

Adjustment Among Adopted Children: The Role of Maternal Self-Reflectiveness*

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The maternal self-reflective function was assumed to affect maternal perceptions of adopted children's adjustment. In a sample of Israeli mothers of school-aged, non-referred children, self-reflectiveness scores were found to discriminate between adoptive (N = 50) and non-adoptive (N = 80) participants, and affect the rate of perceived externalizing behaviors. Specific protective and risk factors that characterize adoptive motherhood are discussed, indicating their implications for therapeutic intervention.

The present is a study of the relations between adoptive mothers' capacity for self-reflectiveness (Main, 1991; Fonagy, 1991) and their perceptions of school-age adoptees adjustment. Although epidemiological, clinical, and empirical studies have addressed the problem of increased risk for adjustment problems among adopted children, findings are inconclusive. Compared to non-adopted children, adoptees have been found to have higher levels of externalizing disorders, academic problems, and more anxiety and social problems (Brodzinsky, 1987; Brodzinsky, Lang, & Smith, 1995; Brodzinsky, Schechter, Braff, & Singer, 1984; Fergusson, Lynskey, & Horwood, 1995; Maughan & Pickles, 1990; Silver, 1989; Wierzbicki, 1993). However, researchers such as Singer, Brodzinsky, Ramsay, Steir, & Waters (1985), Stein and Hoopes (1985) and Thompson and Plomin (1988), have argued that there are not significant differences between adopted and non-adopted child adjustment. Moreover, recent research underscored that adoptees may be at diminished risk of personality characteristics such as poor self-image or insecurity (Benson, Sharma, & Roehlkepartain, 1994). They fare better on prosocial behavior; have less social problems; and present less withdrawn behaviors (Sharma, McGue, & Benson, 1998).

The differences in outcomes reported in the adoption literature may reflect differences in the studied population as to age of adoption, developmental stage, and parenting characteristics. Research on adopted child adjustment shows increased developmental risks among children adopted at a later age; this risk has been related to the adverse experiences that these children generally suffer prior to adoption (Hodges & Tizard, 1989; Howes, 1997; Rosenthal, 1993; Rushton, Treseder, & Quinton, 1995). In addition, the study of adoptee adjustment uncovers important differences between infancy and early childhood and later developmental stages. While, in general, the early development of adoptive children seems to be adequate (Singer et al., 1985), studies consistently report that the full impact of adoption is felt when the child reaches school age (Brodzinsky et al., 1995). Aspects of a child's normative cognitive, and emotional maturation have been cited as playing a major role in school age troubles within the adoptive family. Middle childhood is often the period when being adopted is seen as a problem for the first time, and adoption is connected logically with the fact of having been given up (Brodzinsky, 1990; Smith & Brodzinsky, 1994). At this time, the knowledge of being adopted may be experienced as abandonment, as the loss of the first set of parents, and as a handicapping difference vis-a-vis non-adopted peers (Singer et al., 1985).

Different outcomes of adoption may also relate to adoptive family characteristics. Whereas most studies have centered on the child's characteristics and behavior, much less is known about

the outcomes of adoptive parents function. Early studies of adoptive parenthood (Kirk, 1964) centered on the rejection versus acknowledgment-of-differences issue, as related to a child's adaptation and the parents ability to develop a dialogue with the child about adoption-related subjects. Also, in order to uncover protective factors in relation to developmental outcomes among adoptees, structural aspects of the adoptive family were explored (Brodzinsky, Schechter, & Henig, 1992; Kaye, 1990). More recently, Cohen, Coyne, and Duvall (1993) suggested that adoptive families may have greater psychological and social resources as well as unrealistic expectations vis a vis their adopted child (Cohen et al., 1993).

Assuming that parental functioning within the complexities of the adoption situation may constitute a main factor of resilience, we centered this study on a basic aspect of parenting and of the parent-child relationship—self-reflectiveness. Self-reflectiveness or mentalizing (Fonagy, Steele, Steele, Higgitt, & Target, 1994; Main, 1991) refers to the meta-cognitive capacity to understand oneself and others in terms of feelings, beliefs, intentions, and desires (Fonagy, 1991; Fonagy, Steele, & Steele, 1991; Fonagy & Target, 1996; Target & Fonagy, 1996). It implies the ability to reflect about the "validity, nature and source" of mental representations (Main, 1991, p. 128), and differentiate between what is thought, represented, or felt, and reality. The parental reflective function has been operationalized as the parents capacity to reflect on the current mental state of the child as well as on the parents expectations from, relationship to, and behavior toward the child (Fonagy, et al., 1995). This construct includes both a metacognitive attitude toward the self as subject, and a perspective on others in terms of their mental states. Fonagy and colleagues (1995) corroborated empirically on Main's suggestion that the parents reflective capacity constitutes a main resilience factor in stressful and traumatic situations: parents self-reflective function was found to play a protective role mainly among high risk mother-child dyads (Fonagy et al., 1995).

Even though adoption may not necessarily be traumatic for either parents or children, cultural images and attitudes tend to favor biological bonds and stigmatize adoption. This creates spe-

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cific strains on adoptive families (Wegar, 1995). In this study, we assumed that the parental self-reflective function may constitute a protective factor among parents facing the complexities of adoptive child-rearing. Under these circumstances, the self-reflective function may allow parents to distinguish, both in themselves and in the child, between feelings and behavior related to early (actual or fantasized) relationships, and current real relationships. Higher levels of self-reflectiveness may ease the recognition of and coping with the child's curiosity and his or her feelings, as well as the understanding of the relations between the child's feelings and behavior. Self-reflectiveness may facilitate the adoptive parents' understanding of these feelings and behaviors as the child's individual way of coping with the fact of having been adopted, and living with non-biological parents. For instance, a self-reflective attitude would allow the parent to experience and interpret the ambivalent feelings about being adopted, that are often experienced by adopted school-age children (Brodzinsky et al., 1995), less as proof of parental failure than as expressions of pain and bewilderment. Parents with a limited self-reflective function, however, may overlook the psychological character of the child's wishes, fears, and fantasies. This attitude may hinder parent-child communication, exacerbating the child's difficulties and non-adaptive behavior.

In order to empirically explore the effects of the parental self-reflective function on an adoptive child's perceived adjustment, we developed a measure of parental self-reflectiveness based on the criteria for self-reflectiveness defined by Fonagy et al. (1995). Subsequently, we explored the effects of maternal self-reflectiveness on the child's reported symptomatology, comparing early and late adoptees to non-adopted children. We assumed that higher levels of maternal self-reflectiveness would predict perceptions of children's behavior as less difficult and problematic.

Method

Participants and Procedure

Participants were 50 adoptive and 80 non-adoptive mothers of children aged 8 to 12 years ($M = 10.17$, $SD = 1.45$). Parents and children were White; parents were all Israeli. Fourteen children were overseas adoptees. The first sample included middle-class mothers (socio-economic status was determined according to income and years of maternal education), and their adopted children (21 girls and 29 boys). Mothers were approached at the Center for Consultation and Treatment of Adoptive Families and Adult Adoptees under the auspices of the Israel Welfare Ministry. Most mothers worked part-time outside the home (4 to 6 hours daily), and grandparents or hired caregivers took care of the children after school. Thirty of these children (60%) were adopted early (0 to 2 months of age) and 20 (40%) were late adoptees (adopted at the age of 2 to 3 years). The non-adopted child sample was composed of 80 middle-class children: 36 girls and 44 boys recruited from community schools. Most of these mothers worked outside the home, and after school arrangements were similar to the adopted child sample. All the children, adopted and non-adopted, were part of the non-clinical population, and attended regular schools.

After obtaining the families' informed consent, mothers were interviewed in their own homes as part of a longitudinal project on adoptees' adjustment. Interviews were recorded and transcribed. Parental self-reflectiveness interviews were scored by

two trained independent scorers, blind to the subjects' adoptive or non-adoptive status.

Instruments

Child adjustment. Child adjustment was assessed by means of maternal reports of behavioral and emotional problems and competencies. The Child Behavior Checklist (CBCL) (Achenbach, 1978, 1991a; Achenbach & Edelbrock, 1979) was used. The CBCL is a standardized parent-report questionnaire designed to assess both, levels of adjustment and behavior problems, in children between 4 and 18 years of age. The CBCL is composed of scales measuring adjustment (school and social competence and activity scales) and two broad-band symptom scales: (a) internalizing (withdrawn, anxious-depressed and somatic) symptoms and (b) externalizing (delinquent and aggressive) problems. These scales have shown appropriate psychometric properties and discriminate between clinical and non-clinical populations (Achenbach & Edelbrock, 1979). The CBCL has high concurrent validity (above .80) and associates significantly with the Diagnostic and Statistical Manual of Mental Disorders (DSM-III, American Psychiatric Association, 1987) criteria (Achenbach, 1991a; Edelbrock & Costello, 1988). The CBCL has been adapted for use with Israeli children (Auerbach & Lerner, 1991; Zilber, Auerbach & Lerner, 1994).

Parental self-reflectiveness. We developed a measure of parental self-reflectiveness based on a new coding procedure of 5 specific topics within the Parental Awareness semi-structured interview technique designed by Newberger (1977, 1980; Newberger & Cook, 1983). The Parental Awareness assessment interview focuses on the structure of a parent's thinking about him or herself, about the child, and about the experience of being a parent. We selected those items from the interview that seemed relevant to the definition of parental self-reflectiveness, including items that referred to personalized parenting, understanding of parental demands, understanding of child's compliance, enjoyment of parenthood, as well as the parent's open-ended description of the child; these five main issues constituted the Parental Self-Reflectiveness Scale (PSRP). It is important to note that while Newberger's procedure assessed the parent's practices as well as their cognitive stance, we devised probe questions and a coding procedure intended to assess the extent to which the child is perceived as a separated, unique, and understandable human being. We also assessed the parent's capacity to think about and relate to his or her feelings, thinking, and behavior to a specific child.

Coding procedure. Interviews were evaluated by closely following Fonagy and colleagues' criteria for assessing the self-reflective function (Fonagy, et al., 1995). We applied this scoring procedure to mothers' responses to each of the 5 central themes selected; a scale was defined for each theme and each participant got a score on each sub-scale; for all scales, higher scores indicate more self-reflectiveness. The PSRS scales were coded as follows:

1—*Personalized parenting.* This 7-point scale was applied to the mother's ideas about parenthood, beginning with the question: "How does someone know if they are a good parent?" Coding of the mother's responses to this question and probes ranged from an evaluation of parenting according to the parent's need satisfaction at the lowest level, up to the highest level, where parenting is seen as dynamic and changing in relation to the psychological world of the parent and the child. Intermediate

levels refer to evaluations of parenting based mainly on the parents reported ability to satisfy the child's basic physical needs.

2—*Understanding child compliance.* This 6-point scale assessed the parents understanding of the child's compliance or lack of compliance with parental demands. This scale's lower levels refer to the parents lack of understanding, impulsiveness, and feelings of helplessness. Intermediate levels relate to rigid and/or conventional explanations of child's behavior in relation to parental demands. Responses receiving the highest scores on this scale reveal an understanding of the child's explicit and implicit needs and motivations.

3—*Understanding parental demands.* This 5-point scale taps parental thinking about the aims and usefulness of limit setting in child rearing. The lowest level in this scale relates to thoughts about parental limit setting as a means of protecting the parent. At the highest levels of this scale, discipline and parental demands are thought about as helpful to the child in the present and in the future, and as securing the transmission of common values. Intermediate levels relate to disciplinarian measures as helping the child in other contexts or in defining parent-child roles.

4—*Enjoyment.* This is a 7-point scale applied to aspects of the parents enjoyment of the child. Lower levels relate to reports where the parent enjoys the fact that his or her own needs are satisfied by the child. At the highest levels, the parent expresses joy at being able to feel and understand the child and witness his or her growing up and becoming someone on his or her own, without idealizing the child. Intermediate levels refer to the enjoyment of the child's success at school, sports, etc.

The following codings 5, 6, and 7 were applied to three aspects of the parents description of the child as follows:

5—*Conceptual level.* Levels of child-parent differentiation were evaluated according to their "conceptual level," a structural dimension of human descriptions devised by Blatt, et al. (1992). This dimension assesses a sequence of levels of differentiation leading to increased separateness, empathy and intersubjectivity. This is according to five epigenetic levels: sensorimotor, perceptual, iconic external, iconic internal, and conceptual (Blatt, et al., 1992). In the sensorimotor level, the parent is described mainly in relation to the child's needs. In the perceptual-concrete level, the description is articulated according to external, physical characteristics only, such as, for instance, hair color or height. The iconic levels refer to a shift from depictive into truly representational descriptions. In the external iconic level, the representation is based on concrete parental aspects and functions, such as the parents activities and interests. In the internal iconic level, representations mainly reflect an appreciation of more abstract and internal properties, such as feelings and thoughts. In the conceptual level the parent is represented as a fully independent person with enduring characteristics and continuity.

6—*Positivity.* This 5-point scale assesses parental positive feelings expressed in the description of the child, ranging from totally negative descriptions up to descriptions that are mainly positive but not idealizing. Intermediate levels refer to somewhat negative, detached, or over idealized descriptions of the child.

7—*Uniqueness.* This 5-point scale assesses the extent to which the description conveys the child's uniqueness. On the lowest levels, the child is mainly described as easy or difficult

for the parent. On the highest levels, the description provides a rather clear picture of the child's personality and uniqueness, and indicates also the parents awareness of it. Intermediate levels present the child as fulfilling (or not fulfilling) conventional expectations and roles.

Psychometric properties of the PSRS. The initial validation of the PSRS was done on a sample of mothers of 101 lower middle-class children (56 boys and 45 girls) living with their two biological parents. Children were enrolled from community schools as part of a larger project on emotional development, and mothers were interviewed at home. Each interview centered on one child, aged 8 to 13 years ($M = 10.60$, $SD = 1.29$). Mothers' ages ranged from 29 to 55 years ($M = 40.84$, $SD = 5.10$). The range of mothers' years of formal education was 8–20, with $M = 13.77$ and $SD = 2.52$.

The transcribed self-reflectiveness interviews were scored by two specially-trained independent scorers. Reliability scores ranged from .76 to .79. The Cronbach Alpha coefficient was .80. The PSRS scores were subject to an orthogonal principal factor analysis with Varimax rotation (see Appendix 1). Two factors accounted for 61% of the variance: Factor 1 for 46% (*eigen value* = 3.23) and Factor 2 added 15% (*eigen value* = 1.03) to it. The first factor (Child) included aspects of the mothers description of the child, i.e., the conceptual level, positivity, and uniqueness, as well as the mothers thoughts about the child as a source of enjoyment. The second factor (Self-as-Mother) was related to aspects of the mothers thinking about herself as mothering a specific child. The items included in this factor relate to the meaning attributed to the parental role, including the scores for personalized parenting, understanding child's compliance, and understanding parental demands (for factor loading, means, and standard deviations, see Appendix).

The difference between maternal mean scores for boys and girls in the Child and Self-as-Mother factors was non-significant: $Wilks A [2,98] = .97$, n.s.; ($F[1,99] = 3.09$, n.s., and $F [1,99] = .33$, n.s., respectively). Correlations between the self-reflectiveness factors scores and child's and maternal ages were non-significant, but mothers educational level correlated significantly with both self-reflectiveness factors: the correlation between maternal educational level and the Child factor was $r = .42$, ($p < .0001$), and between maternal educational level and Self-as-Mother was $r = .29$, ($p < .004$), revealing higher self-reflectiveness scores among mothers with more years of formal education.

Results

Comparison of the Adoptee and Non-Adoptee Samples

Insignificant differences were found between the two samples—adopted and non-adopted children—as to the proportion of boys and girls ($\chi^2 = .11$, n.s.) and the distribution of adoptive and non-adoptive mothers by country of origin ($\chi^2 = 4.44$, $p < .16$, n.s.). In order to explore other possible demographic differences between the adopted children and the non-adopted child samples, we performed a one-way MANOVA with three adoption groups as the independent variable, and mothers age, child's age, and mothers educational level as dependent variables. Groups were found to significantly affect the dependent variables ($Wilks A [6,250] = .79$, $p < .0001$). One way ANOVAs showed

Table 1
Means and Standard Deviations of the Self-Reflectiveness Scale: Adopted and Non-Adopted Children

	Non-Adopted ^a		Adopted ^b				<i>F</i> (2,125)
	<i>M</i>	<i>SD</i>	Late		Early		
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Child	.04	.99	.77	.57	1.03	.87	9.67***
Self-as-mother	.01	.99	-1.16	.57	-.56	1.14	12.83***

Note. *n*^b = 50. *n*^a = 80.
****p* < .0001.

that the samples were similar with regard to: (a) childrens age ($F [2,127] = 1.92$, n.s.; $M = 10.36$ and $SD = 1.31$ for non-adopted; $M = 10.05$ and $SD = 1.47$ for early adopted, and $M = 9.77$ and $SD = 1.74$ for late adopted children); (b) maternal educational levels ($F [2,127] = 1.01$, n.s.; $M = 13.78$ and $SD = 2.52$ for non-adopted; $M = 14.45$ and $SD = 2.16$ for early adopted and $M = 14.40$ and $SD = 2.55$ for late adopted children). However, we found a significant difference between groups for mothers age ($F [2,127] = 15.25$, $p < .001$; $M = 39.30$ and $SD = 4.52$ for non-adopted; $M = 41.90$ and $SD = 6.04$ for early adopted; and $M = 44.87$ and $SD = 4.51$ for late adopted children). In post-hoc comparisons, we found that non-adoptive mothers were younger than either early ($F [1, 127] = 29.63$, $p < .0001$) or late ($F [1,127] = 4.74$, $p < .03$) adoptive mothers. In addition, mothers of early adoptees were older than mothers of late adoptees ($F [1, 127] = 4.62$, $p < .03$). Age differences between adoptive and non-adoptive mothers were related to prolonged fertility treatments in most adoption cases, and to a local adoption policy that requires a rather prolonged waiting-period in order to adopt a newborn child in all cases. In all the subsequent analyses, we controlled for the effects of maternal age. We also controlled for the effects of maternal educational level, in spite of the similarity between the two samples on this variable, because of the correlation found between maternal educational level and self-reflectiveness scores in the validation study described above.

Adoptive Parenthood and Maternal Self-Reflectiveness

In order to compare adoptive and non-adoptive mothers self-reflectiveness scores we performed a MANCOVA with three adoption groups (non-adopted, early adopted, and late adopted) as independent variable, the two self-reflectiveness factors (Child and Self-as-Mother) as dependent variables, and mothers' age and years of formal education as covariates. A significant group effect was obtained ($Wilks \Lambda [4,248] = .68$, $p < .0001$). Means, Standard deviations, and *F* scores for univariate ANCOVAs are presented in Table 1.

The two self-reflectiveness factors were affected by adoption; this effect stemmed from differences between mothers of late and early adopted children and the non-adoptive mothers. Mothers of early adopted children were significantly higher than mothers of non-adopted children on the Child factor ($F [1,125] = 16.45$, $p = .0001$), and lower than mothers of non-adopted children on the Self-as-Mother factor ($F [1,125] = 7.17$, $p < .0001$). Similarly, mothers of late adoptees were higher on the Child factor ($F [1,125] = 7.87$, $p < .006$) but lower on the Self-as-Mother factor than mothers of non-adopted children ($F [1,125] = 23.92$, $p < .0001$). The comparison between early and late adoptive mothers showed significant differences on the Self-

Figure 1. Group differences in self-reflectiveness scores.

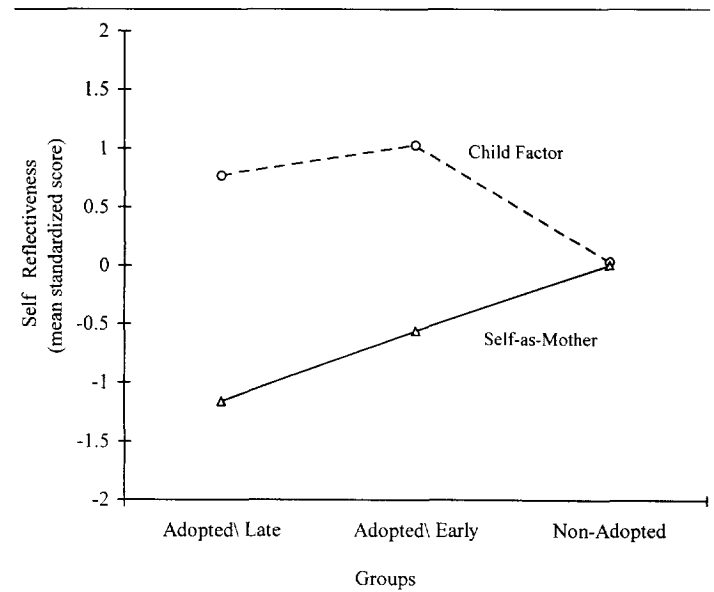


Table 2
Means and Standard Deviations of CBCL Scales: Adopted and Non-Adopted Children

CBCL	Non-Adopted ^a		Adopted ^b				<i>F</i> (2,125)
	<i>M</i>	<i>SD</i>	Late		Early		
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
School competence	5.28	.78	4.08	1.23	4.31	1.36	19.09***
Activity	4.59	1.81	4.45	1.62	4.57	2.26	.17n.s
Social competence	6.48	1.63	4.63	1.58	6.00	1.33	10.95***
Externalizing problems	5.09	4.36	13.90	8.30	11.40	8.24	19.13***
Internalizing problems	4.19	4.16	7.95	5.84	7.90	5.33	8.14***

Note. *n*^b = 50. *n*^a = 80.
****p* < .0001.

as-Mother factor only, with mothers of late adopted children scoring lower than mothers of early adopted children ($F [1,125] = 4.32$, $p < .04$). Figure 1 presents the differences among adoptive and non-adoptive mothers self-reflectiveness scores.

As can be seen in Figure 1, in addition to the differences between mothers of adopted and non-adopted children on the PSRS factors scores, mothers of adoptees showed a large within-group difference between the mean Self-as-Mother factor and the mean Child factor scores. This difference was significant: $t = -18.39$, $p < .0001$ and $t = -28.19$, $p < .0001$ for early and late adopted children, respectively. Non-adoptive mothers, on the other hand, had almost identical mean scores in both factors.

Adoption and Perceived Child Adjustment

We performed a MANCOVA with three adoption groups (non-adoption, late adoption, and early adoption) as independent variables, 5 CBCL dimensions (activity, social and academic competence, and externalizing and internalizing disorders) as dependent variables, and the mother's age and education as covariates. We found a significant effect of adoption on CBCL scales ($Wilks \Lambda [10,242] = .60$, $p < .0001$). CBCL scales means, standard deviations and *F* scores for univariate ANCOVAs are presented in Table 2.

Table 3
Hierarchical Multiple Regression Analysis of Externalizing Problems

Predictor variables	Multiple R	R ²	Fchange	Overall F	df	β
1. Covariate	.26	.06	4.42**	4.42**	2,127	
Mother age						.25**
Mother Education						-.10
2. Reflectiveness	.40	.16	6.90***	5.87***	4,125	
Child						-.31***
Self-as-mother						.06
3. Group ^{a,b}	.54	.30	25.3***	10.67***	5,124	-.49***
4. Interactions	.56	.32	1.39	8.07***	7,22	
Group × child						-.19
Group × self-as-mother						-.05

Note. (two-tailed test). Adopted $n^b = 50$. Non-adopted $n^a = 80$.
* $p < .05$. ** $p < .01$. *** $p < .001$.

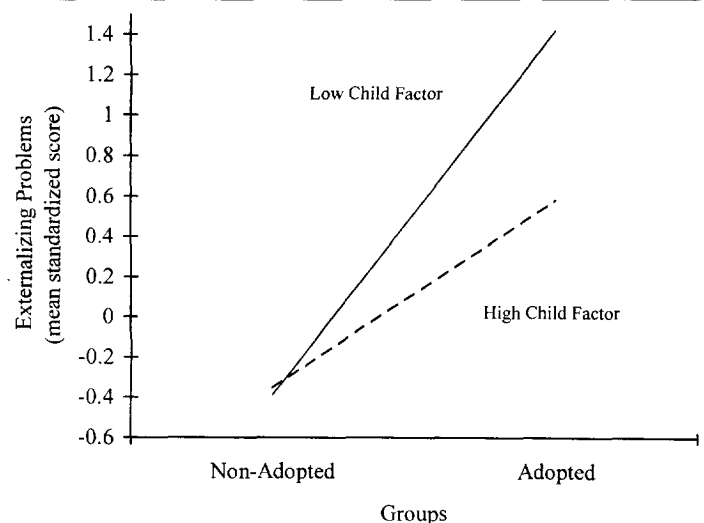
As can be seen from the univariate ANCOVAs presented in Table 2, there is a main effect of groups (non-adopted, early adopted, and late adopted) on the CBCL scales except for the activity scale. Adopted children were reported to be lower on academic and social competence and higher on externalizing and internalizing behavior. Planned comparisons showed that these differences were significant when comparing early adopted and non-adopted child scores on academic competence ($F [1, 125] = 22.59, p < .0001$), externalizing behavior ($F [1, 125] = 16.62, p < .0001$), and internalizing behavior ($F [1, 125] = 11.11, p < .001$). Significant differences were also found between non-adopted and late adopted children on their academic competence ($F [1, 125] = 26.60, p < .0001$), social competence ($F [1, 125] = 21.87, p < .0001$), externalizing behavior ($F [1, 125] = 31.73, p < .0001$), and internalizing behavior ($F [1, 125] = 9.89, p < .002$). Comparisons between late and early adopted children showed differences only for the social competence scale ($F [1,125] = 9.57, p < .002$), with late adopted children scoring lower on this scale.

The Role of Parental Self-Reflectiveness

The results presented above show differences between adoptive and non-adoptive mothers' self-reflectiveness scores as well as differences between adopted and non-adopted children's scores in most CBCL scales. In the present section we examine the effects of maternal self-reflectiveness on perceptions of child problem behavior, in order to explore the assumption that higher levels of maternal self-reflectiveness predict perceptions of child behavior as less difficult and problematic. To this effect, we first computed the correlations between the self-reflectiveness factors and the CBCL externalizing and internalizing scores among the adopted and the non-adopted children. We obtained a significant negative correlation between the Child factor and the reported externalizing behavior disorders among adoptees ($r = -.29, p < .04$) and a near significant negative correlation between the Self-as-Mother factor and reported externalizing behavior disorders among adoptees ($r = -.26, p < .07$); these associations indicate that higher maternal reflectiveness scores associate with less reported externalizing symptoms in the child. Correlations with reports of internalizing problems were non-significant.

Consequently, we proceeded to assess the impact of the self-reflectiveness factors (Child and Self-as-Mother) for the prediction of perceived externalizing behavior disorders. A hierarchical multiple regression analysis was computed as follows: In the first block we entered the mothers' age and educational level, which contributed 6% to the explained variance (See Table 3). Entered

Figure 2. Interaction between adoption and the child factor on externalizing problems.



in the second block, the self-reflectiveness factors explained an additional 10% of the variance. The Group variable, entered in the third block, contributed an additional 14% to the variance of externalizing disorders. The Reflectiveness x Group interaction, entered in the fourth block, did not significantly add to the explained variance of reported externalizing disorders (see Table 3).

In an additional regression analysis we explored the contributions of the Child factor and the interaction between this factor and the Group variable separately. We entered the Child factor in the second block (after the mother's age and educational level in block 1) and the Group variable in block 3. The Child factor added 10% to the explained variance of reported externalizing disorders (Multiple $R = .39, R^2 = .16, Fchange [3,126] = 13.37; \beta = -.31; p < .001$). The Group factor entered in the third block added 13% to the explained variance (Multiple $R = .54, R^2 = .29, Fchange [4,125] = 23.62; \beta = -.43; p < .001$). The Child x Group interaction was entered in the fourth block, and added 2% to the explanation of the common variance (Multiple $R = .56, R^2 = .31, Fchange [5,124] = 3.93; \beta = -.23; p < .05$). Figure 2 represents this interaction effect, showing that the rate of perceived externalizing disorders among adopted children diminishes when the mothers score high on the Child factor.

Discussion

In this study we focused on the maternal self-reflective function, assuming it might significantly affect her perceptions of adopted children's adjustment. In order to assess self-reflectiveness, we developed a new scoring procedure of 5 issues pertaining to Newberger's Parental Awareness Interview, and evaluated its main psychometric properties. This discussion first deals with the assessment procedure and then turns to the analysis of self-reflectiveness in adoption. Finally, we discuss the theoretical and clinical implications of the study findings.

Assessing Parental Self-Reflectiveness

Self-reflectiveness scores, as assessed by means of the PSRS, were found to be reliable and independent of pervasive demographic variables such as the child's age and sex, and the mother's age. On the other hand, higher reflectivity scores were found to associate with higher levels of maternal formal education. This finding may stem from the effects of greater verbal sophistication among more educated mothers on a method of assessment based on participants' narratives. In any case, these findings suggest the necessity to consider formal education levels when assessing self-reflectiveness, controlling for its potentially confounding effects.

Two orthogonal factors were detected in the analysis of the PSRS scores, the first relates to the child and the second to the mother herself. Higher scores on the Child factor convey a reflective stance toward the child that is seen as a differentiated, enjoyable, basically positive and unique individual. The second factor, Self-as-Mother, relates mainly to the mother's feelings and thoughts about herself as a mother, and her awareness of her own and the child's needs and motivations in relation to parental demands. Higher scores in this factor stem from a parental attitude that is based on contextualized considerations of both the parents and the child's needs.

Adopted Children's Perceived Adjustment and Maternal Self Reflectiveness

Our results point to a significantly greater frequency of reported externalizing behavior among adopted children. However, even though adoptees scored higher than non-adopted children on the externalizing dimension, their scores were still normative for Israeli non-referred populations (Zilber et al., 1994). The amount of perceived externalizing symptoms was negatively associated with the Child and Self-as-Mother reflectiveness factors, indicating a relation between low maternal self-reflectiveness and a higher rate of reported externalizing behaviors among adopted as well as non-adopted children. Moreover, the significant lower levels of Self-as-Mother reflectiveness scores among adoptive mothers suggest that these mothers' feelings of helplessness, and tendency to focus on their own needs, may endorse perceptions of child behavior as more difficult and problematic.

Adoptive mothers' perceptions of more externalizing symptoms among their children in this non-clinical sample are congruent with Verhulst, Althaus, and Versluis-Den Bieman's (1990) findings on a very large sample of internationally adopted children. However, since our sample adoptees' externalizing scores were still in the normal range, the implications of these findings for their adjustment are not clear. Moreover, while some authors report that lower levels of adjustment among school-age, non-

referred adoptees do not indicate long-standing maladjustment (Brodzinsky et al., 1995), others report an increased risk for psychiatric disorders among adoptees (Lipman, Offord, Boyle, & Racine, 1993). In addition, it is important to note that any interpretation of the effects of perceived problematic behavior on adoptees' adaptation might be inconclusive, since this is one among many other biological, personal, and environmental variables affecting their long term adjustment (Sharma et al., 1998).

Controlling for maternal age and educational level, different patterns of self-reflectiveness among adoptive and non-adoptive mothers, were revealed. Compared to non-adoptive mothers, the adoptive mothers were found to score higher on the Child factor and lower on the Self-as-Mother factor; this difference increased when mothers of late adoptees were compared to biological mothers, due to the very low Self-as-Mother scores among the former. The lower scores on the Self-as-Mother scale may reflect the pre-adoptive processes the mothers underwent, as well as lower levels of self acceptance as parents (DiGulio, 1988), that are associated with society stigmatizing attitudes around adoption and adoptive parenthood (Wegar, 1993). These difficulties increase in late adoptions, where mothers undergo longer waiting periods prior to adoption, and might feel even less adequate since they haven't experienced the child's infancy stage.

The high scores of adoptive mothers on the Child factor component essentially reflect the positivity of these mothers' perceptions of the child. Studies of the transition to adoptive parenthood have underscored the marked positivity of parental expectations and experiences among these parents, as compared with biological parents (Brodzinsky & Huffman, 1988; Levy-Shiff, Goldshmidt, & Har-Even, 1991). Some authors interpreted highly parental positive attitudes toward the adopted child as defensive and stemming from the parent's need to deny difficulties and feel satisfaction (Levy-Shiff et al., 1991, Kirk, 1964). However, other authors like Hoopes (1982), reported that adoptive mothers scored higher than biological mothers on measures of acceptance and praising the child. Moreover, Cohen, Coyne, and Duvall (1993) have recently developed the idea that adoptive families are characterized by specific psychological and social strengths. The reflective attitude of the adoptive mother toward the child (as reflected in the Child Factor scores of the self-reflectiveness scale) was found to predict perceptions of the child as less difficult, confirming previous findings on the protective role played by parental self-reflectiveness in children's development (Fonagy et al., 1995).

Our findings propound a complex qualitative difference between adoptive and non-adoptive mothers patterns of self-reflectiveness. Non-adoptive mothers had similar self-reflectiveness scores on both the Self-as-Mother and Child factors, whereas adoptive mothers scores tended to be high in the Child factor but low in the Self-as-Mother factor. The conspicuously lower scores on the Self-as-Mother reflectiveness factor among adoptive mothers might stem from these participants' specific difficulties with their own motherhood; while their psychological mindedness about the children is as good, if not better, than among non-adopters, their capacity to attribute relevant psychological meanings to their own maternal role is undermined by a conventional, defensive, and sometimes even rigid stance. This attitude toward the self may reflect the doubts and ambivalence that surround adoption in general, and adoptive motherhood in particular.

Implications for Practitioners

The characterization of adoptive parents self-reflective function as delineated by the present study's findings, might have significant therapeutic implications. This study findings suggest that adoptive parents' thinking about themselves as parents may constitute a specific vulnerability factor in adoptive families. Perceptions of parenthood among adopters are strongly affected by the basic issues of infertility, illegitimacy, and rescue. Previous studies have already shown the centrality of adoptive parents feelings of powerlessness, guilt about the adoption, and the need to be a "perfect parent" (Hartman & Laird, 1990). These issues reflect the effects of pre-adoptive painful experiences, as well as reactions to the stigma that attaches to adoptive families. Practitioners should prepare potential adoptive parents for the social context, which considers the blood tie a prerequisite for authentic parenting. From this perspective issues of low reflectiveness of Self-as-Mother can be addressed in ways that benefit both the adoptive mothers and their children. A main purpose of interventions with adoptive families might be the enhancement of parents' reflective attitude toward themselves as adoptive parents, and toward the process of adoption in itself. A reflective attitude toward the self-as-parent implies the construction of a more integrative narrative of the adoption, one that includes both losses and assets, and that recognizes the complexities of child adoption as well as child relinquishment. Moreover, a self-reflective attitude toward adoption may promote an understanding of adoption as a complex and dynamic psychological process, open to change and novelty.

Limitations and Further Research

It is important to note that this study dealt with the characterization of maternal self-reflectiveness in adoptive and non-adoptive families, and our findings cannot be generalized to include actual maternal behavior. It remains a matter for future research to establish if the effect of parental reflectiveness on childrens externalizing problems is mediated by overt behavior and actual maternal care practices.

Another question that remains open is the relevance of maternal perceptions of childrens behavior for the study of adoptees' actual adjustment. Even though the CBCL has proved robust validity, only longitudinal studies using additional perspectives on childrens behavior (i.e., direct observation or additional sources of information about the child) might further our understanding of the relations between maternal self-reflectiveness and childrens adjustment.

Finally, it is worth noting that our findings and conclusions are limited by the fact that fathers and siblings (adopted or non-adopted) were not included in this study. Since differences in self-reflectiveness between fathers and mothers are plausible, the combined study of both parents might be important for the study of adoptive and non-adoptive childrens adaptation. In addition, the study of parental self-reflectiveness in relation to both their adopted and non-adopted children may further our understanding of the controversial findings reported about the greater vulnerability or resilience of adoptees in families with biological children (Hoopes, 1982; Brodzinsky & Brodzinsky, 1992).

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Appendix

Parental Self-Reflectiveness Scale: Factor Analysis

Parental Reflectiveness Scale	M	SD	Factor I	Factor II
			Child	Self-as-Mother
Personalized parenting	4.82	1.67	.06	.74
Understanding parental demands	4.43	1.25	.17	.71
Understanding child's compliance	3.44	.90	.35	.68
Conceptual level	5.63	1.07	.75	.36
Positivity	3.90	.90	.76	.05
Uniqueness	3.46	1.09	.80	.24
Enjoyment	4.28	1.34	.77	.17

Note. N = 101.