Research has shown that situations characterized by high perceived stress and low perceived control are more likely to lead to avoidant coping (e.g., denial, minimization) than situations involving low perceived stress and/or high perceived control (Altshuler & Ruble, 1989; Brodzinsky, Elias et al., 1992; Causey & Dubow, 1992; Compas et al. 1988).

Our results suggest that not all aspects of the adoption experience, though, are likely to be perceived as uncontrollable. In the present study, children who were experiencing more intrusive thoughts and feelings about adoption were more likely to engage in ASK and particularly PROB. ASK and PROB strategies allow children to gain control over stressful experiences in their lives—in this case, related to their adoption experience. Through these coping strategies, children are likely to have greater access to emotional support and to information about their past, including who their birth parents were, what they were like, and why they decided to relinquish them for adoption. For some adoptees, particularly adolescents and adults, these strategies also may form a basis for planning a search for and/or a reunion with the birth family (Schechter & Bertocci, 1990).

Intrusive thought was not only related to ASK and PROB, however. It was also positively correlated with negative affect about adoption and behavioral avoidant coping. This pattern suggests that the subjects in this study may be experiencing an approach–avoidance conflict regarding this aspect of their life. In other words, their desire for more information about themselves and their past may be coupled with anxiety associated with communicating with their parents about adoption, as well with the process of searching—whether the search is primarily intrapsychic in nature, or an activated, behavioral effort to make contact with family members (Schechter & Bertocci, 1990). Clinically, we find that children frequently worry about further rejection from the birth family should they be successful in making contact with them. They are often anxious about disapproval from adoptive parents who may be quite ambivalent themselves regarding their child's curiosity about his or her origins.

In the present study, no sex differences were found for either intrusive thought, or for adoption-related coping. In contrast, girls did rate adoption more positively and indicated less ambivalence about being adopted than boys. These results are in keeping with several studies that indicate that girls show fewer adoption adjustment problems than boys (Bohman, 1970; Brodzinsky, et al., 1993; Seglow, Pringle & Wedge, 1972).

In conclusion, the results of the present study suggest that, although most infant-placed adopted children view adoption as more positive than negative, they nevertheless do occasionally experience stress associated with their family status. Furthermore, adoption-related stress was clearly linked to patterns of coping behavior. These results support the usefulness of our stress and coping model of adoption adjustment (Brodzinsky, 1990b). Future research, however, needs to expand beyond the current findings. For example, we believe that the experience of adoption is much more complex than was captured by our appraisal measures. Consequently, we are presently attempting to identify, and operationalize, specific aspects of adoption-related loss, and to link these aspects of adoption appraisal to background contextual factors (e.g., preplacement history, family beliefs and attitudes about adoption, social support systems), and current child related variables (e.g., developmental level and personality characteristics of the child), as well as specific outcome measures (e.g., patterns of adjustment). Only by employing such multifactorial designs will we be able to truly capture the complexity underlying children's adjustment to adoption.

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