Parenting and Adolescent Adjustment: 
The Role of Parental Reflective Function

Thesis submitted in partial fulfillment
of the requirements for the degree of
“DOCTOR OF PHILOSOPHY”

by

Naomi Benbassat - Lifshitz

Submitted to the Senate of Ben-Gurion University
of the Negev

31.3.2008

Beer-Sheva
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Approved by the advisor ___________________
Approved by the Dean of the Kreitman School of
Advanced Graduate Studies ___________________

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Beer-Sheva
This work was carried out
under the supervision of
Professor Beatriz Priel,
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Abstract

Reflective Function (RF) is the ability to think about one’s own thoughts and feelings and those of others in an attempt to understand behavior. It is considered to be the basis for self-construal, self-control, affect regulation, and relationships with others. Parental RF (i.e., parents' awareness and understanding of their own, as well as their children's feelings and thoughts) has been shown to be related to children's early attachment relationships and to their understanding of emotions.

Previous research on parental RF has focused on mothers, infancy, and early childhood. However, it stands to reason that parental RF is important at all stages of development, particularly during adolescence. The adolescent child experiences physical, cognitive, and social changes. During adolescence, cognitive development enables higher levels of thinking and perspective-taking, which, in turn, enable the further development of the understanding of one’s self and others, as well as higher moral reasoning. All of these changes necessitate the reorganization and psychological adjustment of both parents and their adolescent children. Parental RF may provide parents with insight into both the developmental changes in their adolescent children and their own feelings and thoughts in response to these changes. Adolescent RF may help adolescents cope with the developmental changes that they are experiencing, in general, and with the development of social competence, in particular.

Previous research on parenting of adolescents has focused mainly on parental behavior and specific parenting practices. A parenting style that combines warmth, acceptance, and involvement with firm behavioral control has been found to be associated with positive children's outcomes. However, several authors have argued that rather than focusing only on parenting behavior, researchers should consider the overall context of this behavior and, specifically, parents’ understandings of their children and the parent-child relationship. Furthermore, there is evidence that the father's role in parenting attains a unique importance during adolescence and that the father’s behavior may affect boys and girls differently. Still, fathers have received relatively little attention in studies of parenting.

Therefore, the objectives of the present study were to explore the association between maternal and paternal parenting behavior and RF, the association between these parental characteristics and adolescents' adjustment and RF, and to compare mothers’ and fathers’ RF levels and parenting behaviors, as well as their associations with the adjustment and RF of their adolescent sons and daughters.
To achieve these objectives, we interviewed 105 adolescents (41 boys and 64 girls; aged 14-18) and their fathers and mothers during home visits and asked them to complete questionnaires. All participants were assured of anonymity and confidentiality before being interviewed separately. The interviews were audio taped and subsequently transcribed and coded. The independent variables were father’s and mother’s RF, Involvement in parenting, and Parenting Style (Warmth and Overcontrol). The dependent variables were the adolescent outcomes: Internalizing and Externalizing Symptoms, Social Competence, Self-Perception, and RF. Parental RF was measured using the Parent Development Interview and Fonagy's scoring system. Involvement in parenting was measured using the Child Caregiving Involvement Scale. Parenting Style was measured using the Parental Bonding Instrument. Internalizing Symptoms, Externalizing Symptoms, and Social Competence were measured using the Youth Self-Report. Self-Perception was measured using the Self-Perception Profile for Adolescents and adolescent RF was measured using an interview created for the present study and Fonagy's scoring system.

We examined six hypotheses:

1. The fathers' levels of RF, Involvement in parenting, Warmth, and Overcontrol are lower than those of the mothers.

2. Higher levels of parental RF are associated with higher levels of Involvement in parenting and Warmth and lower levels of parental Overcontrol.

3. Adolescents' RF scores are positively correlated with their levels of Social Competence and Self-Perception and negatively correlated with their levels of Internalizing and Externalizing Symptoms.

4. Higher levels of parental RF are associated with higher levels of adolescent RF, Self-Perception, and Social Competence and lower levels of Internalizing and Externalizing Symptoms.

5. Parental RF has a moderating effect on the associations between parental behavior and adolescent outcomes.

6. The father's level of RF is more strongly associated with the adjustment of his adolescent son than that of his adolescent daughter; whereas the mother's level of RF is similarly associated with both the adjustment of her adolescent daughter and that of her adolescent son.
We found that, while the parenting behavior variables are associated with positive adolescent outcomes only, parental RF is associated with both positive adolescent outcomes (higher levels of RF, Social Competence, and Prosocial Behavior) and negative outcomes (more Internalizing Symptoms and Social Problems and less positive Self-Perception). Adolescent RF is similarly associated with both positive and negative adolescent outcomes, and is the main mediator of the association between parental variables and adolescent outcomes. It may be concluded that high RF is associated with both benefits and costs.

The benefits of high levels of RF include a more accurate perception of one’s self and others and a higher awareness of distress in both one’s self and others, thereby encouraging the development of higher levels of social competence and prosocial behavior. On the other hand, self-awareness may lead to distress and less positive self-perception. Awareness of the feelings of others may also lead to feelings of distress, as well as guilt. One needs a minimum level of RF in order to be aware of the negative aspects of one’s self and those of others. Thus, RF taps abilities of self- and other-awareness, as well as a capacity to cope with the negative aspects of this awareness. The present study's findings imply that future research would benefit from considering the role of defensiveness in self-reports, in general, and in self-reports of self-perception, in particular. Researchers must also differentiate between highly positive self-perception and accurate self-perception and a minimum level of self-awareness.

We found that parental RF is a significant moderator of the outcomes of parenting behavior. This finding underscores the significance of RF as a context for parenting behavior and suggests that parental RF is important as a superordinate dimension that influences the associations between parenting behavior and adolescent outcomes. Thus, in the presence of high levels of parental RF, parenting behaviors induce more positive outcomes. The findings of the present study show that RF helps parents successfully manage the complex issue of parental control. These findings may contribute to our understanding of how authoritative parenting is associated with better adjustment of children and adolescents.

Finally, these findings indicate that although less reflective and less involved, fathers have a greater influence on most adolescent outcomes than mothers do. It was also found that the outcomes of adolescent boys were associated mainly with parental warmth and involvement, while the outcomes of adolescent girls were associated mainly with parental RF and overcontrol. It seems that adolescent boys, in particular, need a warm and involved parent, especially a father. This conclusion is important considering the fathers' lower levels of Involvement and Warmth and in light of the popular perception of boys as more independent.
than girls. These findings suggest that parenting behavior and parental RF may affect boys and girls differently. They also underscore the importance of including both fathers and mothers in future studies, as well as the need to differentiate between girls and boys.

The findings of the present study contribute to our understanding of the parenting of adolescents at the theoretical, methodological, and clinical levels. At the theoretical level, this study sheds light on the consequences of parental RF, as well as on the interplay between mental states and behavior. Specifically, our findings show how mothers' and fathers' RF levels and parenting behaviors are differentially associated with adolescent boys' and girls' outcomes. By delineating the associations between maternal and paternal RF and behaviors, on the one hand, and the outcomes of their adolescent boys and girls on the other, the present study provides a comprehensive picture of the ways in which parenting may affect adolescent adjustment. At the methodological level, these findings establish the applicability and reliability of an adapted interviewing guide for assessing RF levels of adolescents and their parents. Finally, at the clinical level, our findings suggest interventions for the prevention and treatment of adolescents’ adjustment difficulties. Focusing on RF as a metacognitive capacity may facilitate parents’ awareness and understanding of their own thought patterns and feelings, as well as those of their children.

Keywords: Adolescence, Adolescent Adjustment, Adolescent Reflective Function, Gender Differences, Parenting, Parental Involvement, Parenting Style, Reflective Function.
Introduction

Adolescence is a period of physical, cognitive, and social changes, during which adolescents and their parents must reorganize and adjust their relationships. Research has underscored the importance of parents during adolescence. While there is undisputed evidence that parents’ behavior affects the outcomes of their adolescent children, little is known about the cognitive and emotional determinants of parenting. The broad objective of the present study is to explore these determinants and their relationships with parenting behavior and adolescents’ adjustment.

We used Fonagy's construct of Reflective Function (RF) to assess the cognitive and emotional aspects of the personality. RF is defined as the metacognitive capacity to think about one’s own thoughts and feelings and those of others, in an attempt to understand and predict the behavior of other people. So far, studies of parental RF have been restricted to infants. However, parental RF may be particularly important during adolescence, as it may provide parents with insight into the developmental changes that their adolescent child is experiencing, as well as insight into their own feelings and thoughts in response to these changes. Fathers may assume a unique and significant role during adolescence. However, they continue to be underrepresented in parenting research. Therefore, the objectives of the present research are to explore the association between parental RF, parenting behavior, and the adjustment of adolescent children, and to compare the effects of mothers’ and fathers’ RF levels and behaviors on their adolescent boys and girls.

Adolescence and Parenting

Adolescence is considered to be a period of reorganization and psychological adjustment that is fraught with risks and opportunities (Steinberg, 2005). Adolescent girls and boys undergo biological, cognitive, and social changes. They have to shape their identities, establish their independence, and face the complexities of sexuality, career choice, peer pressure, and academic performance (Elliott & Feldman, 1993). They are at risk for engaging in negative health behaviors, such as drug and alcohol use (Clark, Bukstein, & Cornelius, 2002), unprotected sexual intercourse (Klerman, 2002), and violence (Hudson, Zimmerman, & Morrel-Samuel, 2006), and for suffering from depression (Kessler, Avenevoli, & Merikangas, 2001). Suicide, which is rare in childhood and early adolescence, becomes a more common
cause of death among older adolescents (Pelkonen & Marttunen, 2003). Thus, adolescence is a particularly critical and sensitive period at the threshold of adulthood.

Since Bowlby (1969) emphasized the central role of the parent-child relationship in normal development, an enormous body of theoretical and empirical literature has been gathered to support the significant role played by parents in child development (Maccoby, 2000; Sroufe, 2002). Different researchers have posited that the significance of this role diminishes when the child reaches adolescence, as adolescents try to achieve autonomy from their parents through a process of separation-individuation (Blos, 1979). Identity formation is achieved by emotional disengagement from the family and the establishment of closer relationships with peers (Erikson, 1968). However, recent developmental research has suggested that parents continue to play a major role in the continuing development of their adolescent children (Baumrind, 1991; Steinberg, 2001) and that the overriding emphasis on individuation neglects its dialectic counterpart, attachment (Blatt & Blass, 1990). Real separateness implies an ability to recognize both difference and similarity; and it is paradoxically the latter rather than the former that may be a true mark of autonomy (Fonagy, Gergely, Jurist, & Target, 2002). Therefore, the focus of research has shifted from an emphasis on parent-child estrangement during adolescence to a view that parents and children adjust in order to maintain their relationships.

Empirical research has shown that separation from parents is not a precondition for individuation, but rather that separation and individuation during adolescence are parallel developmental processes (Meeus, Iedema, Maassen, & Engels, 2005). Warm and responsive relationships between adolescents and their parents have been found to be associated with a variety of positive adolescent outcomes, including social competence, self-esteem, and prosocial behavior, as well as lower levels of depression, social anxiety, and aggression (Rice, 1990; Batgos & Leadbeater, 1994; Simons, Paternite, & Shore, 2001). The positive quality of the parent-child relationship has also been found to reduce adolescents' problem behaviors (Spoth et al., 2006), even when adolescents were exposed to deviant peer groups (Galambos, Barker, & Almeida, 2003; Dishion, Nelson, & Bullock, 2004).

**Parenting Behavior**

Over the last few decades, parenting behavior and its effect on children’s development has been the subject of extensive empirical research. In this dissertation, the term *parenting behavior* will be used to refer to the combined effect of parenting style and level of parental involvement.
Parenting Style

Two basic dimensions of parenting style have been identified: (a) a warm/cold (hostile) dimension, which refers to the predominant parental affect toward the child; and (b) a permissive/restrictive dimension, which refers to the degree of control that parents exert over their children (Maccoby & Martin, 1983). Warm parents display affection and support; hostile parents are critical and likely to belittle and punish their child, while restricting the amount of affection that they give. Restrictive parents make many demands on their children and monitor them to ensure that they meet these demands; permissive parents make few demands and give their children freedom to explore and make their own decisions (Maccoby & Martin, 1983).

These dimensions permit a distinction to be made among four parenting styles: (a) authoritarian (restrictive and cold), (b) authoritative (restrictive and warm), (c) permissive (nonrestrictive and warm), and (d) rejecting-neglecting (nonrestrictive and cold). Authoritarian parents impose demands and expect strict obedience. Authoritative parents set limits on their children's behavior, but are considerably more flexible than authoritarian parents and provide explanations for these limits. Permissive parents are warm, make few demands, encourage emotional expression in their children, and only rarely exert firm control. Rejecting-neglecting parents do not monitor their children, are not supportive, and may neglect their childrearing responsibilities altogether (Baumrind, 1991).

There is evidence that authoritative parenting is associated with positive outcomes for children and adolescents, while other parenting styles place children and adolescents at increased risk for psychological and behavioral problems (Steinberg, 2001). For example, when compared to adolescents who described their parents as neglectful, adolescents who described their parents as authoritative scored better on measures of psychosocial adjustment and self-esteem (Baumrind, 1991; Milevsky, Schlechter, Netter, & Keehn, 2007), had more secure attachment styles (Karavasilis, Doyle, & Markiewicz, 2003), and exhibited fewer behavioral problems and less drug abuse (Baumrind, 1991). Adolescents who described their parents as authoritarian scored highly on measures of obedience and conformity, but had relatively poor self-conceptions; while adolescents from permissive homes had a strong sense of self-confidence, but a higher frequency of substance abuse and behavioral problems (Lamborn, Mounts, Steinberg, & Dornbusch, 1991).

A more recent study of the effects of parental support, behavioral control, and psychological control (i.e., control of the child's behavior through psychological means, such as withdrawal of love and induction of guilt) on adolescent outcomes revealed that parental support was linked to more social initiative and less internalization of problems (e.g., a lower
incidence of depressed mood). Parental behavior control was linked to lower levels of externalizing problems and antisocial behavior, and parental psychological control was linked with both internalizing and externalizing problems (Barber, Stoltz, & Olsen, 2005).

**Parental involvement**

The term *parental involvement* is defined as the proportion of total child care performed by each parent (Wood & Repetti, 2004). Parental involvement has been reported to be conducive to healthy development (Frojd, Kaltiala-Heino, & Rimpella, 2007) and was found to be a protective factor against the development of behavioral problems among youth who had been exposed to violence (Pearce, Jones, Schwab-Stone, & Ruchkin, 2003; O'Donnell, Schwab-Stone, & Muyeed, 2002). Mothers and fathers have different levels of involvement in the parenting of their children (Pleck & Masciadrelli, 2004) and these differences may interact with other measures of parenting characteristics. Thus, the parenting style of a highly involved parent may be more significant for adolescent outcome than the style of a noninvolved parent.

**Reflective Function (RF)**

The preceding sections present a brief summary of the evidence that parenting behavior affects emotional and behavioral outcomes of adolescent children. However, little is known about the cognitive and emotional determinants of parenting, or about the processes whereby these determinants influence a child's development (Barber et al., 2005). Research has dealt mainly with parenting behavior, rather than with the questions of why parents behave as they do and what the determinants of individual differences in parenting behavior are.

Other authors have emphasized the importance of the context of parenting behavior. For example, Darling and Steinberg (1993) suggested that the emotional climate within which socialization occurs is best conceptualized as a context that moderates the effects of specific parenting practices on the child. Grusec and Goodnow (1994) have emphasized the importance of considering the characteristics of the child, the parent, and the situation, as well as the interrelationships between them, rather than focusing on the effects of specific forms of discipline only.

In 1984, Belsky presented a model of parenting in which he differentiated between parenting behavior and parental psychological resources. According to this model, parental psychological resources affect parenting behavior, which in turn affects children's development (Belsky, 1984). However, researchers have only recently suggested shifting the focus of research from specific parenting behaviors "to their implications for the broader arena of the
social ecology of child and adolescent development [and] to a broader conceptualization of facilitative social conditions or states, that are only in part defined by the parenting behaviors" (Barber et al., 2005, p. 119, emphasis added).

Such facilitative social conditions have been characterized as parental sensitivity, respect, openness, and responsiveness to their children (Barber et al., 2005). This is in line with the conclusion of Belsky (1984) that:

[P]arenting that is sensitively attuned to children's capabilities and to the developmental tasks they face, promotes a variety of highly valued developmental outcomes, including emotional security, behavioral independence, social competence and intellectual achievement. What kind of person should be able to provide such developmentally flexible and growth-promoting care? The sensitive individual, one might argue, is able to de-center and to appraise accurately the perspective of others… (Belsky, 1984, p. 85, emphasis added).

To sum up, several authors have emphasized the need to consider the context of parental behavior, in general, and parents’ understanding of their children and the parent-child relationship, specifically; rather than focusing only on parenting behavior. Adolescence in particular, seems to call for increased parental understanding, tolerance, control, and support. We assume that these challenges underscore the importance of parental awareness of the changing needs, feelings, and thoughts of their adolescent child, as well as the parents’ abilities to reflect on their own feelings and thoughts. This ability has been referred to as reflective function.

Definition of Reflective Function (RF)

Reflective function (RF) is defined as a metacognitive ability to think about one’s own thoughts and feelings and those of others in an attempt to understand one’s own behavior and the behavior of other people. The term RF refers to the ability to mentalize, which is the ability to envision one’s own mental states (feelings, beliefs, intentions, and desires) and those of others. By attributing mental states to the self and others, behavior becomes more meaningful and predictable (Fonagy & Target, 1997). Thus, RF encompasses both "seeing the self from the outside and seeing the other from the inside" (Fonagy, personal communication, October 28, 2007).
The concept of RF was developed within the framework of attachment theory. Over the past two decades, the focus of research on attachment has shifted from attachment behavior to attachment mental representations (Slade, Belsky, Aber, & Phelps, 1999). The mental representations of an adult’s early attachment experiences are reflected in his/her own descriptions of emotionally significant past relationships and his/her ability to articulate a coherent narrative about the quality of his/her own early relationships (Main, 1991). Main (1991) referred to the coherence of an individual’s narratives about attachment experiences as "metacognitive monitoring," which emphasizes the ability to think about one’s own thinking. Attachment patterns and their transmission across generations seem to be related to such metacognitive monitoring.

Elaborating on this concept, Fonagy et al. (1991, 1995, 1997) proposed their theory of RF, which expanded metacognitive monitoring to include a capacity to think about one’s own thoughts and feelings and those of others. RF refers to the stories we tell ourselves about ourselves and others. These stories organize our sense of who we are and who others are, and form the basis for significant relationships and self-construal (Fonagy & Target, 1997). Individuals lacking RF cannot step back from the immediate experience and consider mental and emotional processes. In the extreme, the lack of this ability may result in a personality organization referred to as borderline (Fonagy et al., 1995).

Parental RF has been shown to be related to children's early attachment relationships (Fonagy, Steele, Steele, Moran, & Higgit, 1991). Moreover, a mother’s RF has been shown to be related to the quality of her affective communication with her child (Grienenberger, Kelly, & Slade, 2005) and to her children's understanding of emotions at age six (Steele, Steele, Croft, & Fonagy, 1999). So far, research on parental RF has been restricted to mothers, infancy and early childhood. However, it stands to reason that parental RF is important at all developmental stages, and especially during adolescence. RF may provide parents with an insight into the developmental changes in their adolescent child, as well as an insight into their own feelings and thoughts, and may facilitate their ability to respond in a manner that is more attuned to the adolescents' needs.

Related Terms

The construct of RF has several predecessors. Kelly (1955) pioneered the research of personal constructs and modern social cognitive models, and proposed that individual differences in personality, emotions, and behavior are due to differences in the interpretations of reality (i.e., in the ways a person perceives the surrounding world). Bieri (1955) posited that
complexity or simplicity of the self reflects the number of dimensions a person uses to construe his/her own behavior and that of others. The more complex a person is, the more constructs he or she will use to describe and understand others, and the greater the predictive accuracy of an individual's behavior. Dennett’s (1987) notion of the intentional stance is closely related to RF. According to Dennett, the explanation of behavior in terms of beliefs and desires, so-called intentional states, provides good grounds for predicting human behavior, and these are the only grounds accessible to all of us.

There are several other concepts related to RF, each of which refers to different aspects of reflectivity. Self-consciousness, self-awareness, emotional intelligence, and introspection refer to one’s understanding of one’s self; and social intelligence, mind-mindedness, and empathy refer to one’s understanding of others. There are two other concepts that, similarly to RF, encompass both one’s understanding of one’s self and one’s understanding of others. Psychological mindedness, which is used in the context of psychotherapy, is defined as a "disposition to reflect upon the meaning and motivation of behavior, thoughts, and feelings in oneself and others" (Farber, 1989, p. 210); and theory of mind (TOM), which is defined as "the ability to understand social interaction by the attribution of mental states to oneself and to others" (Astington, 1996, p.184). Such an understanding of others' minds has been found to be related to social skills and moral sensibility in preschool children (Dunn, Cutting, & Demetriou, 2000).

Of all these terms/constructs, research examining the effects of parental characteristics on children’s outcomes has only examined the effects of parental empathy. However, this research has been limited by the uncertain definition and measurement of empathy (Kilpatrick, 2005; Eisenberg & Strayer, 1987). Empirical research has been limited mainly to samples of preschool and middle school children (Soenens, Duriez, Vansteenkiste, & Goossens, 2007), and this research has revealed low correlations between parental empathy and children's empathy (Strayer & Roberts, 2004). Research on empathy has been dominated by two opposing definitions of the term: the affective approach, which defines empathy as a vicarious sharing of another’s emotion; and the cognitive perspective-taking approach, which defines empathy as a nonemotional understanding of the other’s emotions, thoughts, and motives. The cognitive perspective-taking definition of empathy has appeared to be more useful for the measurement of empathy and more directly relevant to social competence (Kilpatrick, 2005).

Empathy and sympathy are logically linked with cognitive perspective-taking, because before one can develop sympathy for another person, one must first acquire an awareness of the other person’s state and make decisions not only about what the other is experiencing (i.e.,
attend to and recognize his or her emotional cues), but also about the cause of this experience (Kilpatrick, 2005). Parental empathy necessitates making accurate attributions about why the child is feeling that way (i.e., the parent employs his or her RF). Indeed, parents who were more accurate in their perceptions of their adolescents’ thoughts and feelings during conflicts reported more positive conflict outcomes (Hastings & Grusec, 1997). Thus, the existing research on parental empathy underscores the significance of the cognitive aspect of perspective-taking, on the one hand, and the problematic nature of self-report questionnaires on the other.

Development of RF

RF is thought to develop through the child’s experience of how his/her mental states are reflected upon by the caregiver (Fonagy et al., 1995). The child's capacity to create a coherent image of mind is dependent on an experience of being perceived as a mind by the caregiver, who becomes an attachment figure (Fonagy & Target, 1997). Winnicott (1965) suggested that the psychological self develops through perception of itself in another person’s mind and emphasized the importance of the caregiver’s psychological understanding of the infant. The most important interpersonal experiences, which confirm the child’s sense of being reflected in the mind of the other, are likely to be affect-laden interactions, especially those following the child’s expression of distress (Gergely & Watson, 1996).

For example, in a two-month-old that could be the caregivers' responsiveness to an infant’s cry; whereas in the older child, it could be a limit-setting response to one of the child’s transgressions. In both cases, the parent reflects upon the child’s behavior and responds in a way that at once soothes the child’s distress (promoting intimacy and sameness) and also suggests a mode of coping (promoting autonomy and separateness). Therefore, the RF of the parent provides children with a presentation of the contents of the parent’s mind that is both the same as and different from the contents of the child’s mind (Fonagy, Target, Steele, & Steele, 1998). The finding that maternal RF is related to children’s understanding of emotions at age six (Steele et al., 1999) and the report that mothers who think of their children in mentalistic terms (mind-mindedness) have children who have more advanced understandings of beliefs than other children (Meins & Fernyhough, 1999) support this contention.

During infancy and early childhood, parenting is guided mostly by intuitive and emotional responsiveness. However, as children grow, their relationships with their parents evolve into a discourse, both within the relationship and about the relationship (Bretherton, 1999). The evolving nature of child development and of the parents' role calls for different,
higher-order capacities. There is evidence that the attachment system develops from primary attachment behaviors, to procedural knowledge about behavioral strategies, to levels of cognitive representation that include declarative knowledge about attachment, attachment figures, and their availability, as well as the self (Spangler & Zimmermann, 1999).

More systematic research on the development of understanding others' minds and emotions has been carried out in the framework of TOM. A large study of pairs of twins found that heredity accounted for only 15% of the variation in TOM scores (Hughes et al., 2005). On the other hand, several studies have suggested that the development of TOM is influenced mainly by the environment, especially the parent-child relationship. For example, there is evidence that securely attached infants outperform other children on TOM tasks (Fonagy, Redfern, & Charman, 1997; Meins, Fernyhough, Russell, & Clark-Carter, 1998). Securely attached preschoolers have also been found to understand negative (Laible & Thompson, 1998) and mixed (Steele et al., 1999) emotions better than their peers.

Development of TOM was also found to be encouraged through conversations involving mental states. Mothers' talking about emotions with their young children was associated with observed levels of TOM understanding (Ruffman, Slade, & Crowe, 2002; Ruffman, Slade, Devitt, & Crowe, 2006), emotional understanding (Taumoepeau & Ruffman, 2006; Laible & Thompson, 2002), and conscience development (Laible & Thompson, 2000) in later years. Other studies have found a positive correlation between asking a child to reflect on a victim's feelings (but not general discussion and disciplinary actions) and TOM tasks (Ruffman, Perner, & Parkin, 1999). Children's conversations with parents and siblings about internal states have been shown to be related to later measures of understanding of the mind and emotions (Dunn & Brown, 1993; Hughes & Dunn, 1998). Preschoolers with older siblings demonstrate mind understanding at an earlier age than children without older siblings (Perner, Ruffman, & Leekman, 1994). Finally, a negative relationship between an understanding of mind and authoritarian parenting attitudes has been observed among preschoolers (Vinden, 2001).

Vygotzky (1981, quoted in Astington, 1996) emphasized the importance of investigating the origins of an individual's competencies within his or her social group. "Any function in the child's cultural development appears twice, or on two planes. First, it appears between people as an inter-psychological category, and then within the child as an intra-psychological category" (Vygotzky, 1981, p. 163, quoted in Astington, 1996).

From a Vygotzkyan perspective, individual development originates in interpersonal activity as a shared activity is internalized and becomes an individual one. Language plays an
important role in this process because shared discourse and interactions with older, more experienced individuals become intrapersonal. Thus, children construct an understanding of emotions and mind within the context of social relationships with other people, particularly caregivers. Once children can talk about the social, emotional, and psychological world, they begin to reflect on people's activities in psychological terms (Piaget, 1962; Harris, 1996). Similarly, a recent review of the literature concluded that understanding of the mind develops gradually in the context of social interaction. However, children do not simply adopt socially available knowledge; they construct an understanding of mind based on social interactions (Carpendale & Lewis, 2004).

Toward the end of childhood, the emergence of formal operational thought enables the child to differentiate between his own mental constructs and the givens of perception, and to consider multiple perspectives (Selman, 1980). Adolescents' thinking about others becomes more abstract, differentiated, and multidimensional, and enables higher levels of moral reasoning (Eisenberg & Morris, 2004). Thus, in contrast to younger children, adolescents are more likely to consider both external and internal factors when attempting to understand or explain their own behavior or that of others (Elkind, 1998) and are also likely to have deeper understandings of individuals (Selman, 1980). However, Elkind (1998) has argued that the advancing cognitive capabilities of early adolescents, particularly their ability to take the others' perspective, lead to a specifically adolescent version of egocentrism. The belief that the thoughts of others are directed toward the self, which causes adolescents to become preoccupied with their own behavior and appearance, constitutes the egocentrism of the adolescent child. However, interactions with other people gradually enable the adolescent to recognize the difference between his or her own thinking and the thoughts, interests, and concerns of others (Elkind, 1998). Hence, the significance of adolescents' social relations, which affect and are affected by the changes they are experiencing.

Moreover, recent research findings indicate that the maturation of the frontal lobes of the brain, which are associated with regulation and inhibition processes, continues well into late adolescence, while puberty and heightened emotional arousability occur in early adolescence (Steinberg, 2005). This gap may create a period of heightened vulnerability to problems in regulation of affect and behavior (Steinberg, 2005). Increases in self-awareness and reflectivity enhance the possibility of monitoring and regulating one's own thinking and behavior (Keating, 1993). Thus, developmental changes during adolescence set the stage for further development of RF and may gain even more significance as the gap between puberty
and regulation development widens. Relationships and interactions with the social environment, in general, and with parental figures, in particular, are crucial.

Empirical research on the development of TOM during middle childhood and adolescence is scarce (Flavell, 2000). So far, research has found an association between TOM and social competence (Bosacki & Astington, 1999), and self-understanding (Bosacki, 2000) in preadolescents. Another study found that adolescents reflected in a more advanced way about teachers with whom they had positive relationships (O'Connnor & Hirsch, 1999). And lastly, a correlation has been reported between TOM tasks, as a measure of general mentalizing ability, and attachment coherence, as a measure of relationship-specific mentalizing ability (Humfress, O'Connor, Slaughter, Target, & Fonagy, 2002). It may be concluded that there is a need for further studies of the development of the understanding of the mind during adolescence and of the associations between parental and adolescent RF.

The Role of the Father

Most studies of parental behavior and RF have been conducted on mothers. However, the few studies that have included fathers have suggested that fathers significantly impact adolescents' development. The role of the father has changed dramatically over the past decades. On the one hand, the increased rates of gainfully employed mothers have increased the significance of the role that fathers play in childrearing. On the other hand, increased divorce rates and the increase in the number of single-parent families have made fathers increasingly unavailable to the next generation (Doherty, Kouneski, & Erickson, 1998). Although believed to be unique and more important than previously thought, the father's role remains uncertain and poorly defined (Trowell, 2002). It is intrinsically ambiguous and is based upon cultural prescriptions (Garbarino, 2000).

Earlier studies of paternal influence have focused on sex-role development, especially in sons. Later, however, it was found that it is the quality of the father-son relationship (i.e., paternal warmth and sensitivity) that mainly affects the child’s adjustment; whereas paternal masculinity appears to be irrelevant (Lamb, 1997; Marsiglio, Amato, Day, & Lamb, 2000). There is mounting evidence that the father has a direct impact on his children’s adjustment. Children of fathers who are involved in parenting exhibit higher cognitive competence and empathy, do better in school, engage in less antisocial behavior, and have more successful relationships with others, as compared to children of uninvolved fathers (for a review see Lamb & Lewis, 2004). Independent of the mother’s involvement, the father's involvement in parenting has been shown to protect against psychological maladjustment in adolescents from
nonintact families (Flouri & Buchanan, 2003). Studies of clinically referred children have found that paternal characteristics were associated with children's psychopathology (Phares & Compas, 1992).

Fathers and Mothers Play Different Roles

Within his psychoanalytic theory, Freud viewed the father as central to human development and described the castration and Oedipus complexes as major determinants of emotional growth. In the second half of the 20th century, psychoanalysts, such as Donald Winnicott and John Bowlby, shifted the focus from paternal to maternal influence on childhood development and restricted the father’s role to protecting the mother-child dyad (Etchegoyen, 2002). More recently, the role of the father in parenting has been re-emphasized, and this has been followed by a growing body of research on the father-child bond and fatherhood (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Trowell, 2002).

Empirical studies report that relationships of fathers with their children are distinct from mother-child relations. Fathers tend to play with their children; whereas mothers focus on caretaking and nurturing (Lamb, 1997). Fathers encourage their children to be competitive and independent (Pollack, 1999) and fathers' involvement in parenting is selective and restricted to instrumental and problem-centered interactions (Collins & Russell, 1991). To this day, fathers in Western society spend less time with their children than mothers. They assume less responsibility for their children's care, even when mothers are employed full time (Pleck & Masciadrelli, 2004). Breadwinning remains the father's main task, even in families with two wage earners. Despite dramatic changes in ideology regarding gainful employment of women since the 1970s, there has not been a complementary shift in the Western cultural tendency to view child care as primarily the mother's job. Fathers' emotional involvement in their families is less than that of mothers'. For many fathers, empathy, sensitivity, and personal conversations with their children are alien to their realm of experience (Larson & Richards, 1994). However, there has been a gradual increase in the involvement of fathers in intact families in recent years and, in today’s Western culture, the father is evolving into a more accessible, warm, involved, and nurturing figure (Pleck & Pleck, 1997; Pleck & Masciadrelli, 2004).

Little is known about fathers’ RF and its effects on offspring. The only study to compare the RF levels of fathers and mothers found lower RF levels among fathers, as compared with mothers, during first pregnancy (Lis, Zennaro, & Mazzeschi, 2000). This is consistent with the findings that women are more aware of emotions in both themselves and others (Ciarrochi, Hynes, & Crittenden, 2005) and are more inclined to take the perspective of
another person (Davis & Franzoi, 1991). Women were found to be better than men at inferring mental states from photographs of eyes (Baron-Cohen, Jolliffe, Mortimore, & Robertson, 1997) and could more accurately identify emotions on the basis of nonverbal cues across cultures (Hall, 1984).

The Significance of Fathers During Adolescence

The role of the father changes during the different stages of child development (Collins & Russell, 1991; Hosley & Montemayor, 1997). During pregnancy and infancy, this role is one of support. As the infant grows up, he/she can benefit from interaction with the father, as an additional caregiver with different qualities, attitudes, and personality. During adolescence, the father is thought to assume a unique role (Collins & Russell, 1991). Fathering may be particularly important for adolescents as they begin to make decisions about school and careers and as they form separate identities (Videon, 2005). Still, studies have shown that fathers continue to spend less time with their adolescent children than mothers do (Hosley & Montemayor, 1997; Holmbeck, Paikoff, & Brooks-Gunn, 1995) and that fathers' relationships with their adolescent children are more distant, unemotional, and less intense than adolescent-mother relationships (Noller & Callan, 1990; Youniss & Ketterlinus, 1987). Fathers listen less to the problems of their adolescent children than do mothers (Brody, 2000; Youniss & Smollar, 1985). Fathers have fewer arguments and conflicts with their adolescent children than mothers do, presumably because they are more avoidant and less emotionally involved with their families (Hosley & Montemayor, 1997).

However, empirical research concerning the father’s role in parenting remains scarce. Compared with mothers, fathers continue to be underrepresented in studies of developmental psychology (Phares & Compas, 1992; Phares, Fields, Kamboukos, & Lopez, 2005), especially in research on adolescence (Zimmerman, Salem, & Notary, 2000). Despite the relative abundance of research on parenting style, the unique influences of maternal and paternal parenting dimensions on adolescent adjustment remain unexplored. Most studies of parenting ask individual adolescents to rate either their relationship with their mother or with their parents as a single entity (e.g., Armsden & Greenberg, 1987). Some researchers have asked adolescents to rate their relationships with their mothers and fathers separately. However, in these studies, researchers have tended to aggregate the parenting styles of both parents and provide a single overall index of parenting style (e.g., Lamborn et al., 1991) because the correlation between maternal and paternal parenting styles has generally been high (Laible & Carlo, 2004).
There is some evidence that fathers’ involvement in parenting during adolescence is actually more important than maternal involvement. For example, it was found that the father's acceptance of his adolescent child was the main predictor of the adolescent’s adaptation (Forehand & Nousiainen, 1993) and social competence (Barber et al., 2005). Father's parenting style was found to be a better predictor of adolescent self-esteem than mother's parenting style (Bartle, Andersen, & Sabatelli, 1989). Preadolescent boys' behavioral restraint was predicted solely by their fathers' appropriate control and not by their mothers' behavior (Feldman & Wenzel, 1990) and paternal warmth was found to be a more significant predictor of adolescents' interpersonal aggression than maternal warmth (Veneziano, 2003). On the other hand, other studies have detected no differences between the effects of fathers and mothers on their children's outcomes (e.g., Paterson, Pryor, & Field, 1995), or even the reverse. For example, behavioral control by mothers was more predictive of adolescent antisocial behavior than fathers’ behavioral control (Barber et al., 2005) and perceived maternal, but not paternal, support and control were related to adolescents' reports of sympathy, social competence, and self-worth (Laible & Carlo, 2004).

The scarcity of empirical research on the role of the father in parenting, as well as changing societal norms, may partly explain some of the unresolved inconsistencies in research findings, especially during adolescence. It seems likely that, since mothers and fathers have different relationships with adolescents, mothers' and fathers' parenting behaviors and RF levels may affect different aspects of the development of their adolescent children.

**Fathers and Sons Versus Daughters; Mothers and Sons Versus Daughters**

Are fathers more significant for adolescent boys than for adolescent daughters? Studies that have differentiated between fathers and mothers and adolescent sons and daughters have yielded contradictory results. On the one hand, some authors have failed to detect a gender-specific interaction between parents and their adolescent sons and daughters (Laible & Carlo, 2004; Videon, 2005; Spoth et al., 2006). In their meta-analysis of 301 studies, Russell & Saebel (1997) found that out of 116 studies that included mothers and fathers and boys and girls, only one reported significant differences among all four dyads. Often there were interactions between parent gender and child gender. However, the form of this interaction varied from one study to another and from one measure to another.

On the other hand, a positive father-child relationship has been reported to reduce risk behaviors (delinquency and substance use) more in adolescent boys than girls (Bronte-Tinkew, Moore, & Carrano, 2006); whereas negative mother-child relations affect girls more than boys.
Roelofs, Meesters, Ter-Huurne, Bamelis, & Muris, 2006). Fathers have been reported to spend more time with their sons than with their daughters (Harris, Furstenberg, & Marmer, 1998).

However, recent studies found no effect for child gender on the level of paternal involvement (Pleck & Masciadrelli, 2004).

According to Brody (1999), adolescence is characterized by increased gender-differentiated interaction patterns between parents and their children. Specifically, the father may facilitate the acquisition of appropriate levels of autonomy and provide a model for identification, especially for adolescent boys (Hosley & Montemayor, 1997). The finding that paternal involvement in parenting is particularly important for adolescent boys is also supported by clinical research and interviews with adolescents. Adolescent boys express a wish for a close relationship with their fathers and yearn for their fathers’ approval, and this need often contrasts with their fathers’ detachment and distancing behavior (Herzog, 1982; Pollack, 1999). Similarly, Israeli adolescent boys have been reported to express a need for their fathers’ involvement, acceptance, and approval, on the one hand; and lack of paternal emotional responsiveness, on the other (Smilanski, 1990). Israeli adolescents were also found to espouse their fathers’ views on gender roles (Kulik, 2002). While daughters appear to grow emotionally distant from their fathers from early to late adolescence (Youniss & Smollar, 1985), the adolescent boy attempts to disengage himself from his mother while forming a new attachment with his father (Pollack, 1999).

In comparison with mothers, fathers have been found to show more differential treatment of boys and girls (Cowan, Cowan, & Kerig, 1993) and, specifically, to engage in differential socialization of emotional expression for boys and girls (Chaplin, Cole, & Zahn-Waxler, 2005; Lytton & Romney, 1991). In contrast, there is little evidence that mothers are differentially involved in caring for sons versus daughters (Lytton & Romney, 1991). A longitudinal study found that, over a three-year period, fathers of schoolchildren increased their relative contribution to child care when the proportion of male children in the family was greater. Although mothers were found to be more involved in caregiving than fathers, their relative level of involvement tended to decrease when there were no young children in the family (Wood & Repetti, 2004).

Therefore, in the present study we examined and compared the independent effects of mother's and father's RF levels and parenting behaviors on their adolescent sons and daughters, with special emphasis on the father's role during adolescence.
Objectives and Hypotheses of this Research Project

Objectives

The presented literature review reveals that adolescents' adjustment is affected by their relationships with their parents. The challenges of adolescence underscore the importance of parents’ awareness of the changing needs, feelings, and thoughts of their adolescent children and the importance of the parents’ abilities to reflect on their own feelings and thoughts. Before a parent is able to respond empathically to a child’s needs, he or she must first notice and accurately interpret those needs. Therefore, it stands to reason that parental RF is important during adolescence. However, empirical investigations of parental RF have focused on mothers, infants, and young children. We know of no other studies of the effect of parental RF on adolescent children.

Empirical studies of the development of the ability to understand emotions and the mind have been conducted within the framework of TOM. However, most empirical investigations of TOM development have focused on preschoolers and young children. Hence, the significance of studying the further development of understanding of mind (TOM/RF) in adolescence and the broad goal of the present research: To explore the RF levels of both parents and their adolescent child, and the relationship between RF and other parenting characteristics and adolescent adjustment indices.

Parental RF may moderate the association between parenting behavior and adolescent outcomes. Socialization research is shifting from a focus on direct links between parenting and children's outcomes toward models that consider parenting in the context of other factors (Kochanska, Aksan, Knaack, & Rhines, 2004; Grusec & Goodnow, 1994). Therefore, we explored whether RF may moderate the impact of parenting behavior on adolescents' outcomes. An attempt was made to determine whether a similar parenting behavior would be more effective when applied by a reflective parent than by a nonreflective parent.

Our review of the literature also identified a discrepancy between the importance of fathers in parenting, on the one hand, and the relatively little attention fathers have received in empirical studies of parenting on the other. There is some evidence that the father's role in parenting attains a unique importance during adolescence and that this effect may be different in boys and girls. However, the scarcity of studies and the lack of consistency in their findings suggest that definitive conclusions can not yet be drawn. The clinical literature, which points to adolescent boys' yearnings for their fathers’ closeness and approval, as well as findings that point to more differential treatment of boys and girls by fathers as compared to mothers, suggest that fathers may be more important to their adolescent sons; while mothers are equally
important to their adolescent sons and daughters. Furthermore, researchers have failed to analyze whether parental characteristics of one parent interact with those of the other in producing adolescent outcomes (Laible & Carlo, 2004). Therefore, in the present study, we examined how parental characteristics of both mothers and fathers independently and jointly associate with adolescent boys’ and girls’ outcomes.

It has also been argued that different aspects of parenting may influence divergent areas of adjustment and that the conclusions one reaches about the effects of a particular parenting variable depend on the outcome studied (Lamborn et al., 1991). Moreover, much attention has been given to the problematic outcomes of adolescence, while considerably less attention has been devoted to the positive changes that can occur during adolescence (Carlo, Fabes, Laible, & Kupanoff, 1999). Recently, several authors have called on their colleagues to focus on growth-promoting processes in child and adolescent development, in addition to maladaptive processes (e.g., Belsky, Jaffee, Sligo, Woodward, & Silva, 2005), and the existing literature suggests an association between RF and TOM and the social domain (i.e., social skills and prosocial behavior). Therefore, the present study considers simultaneously a variety of measures of adolescent adjustment, including markers of positive adolescent adjustment (i.e., social competence, RF, and self-perception) and markers of problematic adolescent adjustment (i.e., internalizing and externalizing symptoms), with special emphasis on the social domain.

Finally, research in this field, particularly research on adolescents, is mostly based on self-report measures (e.g., Laiable & Carlo, 2004; Gray & Steinberg, 1999), which are subject to response bias and social desirability. This indicates the importance of the use of multiple methods to allow for the capture of both quantitative and qualitative data provided by different informants (e.g., parents and adolescents) and different data-collection procedures (e.g., interviews and questionnaires). To achieve these objectives, we designed a study based on the simultaneous collection of data from fathers, mothers, and their adolescent children during home visits. Data collection was based on (a) qualitative coding of semistructured interviews, according to Fonagy's coding manual, in order to assess parental and adolescent RF; and (b) existing questionnaires that assess parenting behavior (i.e., level of involvement, warmth, and overcontrol) and adolescents' outcomes (i.e., internalizing and externalizing symptoms, self-perception, and social competence).

In summary, the present study attempts to overcome some of the shortcomings of past studies by (a) measuring both parental RF and parenting behavior; (b) measuring parenting characteristics of both fathers and mothers; (c) including a range of outcome variables that tap several aspects of adolescents' adjustment and wellbeing, in order to evaluate more thoroughly
the impact of various parental characteristics; (d) using simultaneously collected reports from parents and adolescents; and (e) using questionnaires as well as a semistructured interviews.

Hypotheses

The following hypotheses were tested:

1. The fathers’ levels of RF, involvement in parenting, warmth, and overcontrol are lower than those of the mothers.

2. Higher levels of parental RF are associated with higher levels of involvement in parenting and warmth and lower levels of parental overcontrol.

3. Adolescents’ RF levels are positively correlated with their individual levels of social competence and self-perception and negatively correlated with levels of internalizing and externalizing symptoms.

4. Higher levels of parental RF are associated with higher levels of adolescent RF, self-perception, and social competence, as well as with lower levels of internalizing and externalizing symptoms.

5. Parental RF has a moderating effect on the associations between parental behavior and adolescents’ outcomes (i.e., parental RF intensifies the association between parental behavior and adolescents’ outcomes).

6. The degree of the associations between parental RF and adolescents’ outcomes differs according to the gender of the adolescent child. The father's level of RF is more strongly associated with the adjustment of his adolescent son than that of his adolescent daughter; whereas the mother's level of RF is associated with both the adjustment of her adolescent daughter and that of her adolescent son.
Method

Participants

The study's population consisted of a convenience sample of 105 adolescents (64 girls and 41 boys) and their mothers and fathers. The adolescents ranged in age from 14 to 18 years, with a mean age of 15.8 years ($SD = 1.13$ years). The mothers' mean age was 46.4 years ($SD = 4.9$ years) and the fathers' mean age was 49.3 years ($SD = 5.5$ years). Adolescents and their parents were recruited over the telephone, using high school student directories ($9^{th}$-$12^{th}$ grade), and also by asking families who participated in the study to refer us to other families who might be willing to participate. Consent to participate in the research was obtained from both parents and from their adolescent children. The inclusion criteria were: (a) intact families, (b) reasonable proficiency in the Hebrew language, and (c) parental education of at least seven grades. The exclusion criteria were: (a) refusal to participate in the study of one or more family members, and (b) diagnosed mental disorders in the parents or the adolescent.

Table 1

_Distribution (n, %) of the Study's Subjects According to Demographic Variables_

<table>
<thead>
<tr>
<th></th>
<th>Mothers</th>
<th></th>
<th>Fathers</th>
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<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$%$</td>
<td>$n$</td>
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<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary-partial</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Secondary</td>
<td>21</td>
<td>20</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>16</td>
<td>15</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>$1^{st}$ academic degree</td>
<td>36</td>
<td>34</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>$2^{nd}$/$3^{rd}$ academic degree</td>
<td>26</td>
<td>25</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>89</td>
<td>85</td>
<td>102</td>
<td>97</td>
</tr>
<tr>
<td>Not employed</td>
<td>16</td>
<td>15</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Ethnic background</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American/European origin</td>
<td>54</td>
<td>50.9</td>
<td>57</td>
<td>53.8</td>
</tr>
<tr>
<td>Asian/African origin</td>
<td>51</td>
<td>49.1</td>
<td>48</td>
<td>46.2</td>
</tr>
</tbody>
</table>
About 94% of mothers and 96% of fathers had 12 or more years of education (Table 1). Rates of employment were 97% for fathers and 85% for mothers. About half of the mothers and fathers were of American/European origin and half were of Asian/African origin. In about one-third of the families, both parents were of American/European origin, in one-third both were of Asian/African origin, and one-third of the families included one parent of Asian/African origin and another of American/European origin. All parents were married ($M = 23.1$ years; $SD = 5.1$). For all of the mothers, it was their first marriage; while for 9% of the fathers, it was their second marriage.

Procedure

After receiving the approval of the University's Ethics Committee, data were collected during scheduled home visits. The procedure for the visits was as follows. First, a brief description of the study was provided to the parents and the adolescent and they were assured that their identities would not be disclosed and that their responses would be kept confidential and used for research purposes only. Then, all three family members were asked to sign a written informed consent form (Appendix A). Finally, fathers, mothers and their adolescent children were interviewed separately and concurrently by three interviewers in separate rooms. After the interviews, the father, mother, and adolescent were asked to complete several questionnaires in the interviewer's presence. At the end of the procedure, the family received a written explanation of the study (Appendix B), as well as a book of sayings about adolescence as a token of appreciation. The interviews were audio taped and subsequently transcribed verbatim and coded.

Measures

The parental variables were: RF, Involvement, and Parenting Style (Warmth and Overcontrol). The adolescent variables were: RF, Internalizing and Externalizing Symptoms, Personal and Social Self-Perception, and Social Competence. The demographic data included child's age and parents’ ages, countries of origin, levels of education, and professions (Appendix C).

Parental Measures

Parental RF was measured using the Parent Development Interview (PDI; Aber, Slade, Berger, Bresgi, & Kaplan, 1985). We used a Hebrew version of the PDI (Dollberg, 2003),
which we adapted for parents of adolescents. The revised Hebrew version included 15 questions that asked the parent to describe his/her child, herself/himself as a parent, and their relationships (Appendix D). For example: "Could you please describe (name of child)?"; "Has (name of child) changed during the last few years?"; "What makes (name of child) feel sad or distressed?"; "Can you give me an example from the last time that he/she was sad and what happened then?"; "How do you respond to (name of child) when he/she is sad? What are your feelings and thoughts?"; "How do you think your relationship with (name of child) is affecting his/her development or personality?"; and "What is the most difficult thing for you to cope with in your relationship with (name of child)?" The interview took approximately 20 minutes to administer ($M = 20.02$ minutes; $SD = 8.02$).

To assess the level of RF, we used Fonagy's scoring system (Fonagy et al., 1998), as adapted for the PDI (Slade, Bernbach, Grienenberg, Wohlgemath-Levy, & Locker, 2001). Scoring was based on verbatim transcripts made from audiotapes of the interviews. The answers to each question were scored and then an overall score was determined for the entire interview.

During November 2003, the author of this thesis participated in an RF-scoring workshop at the Anna Freud Center in London. In 2004, she translated the scoring manual into Hebrew and conducted a 48-hour training workshop for research assistants (undergraduate psychology students) at Ben-Gurion University, which trained these assistants to score the interviews used in this study. The workshop participants became familiar with the scoring manual and practiced scoring several interviews together. At a more advanced stage, they first scored the same interview individually, and then discussed the similarities and differences between the scores they had assigned and the reasons for these differences. Finally, each interview was scored independently by the author of this thesis and a research assistant. Coding discrepancies were resolved by discussion. The RF scores were assigned on a scale from -1 (negative RF) to 9 (full or exceptional RF). Appendix E presents examples of parental responses indicating low and high levels of RF. The correlation coefficient between judges was .87 for interviews with mothers and .89 for interviews with fathers. Internal consistency, as measured by Cronbach's alpha, was .94.

The level of parental Involvement was measured using the Child Caregiving Involvement Scale (CCIS; Wood & Repetti, 2004). The CCIS is a 10-item scale that assesses parents' perceptions of their own and their spouse's responsibilities for specific childcare activities. The scale assesses both direct involvement (e.g., talking with the child), as well as indirect involvement (e.g., attending school meetings). Each item was rated on a 5-point scale,
ranging from none or very little responsibility to almost complete or complete responsibility. For this study, the wording of several items was adapted to suit parents of adolescents and only the parents' perceptions of their own responsibilities were assessed (Appendix F). Internal consistency, as measured by Cronbach's alpha, ranged in the original scale from .77 to .92 (Wood & Repetti, 2004). In the present study, Cronbach's alpha values ranged from .72 for maternal Involvement to .82 for paternal Involvement.

Parenting Style was measured using the Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979). The PBI is a 25-item self-report questionnaire for adolescents and adults that provides an estimate of parental behavior throughout childhood and adolescence. The first dimension, Parental Care (as displayed by warmth and affection at one pole and coldness and rejection at the other), consists of 12 items. The second dimension, Parental Overprotection (i.e., the extent to which the child is allowed to develop autonomy or is rigidly controlled), consists of 13 items. Participants responded according to a 4-point scale that ranged from strongly agree to strongly disagree (Appendix G). In the present study, the adolescents completed two forms, one for mothers and a parallel form for fathers. The internal consistency of the instrument, as reported by Parker et al. (1979), was .88 for the Care scale and .74 for the Overprotection scale, and the test-retest reliability was .76 for the Care scale and .63 for the Overprotection scale. In the present study, internal consistency, as measured by Cronbach's alpha, ranged from .87 to .88 (mothers and fathers, respectively) for the Care scale and from .80 to .84 (mothers and fathers, respectively) for the Overprotection scale.

Adolescents' Measures

Adolescent RF was assessed through a semistructured interview procedure that we developed for the present study. Since we know of no published method for the assessment of adolescent RF, we used a combination of questions from several existing interview protocols, specifically the Adult Attachment Interview (AAI; Main & Goldwyn, 1994), the Child Attachment Interview (CAI; Target, Fonagy, & Shmueli-Goetz, 2003), and the Object Relations Inventory (ORI; Blatt, Chevron, Quinlan, Schaffer, & Wein, 1992). Our interview included 19 questions that asked the adolescent to describe himself/herself, his/her mother and father, and their relationships (Appendix H). For example: "Can you describe your mother/father?"; "Can you tell me about a time when you were sad? Did you want someone to help you?"; "In what ways do you want/not want to be like your mother/father?"; and, "Did you ever feel insulted by your parents? When? Why do you think your parents behaved as they
We used Fonagy's scoring system to determine RF levels (Fonagy et al., 1998), the same procedure that we used for scoring the parents' interviews. The correlation coefficient (interrater reliability) between the scores given by the different evaluators was .89 and the internal consistency, as measured by Cronbach's alpha, was .94.

Adolescents' Internalizing and Externalizing Symptoms and Social Competence were measured using the Youth Self-Report (YSR; Achenbach & Rescorla, 2001). The YSR is a self-reported, standardized method for assessing competencies and problems in adolescents between 11 and 18 years of age. It consists of 20 items designed to assess competence and 113 items designed to assess behavioral and emotional problems. The items concerning behavioral and emotional problems are scored on a 3-point scale (0 = not true, 1 = somewhat true or sometimes true, and 2 = very true or often true). The competence scales include Activity, Social, School, and Total Competence. The items concerning behavioral and emotional problems yield two broad-band behavioral syndromes (Internalizing and Externalizing Symptoms) and eight narrow-band behavioral syndromes (Withdrawn, Anxious/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior). Cronbach's alpha coefficients for the two broad-band scales ranged from .90 to .96 in previous studies (Achenbach & Rescorla, 2001). In the present study, the adolescents completed the Hebrew version of the questionnaire (Psychtech LTD, 2001) and we analyzed the results of the Social Competence scale and the two broad-band behavioral syndromes (i.e., Internalizing and Externalizing Symptoms). Internal consistency, as measured by Cronbach's alpha, was .63 for the Social Competence scale and .82 for both Internalizing and Externalizing Symptoms.

Self-Perception was measured using the Self-Perception Profile for Adolescents (SPPA; Harter, 1988). This questionnaire asks respondents to indicate self-perceptions for eight age-appropriate domains, as well as for global self-worth. In the present research, items concerning two domains (Job Competence and Athletic Competence) were excluded from the questionnaire. Thus, the questionnaire included 30 items. Each question was scored on a scale from 1 to 4, with a high score indicating high self-perception concerning that dimension (Appendix I). The domains and their reported Cronbach's alpha values were: Scholastic Competence (.81), Physical Appearance (.86), Romantic Appeal (.80), Social Acceptance (.78), Close Friendship (.83), Behavioral Conduct (.78), and Global Self-Worth (.88; Harter, 1988). In the present study, the Cronbach alpha values were: Scholastic Competence (.68),
Physical Appearance (.88), Romantic Appeal (.61), Social Acceptance (.56), Close Friendship (.65), Behavioral Conduct (.73), and Global Self-Worth (.62).

In order to reduce the number of dependent variables, a principal component factor analysis was conducted for the SPPA items. Two content domains were identified, which together explained 53.75% of the variance (Table 2). The first one included four dimensions: Close Friendship, Social Acceptance, Romantic Appeal, and Behavioral Conduct, areas mainly related to Social Self-Perception. The second domain included Scholastic Competence, Physical Appearance, and Global Self-Worth, dimensions mainly related to Personal Self-Perception. Internal consistency, as measured by Cronbach's alpha, ranged from .74 for the Social Self-Perception factor to .85 for the Personal Self-Perception factor. Thus, two general dimensions, Personal Self-Perception and Social Self-Perception, were derived from the questionnaire.

Table 2

*Loading Coefficients of the Two Factors Identified in the Self-Perception Profile for Adolescents*

<table>
<thead>
<tr>
<th></th>
<th>Factor 1: Social</th>
<th>Factor 2: Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close Friendship</td>
<td>.76</td>
<td>-.36</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>.68</td>
<td>.20</td>
</tr>
<tr>
<td>Romantic Appeal</td>
<td>.65</td>
<td>.32</td>
</tr>
<tr>
<td>Behavioral Conduct</td>
<td>.56</td>
<td>.21</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>.05</td>
<td>.80</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>.39</td>
<td>.77</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>.07</td>
<td>.55</td>
</tr>
<tr>
<td>Eigen values</td>
<td>1.92</td>
<td>1.84</td>
</tr>
<tr>
<td>% of variance explained</td>
<td>27.5</td>
<td>26.3</td>
</tr>
</tbody>
</table>
Results

We performed five sets of analyses. First, the descriptive characteristics of the parents' variables will be presented, comparing mothers and fathers. Second, the descriptive characteristics of the adolescents' variables will be presented, comparing boys and girls. Third, we will present the observed correlations between the research variables: between the parental variables, between the adolescents' variables, and between parental variables and adolescent outcomes. Fourth, we will present the results of our hierarchical regression analyses, which we performed in order to determine the independent explanatory power of the parental variables for the variance in the adolescents' outcomes. Finally, we will present the path model that we derived, in order to examine whether the associations between parental variables and adolescent outcomes are mediated by adolescents' RF and Self-Perception.

Maternal and Paternal Parenting Variables

Our first hypothesis was that the fathers’ levels of RF, Involvement in parenting, parental Warmth, and Overcontrolling behavior are lower than those of the mothers. In order to examine this hypothesis, as well as whether the differences between fathers and mothers are influenced by the gender of the child, we conducted a 2 x 2 MANOVA (Father/Mother x Adolescent Gender) analysis with repeated measures for the differences between parents. The dependent variables were Parental RF and the parenting behavior variables: Involvement, Warmth, and Overcontrol. The results indicated a main effect for the differences between mothers and fathers ($F(4,100) = 27.56, p < .001, \eta^2 = 0.52$). There was no significant effect for the gender of the child ($F(1,103) = 0.66, p > .05$) and there was no significant Parent Gender x Adolescent Gender interaction effect ($F(4,100) = 1.73, p > .05$). Thus, the differences between fathers and mothers were not influenced by the gender of their adolescent child. Univariate ANOVA revealed significant differences concerning all four dependent variables (Table 3). Mothers scored significantly higher than fathers for all of the parental variables: RF, Involvement, and both dimensions of Parenting Style (i.e., Warmth and Overcontrol; Table 3). However, the magnitude of these differences varied, with the largest difference concerning the level of Involvement and the smallest concerning Overcontrol. These findings support the first hypothesis, namely that the fathers’ levels of RF, Involvement, Warmth, and Overcontrol are lower than those of the mothers.
Table 3
Means, Standard Deviations and ANOVA Results of Mothers' and Fathers' Parental Variables

<table>
<thead>
<tr>
<th></th>
<th>Mothers</th>
<th></th>
<th>Fathers</th>
<th></th>
<th>F(1,103)</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflective Function  (RF)</td>
<td>4.27</td>
<td>1.40</td>
<td>3.80</td>
<td>1.46</td>
<td>11.11**</td>
<td>.10</td>
</tr>
<tr>
<td>Level of Involvement</td>
<td>42.49</td>
<td>4.66</td>
<td>35.78</td>
<td>6.42</td>
<td>79.01***</td>
<td>.43</td>
</tr>
<tr>
<td>Parenting Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warmth</td>
<td>31.42</td>
<td>4.66</td>
<td>28.96</td>
<td>5.39</td>
<td>26.29***</td>
<td>.20</td>
</tr>
<tr>
<td>Overcontrol</td>
<td>8.65</td>
<td>5.27</td>
<td>7.67</td>
<td>5.47</td>
<td>4.90*</td>
<td>.05</td>
</tr>
</tbody>
</table>

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

Adolescent Girls' and Boys' Outcome Variables

The dependent variables in the present research were the adolescents' outcome variables: Internalizing and Externalizing Symptoms, Personal and Social Self-Perception, Social Competence, and RF. The results concerning these variable will be presented and girls’ and boys’ outcomes will be compared. First, in order to examine whether there are any differences between the levels of symptomatology observed among boys and girls, as well as whether there are differences between their respective levels of Externalizing and Internalizing Symptoms, a 2 x 2 (Gender x Symptoms) ANOVA with repeated measures was conducted.

![Figure 1. Levels of Internalizing and Externalizing symptoms among Girls and Boys](image-url)
The ANOVA revealed no significant differences between boys and girls \((F(1,103) = 0.05, p > .05)\) nor between the levels of Internalizing and Externalizing Symptoms \((F(1,103) = 2.37, p > .05)\). However, we found a significant interaction between gender and symptoms (Internalizing/Externalizing; \(F(1,103) = 7.50, p < .01, \eta^2 = 0.07\)). This interaction is presented in Figure 1. As can be seen in the figure, among boys, the level of Internalizing Symptoms was lower than that of Externalizing Symptoms, while among girls the pattern was reversed. Simple effects tests found a significant difference between the levels of Internalizing and Externalizing Symptoms among boys \((F(1,40) = 12.47, p < .001, \eta^2 = 0.24)\), but not among girls \((F(1,63) = 0.74, p > .05)\).

Multiple analyses of variance (MANOVA), with the adolescent’s gender as the independent variable and Personal and Social Self-Perception, Social Competence, and RF as the dependent variables, revealed a main effect for adolescent’s gender \((F(4,100) = 2.76, p < .05, \eta^2 = 0.10)\). The means and standard deviations of the scores of the boys and girls for the different variables are presented in Table 4. Univariate ANOVA for each measure revealed a significant gender difference for Social Self-Perception only.

Table 4

*Means, Standard Deviations, and ANOVA Results for Adolescent Outcome Variables in Boys and Girls*

<table>
<thead>
<tr>
<th></th>
<th>Girls (n = 64)</th>
<th>Boys (n = 41)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(M)</td>
<td>(SD)</td>
<td>(M)</td>
<td>(SD)</td>
<td>(F (1,103))</td>
</tr>
<tr>
<td>Self-Perception – Personal</td>
<td>3.02</td>
<td>0.46</td>
<td>3.13</td>
<td>0.39</td>
<td>1.81</td>
</tr>
<tr>
<td>Self-Perception – Social</td>
<td>3.39</td>
<td>0.37</td>
<td>3.21</td>
<td>0.39</td>
<td>5.68*</td>
</tr>
<tr>
<td>Social Competence</td>
<td>8.79</td>
<td>1.96</td>
<td>8.65</td>
<td>1.68</td>
<td>.15</td>
</tr>
<tr>
<td>Reflective Function (RF)</td>
<td>3.97</td>
<td>1.13</td>
<td>3.73</td>
<td>1.07</td>
<td>1.15</td>
</tr>
</tbody>
</table>

* \(p < .05\).
Correlations Between the Research Variables

In the following section, correlations between the parental variables, between the adolescents' variables, and between parental variables and adolescents' outcomes will be presented.

Correlations Between Parental Variables

Our second hypothesis was that higher levels of parental RF are associated with higher levels of Involvement and Warmth and lower levels of Overcontrol. Pearson correlations between mothers' and fathers' individual RF levels and their levels of Involvement, Warmth, and Overcontrol are presented in Table 5. No significant correlations or nonlinear associations were found between parental RF and the other parenting variables. Therefore, we concluded that parental RF is not correlated with parenting behavior.

Table 5
Correlation Coefficients Between Mothers' and Fathers' Reflective Function (RF) and Involvement in Parenting, Warmth, and Overcontrol

<table>
<thead>
<tr>
<th></th>
<th>Level of Involvement</th>
<th>Warmth</th>
<th>Overcontrol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s RF</td>
<td>-.08</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Father’s RF</td>
<td>.02</td>
<td>.02</td>
<td>.04</td>
</tr>
</tbody>
</table>

The associations between parental demographic characteristics and parental RF and behavior variables were examined. Pearson correlations between mother’s and father’s ages and levels of education, on the one hand, and parental RF and parenting behavior variables on the other, are presented in Table 6. Mother’s and father’s ages were not correlated with their respective RF levels. However, mother’s and father’s levels of education were correlated with parental RF. The higher the level of education, the higher the level of parental RF. No significant correlations were found between parental age and level of education and the parenting behavior variables, except for a negative correlation between mother’s age and her level of Involvement. Thus, the older the mother, the lower her level of involvement in parenting.
Table 6

*Correlation Coefficients of Parental Demographic Characteristics with Parental RF and Parenting Behavior Variables*

<table>
<thead>
<tr>
<th>Parental RF</th>
<th>Parenting behavior variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Involvement</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.13</td>
</tr>
<tr>
<td>Fathers</td>
<td>.09</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.53**</td>
</tr>
<tr>
<td>Fathers</td>
<td>.44**</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01, two-tailed.

Correlations Between Adolescents’ Variables

According to Hypothesis 3, adolescents’ RF would be positively associated with their levels of Social Competence and Self-Perception and negatively associated with their levels of Internalizing and Externalizing Symptoms. Pearson correlations for these relationships are presented in Table 7. Positive correlations were found between adolescent RF and Social Competence and Internalizing and Externalizing Symptoms. Thus, the higher the level of RF, the higher the Social Competence and reported level of symptoms. A negative correlation was found between adolescents’ RF and Personal Self-Perception, indicating that the higher the level of RF, the lower the level of Personal Self-Perception.

Table 7

*Correlation Coefficients Between Adolescent’s Reflective Function (RF) and Internalizing and Externalizing Symptoms, Personal and Social Self-Perception and Social Competence*

<table>
<thead>
<tr>
<th></th>
<th>Internalizing Symptoms</th>
<th>Externalizing Symptoms</th>
<th>Self-Perception Personal</th>
<th>Self-Perception Social</th>
<th>Social Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent’s RF</td>
<td>.25*</td>
<td>.20*</td>
<td>-.21*</td>
<td>.04</td>
<td>.24*</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01, two-tailed.
These results support the hypothesized correlation between adolescent RF and Social Competence. However, they did not support the expected positive correlation between adolescent RF and Self-Perception or negative correlations with the levels of Internalizing and Externalizing Symptoms. Additionally, adolescent RF levels correlated significantly with two variables that were not included in the hypothesis: Social Problems and Prosocial Behavior (Table 8). The Social Problems scale is one of the eight narrow-band behavioral syndromes of the YSR that was not included among the Internalizing or Externalizing Symptoms. Prosocial Behavior was assessed using information derived from the YSR concerning prosocial activities (i.e., participation in youth organizations and community service activities), as suggested by Hart, Atkins, and Ford (1999). Adolescents’ RF levels correlated significantly with their levels of Social Problems and Prosocial Behavior. In order to examine whether there are significant differences between boys and girls in these correlations, we calculated Fisher's $r$ to $z$ transformations. No significant differences between boys and girls were found. To sum up, adolescents' RF correlated positively with Social Competence and Prosocial Behavior. Unexpectedly, adolescents’ RF also correlated positively with Internalizing and Externalizing Symptoms, with Social Problems, and negatively with Personal Self-Perception.

Table 8

*Correlation Coefficients Between Adolescent’s Reflective Function (RF) and Social Problems and Prosocial Behavior*

<table>
<thead>
<tr>
<th></th>
<th>Social Problems</th>
<th>Prosocial Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent’s RF</td>
<td>.32**</td>
<td>.29**</td>
</tr>
</tbody>
</table>

* $p < .05$.  ** $p < .01$, two-tailed.

Correlations between Internalizing and Externalizing Symptoms, on the one hand, and Personal and Social Self-Perception, Social Competence, Social Problems, and Prosocial Behavior, on the other, were calculated (Table 9). Internalizing Symptoms correlated negatively with both Personal and Social Self–Perception; and Externalizing Symptoms correlated negatively with Social Self-Perception only. Both Internalizing and Externalizing Symptoms correlated positively with Social Problems.
Table 9

Correlation Coefficients Between Adolescents' Internalization and Externalization and Other Outcome Variables

<table>
<thead>
<tr>
<th></th>
<th>Self-Perception Personal</th>
<th>Self-Perception Social</th>
<th>Social Competence</th>
<th>Social Problems</th>
<th>Prosocial Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing Symptoms</td>
<td>-.42**</td>
<td>-.27**</td>
<td>.00</td>
<td>.53***</td>
<td>.12</td>
</tr>
<tr>
<td>Externalizing Symptoms</td>
<td>-.11</td>
<td>-.20*</td>
<td>-.07</td>
<td>.39***</td>
<td>-.17</td>
</tr>
</tbody>
</table>

* p < .05. ** p < .01. *** p < .001, two-tailed.

In order to examine whether there are significant differences between boys and girls in these correlations, we calculated Fisher's r to z transformations. A significant difference between boys and girls was found only in the correlation between Internalizing Symptoms and Personal Self-Perception (Z = 3.19, p < .001). This correlation was significantly stronger among adolescent girls than among adolescent boys. This indicates that among girls the higher the level of Internalizing Symptoms, the lower the Personal Self-Perception (r = -.58, p < .001). In contrast, among boys, no correlation was found (r = .00, p > .05).

Correlations between adolescents' demographic characteristics and their outcomes were examined as well. Adolescent age was positively correlated with adolescent RF (r = .25, p < .01). However, adolescent age was not associated with either of the other outcome variables (Table J1, Appendix J).

Correlations Between Parental Variables and Adolescents' Outcomes

Hypothesis 3 predicted that higher levels of parental RF would be associated with higher levels of adolescent RF, Self-Perception, and Social Competence, as well as with lower levels of Internalizing and Externalizing Symptoms. The results concerning this hypothesis will be presented (while comparing boys and girls) and divided into four sections: adolescents’ symptomatology (Internalizing and Externalizing Symptoms), Self-Perception (Personal and Social), Interpersonal Competence (Social Competence and RF), and finally, Social Problems and Prosocial Behavior.
Adolescents' Internalizing and Externalizing Symptoms. Pearson correlations between maternal and paternal RF levels and parenting behavior variables, on the one hand, and adolescent girls' and boys' Internalizing and Externalizing Symptoms on the other, are presented in Table 10. Unexpectedly, paternal RF correlated positively with girls' Internalizing Symptoms. Paternal Involvement and Warmth correlated negatively with boys' Internalizing and Externalizing Symptoms. Maternal Involvement in parenting correlated negatively with girls' Internalizing Symptoms, and Maternal Warmth correlated negatively with girls' Externalizing Symptoms. Both paternal and maternal levels of Overcontrol correlated positively with boys' and girls' Externalizing Symptoms.

Table 10

Correlation Coefficients Between Parental Reflective Function (RF), Parenting Behavior Variables (Involvement, Warmth, and Overcontrol) and Adolescents' Internalizing and Externalizing Symptoms

<table>
<thead>
<tr>
<th>Reflective Function</th>
<th>Girls (n = 64)</th>
<th>Boys (n = 41)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internalizing Symptoms</td>
<td>Externalizing Symptoms</td>
</tr>
<tr>
<td>Maternal RF</td>
<td>.16</td>
<td>.06</td>
</tr>
<tr>
<td>Paternal RF</td>
<td>.42**</td>
<td>.12</td>
</tr>
<tr>
<td>Involvement in parenting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Involvement</td>
<td>-.25*</td>
<td>-.09</td>
</tr>
<tr>
<td>Paternal Involvement</td>
<td>.17</td>
<td>-.01</td>
</tr>
<tr>
<td>Parental behavior – Warmth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Warmth</td>
<td>-.19</td>
<td>-.25*</td>
</tr>
<tr>
<td>Paternal Warmth</td>
<td>-.08</td>
<td>-.08</td>
</tr>
<tr>
<td>Parental behavior – Overcontrol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Overcontrol</td>
<td>.15</td>
<td>.34**</td>
</tr>
<tr>
<td>Paternal Overcontrol</td>
<td>.06</td>
<td>.48**</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, two-tailed.
In general, the correlations between boys’ outcomes and parental variables were larger than those between girls’ outcomes and parental variables, except for parental RF. To examine the significance of the differences, we calculated Fisher’s r to z transformations, which revealed significant differences between boys and girls in the relationships between (a) father’s level of Involvement in parenting and adolescent’s Internalizing Symptoms (Z = 3.48, p < .01), (b) father’s level of Involvement in parenting and adolescent’s Externalizing Symptoms (Z = 2.27, p < .05), and (c) father’s Warmth and adolescent’s Externalizing Symptoms (Z = 2.26, p < .05). To sum up, parenting behavior variables were associated with Internalizing and Externalizing Symptoms in adolescent boys’ more strongly than in adolescent girls, and unexpectedly, paternal RF correlated positively with adolescent girls’ Internalizing Symptoms.

Table 11

*Correlation Coefficients Between Parental Reflective Function (RF), Parenting Behavior Variables (Involvement, Warmth, and Overcontrol) and Adolescents’ Personal and Social Self-Perception*

<table>
<thead>
<tr>
<th>Reflection Function</th>
<th>Girls (n = 64)</th>
<th>Boys (n = 41)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personal Self-Perception</td>
<td>Social Self-Perception</td>
</tr>
<tr>
<td>Reflective Function</td>
<td>Mothers</td>
<td>Fathers</td>
</tr>
<tr>
<td></td>
<td>-.12</td>
<td>-.31*</td>
</tr>
<tr>
<td></td>
<td>.04</td>
<td>-.01</td>
</tr>
<tr>
<td>Involvement in parenting</td>
<td>Mothers</td>
<td>Fathers</td>
</tr>
<tr>
<td></td>
<td>.03</td>
<td>-.20</td>
</tr>
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<td></td>
<td>.26*</td>
<td>-.14</td>
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<td>Parental behavior – Warmth</td>
<td>Mothers</td>
<td>Fathers</td>
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<td></td>
<td>.05</td>
<td>-.05</td>
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<tr>
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<td>.12</td>
<td>.04</td>
</tr>
<tr>
<td>Parental behavior – Overcontrol</td>
<td>Mothers</td>
<td>Fathers</td>
</tr>
<tr>
<td></td>
<td>-.16</td>
<td>-.01</td>
</tr>
<tr>
<td></td>
<td>.01</td>
<td>.01</td>
</tr>
</tbody>
</table>

* p < .05. ** p < .01, two-tailed.
Adolescents' Personal and Social Self-Perception. Pearson correlations between mothers’ and fathers’ RF and parenting behavior variables on the one hand, and adolescent girls' and boys' Personal and Social Self-Perception on the other, are presented in Table 11. Unexpectedly, paternal RF correlated negatively with girls' Personal Self-Perception, and both parents' RF levels correlated negatively with boys' Social Self-perception. Maternal Involvement in parenting correlated positively with girls' Social Self-Perception. Maternal and paternal Warmth correlated positively with boys' Social Self-Perception; and maternal and paternal Overcontrol correlated negatively with boys' Social and Personal Self-Perception.

Here again, the correlations between boys' outcomes and parental variables were larger than those between girls' outcomes and parental variables. To examine the significance of the differences, we calculated Fisher's r to z transformations, which revealed significant differences between boys and girls in the relationships between (a) mother’s RF and adolescent’s Social Self-Perception (Fisher's $Z = 2.24, p < .05$), (b) father’s Warmth and adolescent’s Social Self-Perception ($Z = 2.61, p < .01$), (c) mother’s Overcontrol and adolescent’s Social Self-Perception ($Z = 2.08, p < .05$), and (d) father’s Overcontrol and adolescent’s Personal Self-Perception ($Z = 2.03, p < .05$). To sum up, here again, parenting behavior variables were more strongly associated with adolescent boys' Self-Perception, compared to adolescent girls. Unexpectedly, paternal RF correlated negatively with girls' Personal Self-Perception, and both parents' RF levels correlated negatively with boys' Social Self-perception.

Adolescents' Social Competence and RF. Pearson correlations between mothers' and fathers' RF and parenting behavior variables on the one hand, and adolescent girls' and boys' Social Competence and RF on the other, are presented in Table 12. Father’s RF correlated positively with girls' Social Competence and fathers’ and mothers' RF scores correlated positively with girls' and boys' RF scores. Father’s Overcontrol correlated positively with girls' RF. In order to examine whether there are significant differences between boys and girls in these correlations, we calculated Fisher's $r$ to $z$ transformations. No significant differences between boys and girls were found. Therefore, both parents' RF levels correlated positively with adolescent boys' and girls' RF. Paternal RF also correlated positively with adolescent girls' Social Competence, and paternal Overcontrol correlated with adolescent girls' RF level.
Table 12

*Correlation Coefficients Between Parental Reflective Function (RF), Parenting Behavior Variables (Involvement, Warmth, and Overcontrol) and Adolescents’ Social Competence and RF*

<table>
<thead>
<tr>
<th>Reflective Function</th>
<th>Social Competence</th>
<th>Reflective Function</th>
<th>Social Competence</th>
<th>Reflective Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Girls (n = 64)</strong></td>
<td></td>
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<td>Mothers</td>
<td>.06</td>
<td>.51**</td>
<td>.03</td>
<td>.38*</td>
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<td>Fathers</td>
<td>.33**</td>
<td>.56**</td>
<td>.02</td>
<td>.31*</td>
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<tr>
<td><strong>Boys (n = 41)</strong></td>
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<td></td>
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</tr>
<tr>
<td>Involvement in parenting</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.09</td>
<td>-.06</td>
<td>-.10</td>
<td>-.19</td>
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<tr>
<td>Fathers</td>
<td>.06</td>
<td>-.04</td>
<td>.15</td>
<td>-.25</td>
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</tr>
<tr>
<td>Mothers</td>
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<td>.22</td>
<td>-.10</td>
</tr>
<tr>
<td>Fathers</td>
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<td>-.08</td>
<td>.23</td>
<td>-.30</td>
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<td>Parental behavior – Overcontrol</td>
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</tr>
<tr>
<td>Mothers</td>
<td>-.09</td>
<td>.24</td>
<td>-.22</td>
<td>.14</td>
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<td>Fathers</td>
<td>-.16</td>
<td>.30*</td>
<td>-.16</td>
<td>.08</td>
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</table>

* p < .05.  ** p < .01, two-tailed.

Adolescents’ Social Problems and Prosocial Behavior. Similar to adolescent RF, parental RF correlated significantly with two variables that were not included in the hypotheses: Social Problems and Prosocial Behavior. Pearson correlations between mothers’ and fathers’ RF levels and parenting behavior variables, on the one hand, and adolescent girls’ and boys’ Social Problems and Prosocial Behavior on the other, are presented in Table 13. Both maternal and paternal RF scores correlated significantly with the adolescent’s level of Social Problems; and fathers' RF scores correlated significantly with girls' Prosocial Behavior. Thus, the higher the level of parental RF, the higher the levels of both Social Problems and Prosocial Behavior. Among the parenting behavior variables, maternal and paternal Involvement and paternal Warmth correlated negatively with reported Social Problems. No significant differences were found between boys and girls.
Table 13

Correlation Coefficients Between Parental Reflective Function (RF), Parenting Behavior Variables (Involvement, Warmth, and Overcontrol) and Adolescents’ Levels of Social Problems and Prosocial Behavior

<table>
<thead>
<tr>
<th></th>
<th>Girls (n = 64)</th>
<th></th>
<th>Boys (n = 41)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social Problems</td>
<td>Prosocial Behavior</td>
<td>Social Problems</td>
<td>Prosocial Behavior</td>
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<td></td>
</tr>
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<td>.23</td>
<td>.48**</td>
<td>.13</td>
</tr>
<tr>
<td>Fathers</td>
<td>.29*</td>
<td>.37**</td>
<td>.23</td>
<td>.12</td>
</tr>
<tr>
<td>Involvement in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>parenting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>-.21</td>
<td>.05</td>
<td>-.35*</td>
<td>-.12</td>
</tr>
<tr>
<td>Fathers</td>
<td>-.11</td>
<td>.06</td>
<td>-.32*</td>
<td>.12</td>
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<tr>
<td>Parental behavior –</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warmth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
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<td>-.04</td>
<td>-.16</td>
<td>.02</td>
</tr>
<tr>
<td>Fathers</td>
<td>-.21</td>
<td>.09</td>
<td>-.38*</td>
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<td>Parental behavior –</td>
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</tr>
<tr>
<td>Overcontrol</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.00</td>
<td>-.15</td>
<td>.09</td>
<td>-.08</td>
</tr>
<tr>
<td>Fathers</td>
<td>.14</td>
<td>-.23</td>
<td>.01</td>
<td>-.06</td>
</tr>
</tbody>
</table>

* p< .05, ** p< .01, two-tailed.

In addition, correlations between parental demographic characteristics and adolescents’ outcomes were examined (Table J2, Appendix J). Mother’s and father’s ages were not associated with either of the outcome variables. However, father’s level of education was correlated positively with adolescent’s RF (r = .34, p < .01), Social Competence (r = .25, p < .01), Social Problems (r = .23, p < .05), and Prosocial Behavior (r = .36, p < .01). Mother’s level of education was correlated with adolescent’s RF and Prosocial Behavior (r = .24, p < .05 and r = .22, p < .05, respectively).
Multiple Regression Analyses

The previous bivariate analyses explored the associations between each pair of variables. The following multivariate analyses were intended to explore (a) how the parental variables together explain the variance in the adolescents' outcomes, as well as their relative power in explaining this variance; (b) the interactions between parental variables and the adolescent’s gender; and (c) the interactions between parental variables. For example, whether among parents with high RF the contribution of the behavioral variables is larger than among low RF parents. These analyses were carried out in order to test Hypotheses 5 and 6, which stated that (a) parental RF would enhance the association between parenting behavior and the adolescent’s outcomes; and (b) parental RF and the adolescent outcomes would differ by the parental gender. That is, father's RF would be more strongly associated with the adjustment of his adolescent son than that of his daughter; while mother's RF would be associated with the adjustment of both her adolescent daughter and son.

We carried out a series of hierarchical multiple regression analyses with adolescent outcomes – Internalizing and Externalizing Symptoms, Personal and Social Self-Perception, Social Competence, and RF – as the dependent variables. The independent variables were parental RF and the parenting behavior variables (Involvement, Warmth, and Overcontrol). A four-step hierarchical multiple regression model was used. Adolescent’s gender and father’s education were entered in the first step as covariates. Paternal and maternal RF scores were entered in the second step, and parenting behaviors - Warmth, Overcontrol and Involvement – were entered in the third step. In the fourth step, we entered the interactions between mother’s and father’s RF and their parenting behavioral variables, between father's and mothers' parental variables (i.e., RF, Involvement, Warmth and Overcontrol) and the adolescent’s gender, and between mother’s and father’s RF and their parenting behaviors. The rationale for the sequence of entering the variables was that the demographic and background variables were entered first; parental RF, as a relatively stable personality characteristic, was entered next; and parenting behavior was entered last. The results of the regression analyses will be discussed in three sections: adolescents' symptomatology (Internalizing and Externalizing Symptoms), Self-Perception (Personal and Social), and interpersonal competence (Social Competence and RF).
Adolescents' Internalizing and Externalizing Symptoms

We conducted two hierarchical multiple regression analysis with Internalizing and Externalizing Symptoms as dependent variables. The complete regression models indicated that the predictors accounted for 39% of the variance in adolescents' Internalizing Symptoms ($F(13,91) = 4.52, p < .001$) and for 47% of the variance in adolescents' Externalizing Symptoms ($F(14,90) = 5.70, p < .001$). The standardized regression weights, increments in explained variance ($R^2$ change), and total explained variance ($R^2$), are shown in Tables 14 and 15.

In the first step, the personal characteristics of adolescent’s gender and father’s level of education explained 6% of the variance in Internalizing Symptoms ($p < .05$). Both gender and education were significant predictors of Internalizing Symptoms. Adolescent girls and children (boys and girls) of fathers with higher levels of education reported more Internalizing Symptoms, as compared to adolescent boys and children of fathers with lower levels of education.

In the second step of the regression, fathers' and mothers' RF scores were entered into the model as predictors, and together they explained an additional 10% of the variance ($p < .01$). Of these, only the father’s level of RF was a significant predictor of Internalizing Symptoms. The higher the father's RF, the more Internalizing Symptoms were observed. In this step of the analysis, the father’s level of education was no longer a significant predictor; a finding that may indicate that parental RF mediates the association between level of education and Internalizing Symptoms. Thus, parental RF was directly associated with Internalizing Symptoms, while parental education was associated indirectly, through parental RF.

In the third step of the regression, paternal and maternal behavior variables were entered, and together they explained an additional 13% of the variance ($p < .01$). Of these, mother’s Overcontrol and Involvement and father’s Warmth were significant predictors of the adolescent’s level of Internalizing Symptoms. The lower the levels of maternal Involvement and paternal Warmth and the higher the level of maternal Overcontrol, the more Internalizing Symptoms were reported. In the last step, the interactions were included in the model, and they explained an additional 11% of the variance.
Table 14

Summary of the Hierarchical Regression Analysis for Variables Predicting Adolescents’ Internalizing Symptoms (N = 105)

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B$</th>
<th>$SE$ $B$</th>
<th>$\beta$</th>
<th>$R^2$ change</th>
<th>$R^2$</th>
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</thead>
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<td>.06*</td>
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<td>0.47</td>
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<td></td>
<td></td>
<td>.10**</td>
<td>.16**</td>
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<td>.02</td>
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<td>0.47</td>
<td>-.04</td>
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</tr>
<tr>
<td>Father’s RF</td>
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<td>0.44</td>
<td>.37***</td>
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<tr>
<td>Step 3</td>
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<td></td>
<td>.13**</td>
<td>.29***</td>
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<td>-.07</td>
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<tr>
<td>Father’s Overcontrol</td>
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<tr>
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<td>.39***</td>
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<td>.33***</td>
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</tr>
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<td>Father’s Warmth</td>
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<td>0.13</td>
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<tr>
<td>Mother’s Involvement</td>
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<tr>
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<td>-.05</td>
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<tr>
<td>Father’s RF × Father’s Overcontrol</td>
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<td>0.52</td>
<td>-.23**</td>
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<td></td>
</tr>
<tr>
<td>Father’s Involvement × Gender</td>
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<td>0.52</td>
<td>.24**</td>
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<tr>
<td>Father’s RF × Gender</td>
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<td>0.57</td>
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</table>

* $p < .05$. **$p < .01$. ***$p < .001$. 
Three interactions - between paternal RF and Overcontrol, between paternal Involvement and adolescent’s gender, and between paternal RF and adolescent’s gender - were found to be significant. To examine the nature of the first interaction, the subjects were divided according to the median of the fathers' RF scores (Cohen & Cohen, 1983). Overcontrolling behavior correlated positively with adolescents’ Internalizing Symptoms only among low RF fathers ($r = .30, p < .05$) and not among high RF fathers ($r = .01, p > .05$). The interaction between paternal Involvement and adolescent’s gender indicated that the father’s level of Involvement was negatively associated with Internalizing Symptoms only among boys (boys: $r = -.50, p < .01$; girls: $r = .17, p < .05$); whereas the interaction between paternal RF and adolescent’s gender indicated that the father’s level of RF was positively associated with Internalizing Symptoms only among girls (boys: $r = .22, p > .05$; girls: $r = .42, p < .01$).

In the second hierarchical multiple regression analysis, the data included in the first two steps of the analysis – adolescent’s gender and father’s education, and father’s and mother’s RF scores – did not make a significant contribution to the variance in adolescent Externalizing Symptoms. In the third step of the regression, the paternal and maternal parenting behavior variables explained 26% of the variance ($p < .001$). Of these, the mother’s and father’s levels of Involvement, and father’s Overcontrol were significant predictors. The lower the level of parental Involvement and the higher the level of paternal Overcontrol, the more Externalizing Symptoms were reported.

In the last step, the interactions were included in the model, and they explained an additional 16% of the variance in Externalizing Symptoms. Four interactions were significant. Two of these interactions involved the adolescent's gender. The father’s Warmth was associated with Externalizing Symptoms only among boys (boys: $r = -.50, p < .01$; girls: $r = -.08, p > .05$); and father’s Overcontrol was associated with Externalizing Symptoms only among girls (boys: $r = .30, p > .05$; girls: $r = .48, p < .01$). This last interaction should be interpreted with caution, because both correlations were high, and the lack of significance of the boys’ correlation may have been the result of the smaller number of boys compared to girls in the sample. Two more interactions were found between the maternal and paternal parenting variables: between paternal and maternal Overcontrol, and between paternal and maternal RF.
Table 15

Summary of the Hierarchical Regression Analysis for Variables Predicting Adolescents’
Externalizing Symptoms (N = 105)

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$\beta$</th>
<th>$R^2$ change</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
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<td><strong>Step 1</strong></td>
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<td>.03</td>
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<td></td>
</tr>
<tr>
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<td>.02</td>
<td>.05</td>
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<td>.04</td>
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<td>-.05</td>
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<td>.31***</td>
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<tr>
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<tr>
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<td>0.14</td>
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<td>Mother’s Warmth</td>
<td>-0.05</td>
<td>0.15</td>
<td>-.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s Warmth</td>
<td>-0.04</td>
<td>0.13</td>
<td>-.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Involvement</td>
<td>-0.19</td>
<td>0.11</td>
<td>-.16*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s Involvement</td>
<td>-0.20</td>
<td>0.08</td>
<td>-.23**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
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<td></td>
<td></td>
<td>.16***</td>
<td>.47***</td>
</tr>
<tr>
<td>Adolescent’s gender</td>
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<td>0.97</td>
<td>-.16*</td>
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<tr>
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<td>0.47</td>
<td>.05</td>
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</tr>
<tr>
<td>Mother’s RF</td>
<td>-0.84</td>
<td>0.41</td>
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</tr>
<tr>
<td>Father’s RF</td>
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<td>0.40</td>
<td>.26**</td>
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</tr>
<tr>
<td>Mother’s Overcontrol</td>
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<td>0.13</td>
<td>-.03</td>
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</tr>
<tr>
<td>Father’s Overcontrol</td>
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<td>0.14</td>
<td>.28***</td>
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</tr>
<tr>
<td>Mother’s Warmth</td>
<td>0.03</td>
<td>0.14</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s Warmth</td>
<td>-0.15</td>
<td>0.12</td>
<td>-.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Involvement</td>
<td>-0.23</td>
<td>0.10</td>
<td>-.19*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s Involvement</td>
<td>-0.16</td>
<td>0.08</td>
<td>-.18*</td>
<td></td>
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</tr>
<tr>
<td>Father’s Warmth × Gender</td>
<td>0.94</td>
<td>0.56</td>
<td>.16*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s Overcontrol × Gender</td>
<td>1.25</td>
<td>0.58</td>
<td>.21*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s Overcontrol × Mother’s Overcontrol</td>
<td>1.35</td>
<td>0.40</td>
<td>.30***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s RF × Mother’s RF</td>
<td>-0.95</td>
<td>0.43</td>
<td>-.20**</td>
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</tbody>
</table>

* $p < .05$. **$p < .01$. ***$p < .001$. 
The interaction between levels of paternal and maternal Overcontrol in their association with adolescent’s Externalizing Symptoms (Figure 2) indicated that the adolescents’ levels of Externalizing Symptoms were highest when both their mothers and fathers expressed high levels of Overcontrolling behavior. In contrast to this, adolescents exhibited the least Externalizing Symptoms when their mothers exhibited low levels of Overcontrolling behavior and their fathers exhibited high levels of Overcontrolling behavior.

Figure 2. The mean levels of Externalizing Symptoms relative to mother’s and father’s Overcontrol.

Finally, the interaction between maternal and paternal RF levels in their association with adolescents' Externalizing Symptoms (Figure 3) indicated that the adolescents who exhibited the highest levels of Externalizing Symptoms were those who lived in families in which there was a discrepancy between the RF levels of the two parents.

Figure 3. The mean levels of Externalizing Symptoms relative to mother's and father's RF levels.
Adolescents' Personal and Social Self-Perception

In the next step of our analysis, we conducted two hierarchical multiple regression analyses with Personal and Social Self-Perception as the dependent variables. The complete regression model significantly predicted 21% of the variance in adolescents' Personal Self-Perception ($F(11,93) = 2.30, p < .05$) and 31% of the variance in adolescents' Social Self-Perception ($F(12,92) = 3.47, p < .001$). The standardized regression weights, increments in explained variance ($R^2$ change), and total explained variance ($R^2$), are shown in Tables 16 and 17.

The first step of the regression, in which the data concerning the adolescent’s gender and the father’s level of education were entered, did not significantly explain the observed differences in adolescents’ level of Personal Self-Perception. In the second step, fathers' and mothers' RF scores were included in the model as predictors, and together they explained 7% of the variance ($p < .05$) in the adolescents' Personal Self-Perception. Of these, only the father’s level of RF was a significant predictor. The higher the level of the father’s RF, the lower the adolescent's Personal Self-Perception.

In the third step of this regression, fathers' and mothers’ behavior variables were entered, and together these explained an additional 8% of the variance ($p > .05$). Of these, mother’s Overcontrolling behavior was the only significant predictor. The higher the level of the mother’s Overcontrolling behavior, the lower the adolescent’s Personal Self-Perception. In the last step, an interaction between paternal Overcontrol and the gender of the child was entered, which explained an additional 3% of the variance in Personal Self-Perception. Father’s Overcontrol was associated with lower Personal Self-Perception only among boys (boys: $r = -.41, p < .01$; girls: $r = -.01, p > .05$).
Table 16
*Summary of the Hierarchical Regression Analysis for Variables Predicting Adolescents’ Personal Self-Perception (N = 105)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
<th>( R^2 ) change</th>
<th>( R^2 )</th>
</tr>
</thead>
<tbody>
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<td><strong>Step 1</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Adolescent’s gender</td>
<td>-0.10</td>
<td>0.09</td>
<td>-.12</td>
<td>.04</td>
<td>.04</td>
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<tr>
<td>Father’s education</td>
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<td>0.04</td>
<td>-.15</td>
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<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent’s gender</td>
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<td>0.09</td>
<td>-.13</td>
<td>.07*</td>
<td>.11*</td>
</tr>
<tr>
<td>Father’s education</td>
<td>-0.01</td>
<td>0.04</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s RF</td>
<td>0.00</td>
<td>0.04</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s RF</td>
<td>-0.09</td>
<td>0.03</td>
<td>-.29**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent’s gender</td>
<td>-0.13</td>
<td>0.09</td>
<td>-.15</td>
<td>.08*</td>
<td>.19*</td>
</tr>
<tr>
<td>Father’s education</td>
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<td>0.04</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s RF</td>
<td>-0.02</td>
<td>0.04</td>
<td>-.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s RF</td>
<td>-0.08</td>
<td>0.04</td>
<td>-.26*</td>
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<tr>
<td>Mother’s Overcontrol</td>
<td>-0.03</td>
<td>0.01</td>
<td>-.31*</td>
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<tr>
<td>Father’s Overcontrol</td>
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<td>0.01</td>
<td>.14</td>
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<tr>
<td>Mother’s Warmth</td>
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<td>0.01</td>
<td>-.06</td>
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<td></td>
</tr>
<tr>
<td>Father’s Warmth</td>
<td>0.01</td>
<td>0.01</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Involvement</td>
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<td>0.01</td>
<td>.06</td>
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<td></td>
</tr>
<tr>
<td>Father’s Involvement</td>
<td>-0.01</td>
<td>0.01</td>
<td>-.16</td>
<td></td>
<td></td>
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<tr>
<td><strong>Step 4</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent’s gender</td>
<td>-0.11</td>
<td>0.09</td>
<td>-.12</td>
<td>.03</td>
<td>.21*</td>
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<tr>
<td>Father’s education</td>
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<td>0.04</td>
<td>.03</td>
<td></td>
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</tr>
<tr>
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<td>-0.02</td>
<td>0.04</td>
<td>-.07</td>
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<tr>
<td>Father’s RF</td>
<td>-0.07</td>
<td>0.03</td>
<td>-.24*</td>
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<td></td>
</tr>
<tr>
<td>Mother’s Overcontrol</td>
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<td>0.01</td>
<td>-.28*</td>
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<tr>
<td>Father’s Overcontrol</td>
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<td>0.01</td>
<td>.08</td>
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<tr>
<td>Mother’s Warmth</td>
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<td>0.01</td>
<td>-.05</td>
<td></td>
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<tr>
<td>Father’s Warmth</td>
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<td>0.01</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Involvement</td>
<td>0.01</td>
<td>0.01</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s Involvement</td>
<td>-0.01</td>
<td>0.01</td>
<td>-.19*</td>
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<td></td>
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<td>Father’s Overcontrol ( \times ) Gender</td>
<td>0.08</td>
<td>0.05</td>
<td>.17*</td>
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<td></td>
</tr>
</tbody>
</table>

* \( p < .05 \). ** \( p < .01 \).
In the second hierarchical multiple regression analysis, Social Self-Perception was the dependent variable. In the first step of this analysis, adolescent’s gender and father’s level of education explained 7% of the variance in Social Self-Perception ($p < .05$). Of these, only adolescent’s gender was a significant predictor; girls reported higher levels of Social Self-Perception than boys. In the second step of the regression, fathers’ and mothers’ RF scores were included in the model, and were both found to not significantly affect adolescents’ Social Self-Perception. In the third step of the regression, paternal and maternal behavior variables explained an additional 13% of the variance ($p < .05$). Of these, mother’s Involvement and father’s Warmth were significant. The higher the levels of maternal Involvement and paternal Warmth, the higher the adolescent’s Social Self-Perception.

In the last step, the interactions were included in the model. These interactions explained an additional 11% of the variance in Social Self-Perception. Two interactions had significant contributions: the interaction between maternal RF and maternal Warmth, and the interaction between paternal Warmth and the adolescent’s gender. In order to examine the nature of the first interaction, the subjects were divided according to the median mother’s RF score. Maternal Warmth correlated positively with the adolescent’s Social Self-Perception only among high RF mothers ($r = .39, p < .01$) and not among low RF mothers ($r = .07, p > .05$). The second interaction, between paternal Warmth and adolescent’s gender, indicated that paternal Warmth was associated with higher Social Self-Perception only among boys (boys: $r = .52, p < .01$; girls: $r = .04, p > .05$).
Table 17  
Summary of the Hierarchical Regression Analysis for Variables Predicting Adolescents’  
Social Self-Perception (N = 105)  

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R² change</th>
<th>R²</th>
</tr>
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<td>Step 1</td>
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<td></td>
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<td></td>
</tr>
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<td>Adolescent’s gender</td>
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<td>0.08</td>
<td>0.24**</td>
<td>.07*</td>
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</tr>
<tr>
<td>Father’s education</td>
<td>-0.04</td>
<td>0.03</td>
<td>-0.12</td>
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<td></td>
</tr>
<tr>
<td>Step 2</td>
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<td></td>
</tr>
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<td>0.23**</td>
<td>.01</td>
<td>.08*</td>
</tr>
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<td>0.04</td>
<td>-0.06</td>
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</tr>
<tr>
<td>Mother’s RF</td>
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<td>0.03</td>
<td>-0.09</td>
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<tr>
<td>Father’s RF</td>
<td>-0.01</td>
<td>0.03</td>
<td>-0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent’s gender</td>
<td>0.16</td>
<td>0.08</td>
<td>0.21*</td>
<td>.13*</td>
<td>.20*</td>
</tr>
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<td>0.03</td>
<td>-0.05</td>
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</tr>
<tr>
<td>Mother’s RF</td>
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<td>0.03</td>
<td>-0.10</td>
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</tr>
<tr>
<td>Father’s RF</td>
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<td>0.03</td>
<td>-0.14</td>
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<tr>
<td>Mother’s Overcontrol</td>
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<td>0.01</td>
<td>0.10</td>
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</tr>
<tr>
<td>Father’s Overcontrol</td>
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<tr>
<td>Father’s Warmth</td>
<td>0.02</td>
<td>0.01</td>
<td>0.23**</td>
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<td></td>
</tr>
<tr>
<td>Mother’s Involvement</td>
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<td>0.01</td>
<td>-0.12</td>
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</tr>
<tr>
<td>Step 4</td>
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<td></td>
</tr>
<tr>
<td>Adolescent’s gender</td>
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<td>0.08</td>
<td>0.16*</td>
<td>.11***</td>
<td>.31***</td>
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<tr>
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<td>0.01</td>
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<tr>
<td>Mother’s RF</td>
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<td>-0.10</td>
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<td>-0.01</td>
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<td></td>
</tr>
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<td>-0.11</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.01</td>
<td>0.17</td>
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</tr>
<tr>
<td>Mother’s Warmth</td>
<td>0.01</td>
<td>0.01</td>
<td>0.12</td>
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<tr>
<td>Father’s Warmth</td>
<td>0.02</td>
<td>0.01</td>
<td>0.30**</td>
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<tr>
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<td>0.01</td>
<td>0.22**</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.01</td>
<td>-0.19*</td>
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</tr>
<tr>
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<td>0.04</td>
<td>0.23**</td>
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<td></td>
</tr>
<tr>
<td>Father’s Warmth × Gender</td>
<td>-0.10</td>
<td>0.04</td>
<td>-0.26**</td>
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</tr>
</tbody>
</table>

\(p < .05, \quad **p < .01, \quad ***p < .001.\)
Adolescents’ Social Competence and RF

We then conducted two hierarchical multiple regression analysis with adolescent’s Social Competence and adolescent’s RF as the dependent variables. The complete regression model significantly predicted 22% of the variance in adolescent’s Social Competence ($F(12,92) = 2.10, p < .05$) and 53% of the variance in adolescent’s RF ($F(14,90) = 7.10, p < .001$). The standardized regression weights, increments in explained variance ($R^2$ change), and total explained variance ($R^2$) are shown in Tables 18 and 19.

In these two regression analyses, we considered adolescent’s age as a covariate in the first step, as adolescent’s age correlated significantly with adolescent’s RF. In the first hierarchical multiple regression analysis, in which Social Competence was the dependent variable, the inclusion of adolescent’s gender and age and father’s level of education in the model (the first step) explained 6% of the variance in Social Competence ($p < .05$). Of these, only the father’s level of education was a significant predictor, indicating that a higher level of father’s education is positively associated with a higher level of adolescent’s Social Competence. The second step of the regression, in which paternal and maternal RF scores were included, was not significant as a whole; however, father’s RF was significant ($p < .05$).

The third step of the regression, in which paternal and maternal behavior variables were included in the model, was not significant; neither of the variables was significant. In the last step, an interaction between father’s RF and father’s Overcontrol explained an additional 6% of the variance in adolescent’s Social Competence ($p < .05$). In order to examine the nature of this interaction, the subjects were divided according to the median of the fathers’ RF scores. Paternal Overcontrol was associated with lower adolescent Social Competence only among low RF fathers ($r = -.36, p < .01$) and not among high RF fathers ($r = .04, p > .05$).

In the second hierarchical multiple regression analysis, adolescent RF was the dependent variable. In the first step of this analysis, adolescent’s gender and age and father’s level of education explained 18% of the variance in adolescent RF scores ($p < .001$). The father’s level of education and the adolescent’s age were both significant predictors; these factors were positively correlated with adolescent RF.
### Table 18

**Summary of the Hierarchical Regression Analysis for Variables Predicting Adolescents’ Social Competence**  
*(N = 105)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R^2 change</th>
<th>R^2</th>
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<td>0.16</td>
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<td>.06*</td>
<td>.06*</td>
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</tr>
<tr>
<td>Adolescent’s age</td>
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<td>0.04</td>
<td>.04</td>
<td>.10*</td>
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<td>0.26**</td>
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* *p < .05. **p < .01. ***p < .001.*
The second step of the regression, which included father’s and mother’s RF scores, was highly significant \((p < .001)\); both father’s and mother’s RF levels significantly affected adolescent’s RF. At this point in the analysis, father’s level of education was no longer a significant predictor of adolescent RF. Similar to our findings concerning adolescents’ Internalizing Symptoms, parental RF mediated the association between parental education and adolescent RF. Thus, parental RF is directly associated with adolescent RF, while parental education is indirectly associated with adolescent RF, through parental RF. In the third step of the regression, we included paternal and maternal behavior variables in the model and found that these additional variables were not significant.

In the last step, the interactions were included in the model. These interactions explained an additional 10% of the variance in adolescent RF \((p < .001)\). Three interactions had significant effects: the interaction between father’s RF and father’s Involvement, the interaction between mother’s RF and mother’s Involvement, and the interaction between father’s RF and mother’s RF. The first two interactions indicated that there was a negative correlation between father’s Involvement and adolescent RF only among low RF fathers \((r = -.35, p < .05)\) and not among high RF fathers \((r = .15, p > .05)\). We also found a negative correlation between mother’s Involvement and adolescent RF among low RF mothers \((r = -.27, p < .05)\), but not among high RF mothers \((r = .18, p > .05)\). Finally, an interaction between father’s and mother’s RF levels indicated that when both parents have high levels of RF, the highest levels of adolescent RF are observed (Figure 4).

![Figure 4. Mean adolescent RF scores relative to mother's and father's RF scores.](image-url)
Table 19

Summary of the Hierarchical Regression Analysis for Variables Predicting Adolescents’ Reflective Function (RF) (N = 105)

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
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<td>.21**</td>
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<td>.20*</td>
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<td>Fathers' RF × Mothers' RF</td>
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<td>0.08</td>
<td>.18*</td>
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* p < .05.  **p < .01.  ***p < .001.
In summary, the regression analyses of the combined effect of parental RF and parenting behavior on the variance in adolescents' outcomes revealed that (a) parental RF, but not parenting behavior, predicted adolescents' RF and Social Competence; (b) parenting behavior, but not parental RF, predicted adolescents' Externalizing Symptoms; (c) both parental RF and parenting behavior predicted Internalizing Symptoms and Personal and Social Self-Perception. Therefore, parental RF appeared to be particularly significant for adolescent RF and Social Competence, and to also affect adolescents' Self-Perception and Internalizing Symptoms; (d) when compared to mothers, fathers' characteristics explained more of the variability in most adolescent outcomes; (e) parental RF interacted with parenting behavior and moderated the relationship between these variables and the various adolescent outcomes; (f) interactions between maternal and paternal variables indicated that the predictive values of maternal and paternal RF and parenting behaviors vary not only according to the outcome measured, but also according to the influence of the other parent; and finally, (g) interactions between the paternal variables and adolescent gender indicated that fathers’ relationships with their adolescent sons and daughters are characterized by a stronger gender differentiation than mothers’ relationships with their adolescent children.

**Structural Equation Model (SEM)**

Finally, in order to explore whether the associations between parental RF and behavior, on the one hand, and adolescents’ outcomes (Internalizing and Externalizing Symptoms and Social Competence) on the other, are mediated by adolescent RF and Self-Perception, path analyses were conducted using AMOS software.

Figure 5 depicts the path analysis. The exogenous variables were Parental RF, Parental Overcontrol, Parental Involvement, and Parental Warmth. The endogenous variables were the adolescents’ outcomes: Adolescent’s RF and Adolescent’s Self-Perception were designated as mediators (affected by parental variables and in turn affecting the target variables) and Internalizing and Externalizing Symptoms and Social Competence were the target variables. In the initial analysis, the goodness of fit was slightly below the threshold ($\chi^2/df = 2.77$; CFI = 0.85; NFI = 0.82; RMSEA = 0.13). Following AMOS modification indices, we added direct effects between Parental Overcontrol on the one hand, and Social Competence and Externalizing Symptoms on the other, as well as between Parental Involvement and Externalizing Symptoms. This model fit the data well ($\chi^2/df = 1.15$; CFI = 0.99; NNFI = 0.95; RMSEA = 0.04).
As shown in Figure 5, Parental RF and Overcontrol correlated significantly and positively with Adolescent RF and negatively with Adolescent Personal Self-Perception. Parental Overcontrol correlated positively with Adolescent’s Externalizing Symptoms and negatively with Social Competence. Parental Involvement correlated negatively with Adolescent’s Externalizing Symptoms; whereas Parental Warmth correlated positively with Adolescent’s Social Self-Perception. Adolescent RF correlated positively with Internalizing Symptoms and Social Competence; and finally, Adolescent’s Personal and Social Self-Perception correlated negatively with Adolescent’s Internalizing Symptoms. These findings indicate that Adolescent RF is a major mediator of the association between parental variables and adolescent outcomes.

Since we found differences between mothers and fathers in relation to adolescent outcomes, we performed separate analyses for mothers and fathers as well (Figures K1 and K2, Appendix K). Following AMOS modification indices, we added one direct effect between Maternal Overcontrol and Externalizing Symptoms in the mothers' model, while in the fathers' model, we added three direct effects, similar to the combined parental model. Both models fit the data well ($\chi^2/df = 0.91$, CFI = 1.00, NFI = 0.94, RMSEA = 0.00; $\chi^2/df = 1.52$, CFI = 0.97, NFI = 0.92, RMSEA = 0.07, mothers' and fathers' models, respectively). As for the associations with RF, there was one difference between the two models: While the fathers' RF was associated with both Adolescents' RF and Personal Self-Perception, mothers' RF was associated with Adolescents' RF only. All the associations between the mediating variables and the target variables were similar.
Figure 5. Path model for the obtained associations between parental variables and adolescents' RF, self perception and outcome variables.
Discussion

The objective of this study was to explore the relationships between parental RF, parenting behavior, and adolescent adjustment. We found that: (a) Parenting behavior variables are associated with positive adolescent outcomes only. Parental RF is associated with both positive and negative outcomes. (b) Adolescent RF is the main mediator of the association between parental variables and adolescents' outcomes and is associated with both positive and negative adolescent outcomes; And, (c) parental RF is a significant moderator of the outcomes of parenting behavior. Also, (d) the fathers' scores are lower than those of the mothers' for RF, Involvement, Warmth, and Overcontrol. Still, paternal characteristics explain more of the variability in most of the adolescents' outcomes than maternal characteristics. Finally, (e) we observed marked gender differences. Boys’ outcomes are associated mainly with parental Warmth and Involvement; whereas girls' outcomes are associated mainly with parental RF and Overcontrol. The following sections present a detailed discussion of the originality and relevance of these findings, as well as a general discussion on the construct of RF.

Parenting Characteristics and Adolescent Outcomes

Parental RF and Adolescent Outcomes

As expected, parental RF associated with adaptive aspects of adolescent adjustment. However, RF was also found to associate with maladaptive aspects of adolescent adjustment. There was a correlation between parental RF and adolescent RF. Children of families in which both parents have high RF levels have the highest levels of RF. The correlation between parental RF and adolescent RF is particularly strong in families with highly involved parents. Father’s RF is correlated with daughter’s Social Competence and adolescent children of parents with high levels of RF are more likely to participate in prosocial activities. Unexpectedly, the levels of RF of both parents correlated with adolescents’ reports of Social Problems, and with lower Self-Perception. Father’s RF is also associated with more Internalizing Symptoms in girls. Overall, there is an evident association between RF and the social domain (Social Competence, Prosocial Behavior, Internalizing Problems, Social Problems, and low Self-Perception).

This conclusion is consistent with the findings of previous studies that have shown that maternal perspective-taking and support are associated with adolescents' perspective-taking and friendship quality (Soenens et al., 2007); whereas negative and nonsupportive parental responses to children's negative emotions are associated with children's low social and
emotional competence (Eisenberg, Cumberland, & Spinard, 1998). Similarly, a cognitively rich and emotionally supportive family environment has been found to be related to adolescents' participation in prosocial activities (Hart et al., 1999). Finally, a longitudinal study revealed that mothers who exhibited high levels of empathy and psychological mindedness had children who were better socially adjusted in adulthood (Solomon, 2000).

Our finding that parental RF is associated with more Internalizing Symptoms and Social Problems and lower Self-Perception among adolescent children is consistent with the findings of three studies that examined the associations between parental characteristics and children's outcomes. The first study identified parental cognitive resourcefulness (as opposed to confused insensitivity) during the preschool years as a predictor of adolescent daughters' depressive symptoms (Gjerde, Block, & Block, 1991). The second study revealed feelings of emotional exposure and intrusiveness in the children of therapists, who are considered to be high in psychological mindedness (Golden & Farber, 1998). The third study revealed that positive parenting practices (i.e., expressing positive affect and sensitivity to the child's needs and goals) were associated with lower levels of pride in three-year-old children and negative parenting practices (i.e., expressing negative affect, intrusiveness, and detachment) were associated with lower levels of shame (Belsky, Domitrovich, & Crnic, 1997).

Finally, we found that both maternal and paternal RF levels are inversely correlated with both girls' and boys' indicators of self-perception. This finding is consistent with recently published reviews of self-esteem research. Self-esteem emerges as a heterogeneous category of personality characteristics that range from an objective and sober appraisal of one's good qualities to narcissism, defensiveness, and conceit (Baumeister, Campbell, Krueger, & Vohs, 2003). People with high self-esteem report higher levels of achievements, more popularity, and better relationships than people with low self-esteem. However, objective measures fail to confirm most of these beliefs (Baumeister et al., 2003). It has been concluded that high self-esteem predicts nothing but happiness, while low self-esteem is more likely to lead to depression (Baumeister et al., 2003) and that "perhaps it is more valuable and adaptive to understand oneself honestly and accurately, even when this means feeling bad about oneself… That would mean that accurate self-knowledge would be more useful than high self-esteem" (Baumeister et al., 2003, pp. 37-38, emphasis added).

Therefore, our finding that high parental and adolescent RF levels are associated with both positive and negative adolescent outcomes may reflect an association between RF and lower defensiveness and/or higher self-awareness of the more negative aspects of one’s inner world, rather than a problematic or maladaptive outcome. This finding may indicate a more
accurate adolescent perception of the self, openness to experience, and/or self-criticism. However, all these entail certain amounts of distress.

Two additional correlations between parental RF and other variables warrant discussion. First, unlike the low correlations between parental and children's empathy reported by others (Strayer & Roberts, 2004), we found a clear and strong association between parental and adolescent RF. This difference is probably due to our use of a better measure of RF and to our emphasis on cognitive ability rather than the emotional aspects of perspective-taking and empathy (Kilpatrick, 2005). The correlation between parental and adolescent RF levels supports the contention that RF develops through the child’s experience of how his/her mental states are reflected upon by the caregiver (Fonagy et al., 1995). This finding is consistent with the reported association between maternal RF and six-year-old children's understandings of emotions (Steele et al., 1999); with the finding that mothers who tended to use mental state terms (mind-mindedness) had children who were more advanced in TOM performance (Meins et al., 2002; Meins & Fernyhough, 1999) and with the finding that mothers who restricted their children’s emotional displays had children who scored lower on measures of emotional understanding (Denham, Zoller, & Couchoud, 1994) than other children.

Second, the correlation between parental level of education and adolescent RF, Social Competence, and Prosocial Behavior is consistent with previous reports that mothers’ levels of education (Meins & Fernyhough, 1999; Cutting & Dunn, 1999) and socioeconomic status (SES; Cole & Mitchell, 2000; Hughes, Deater-Deckard, & Cutting, 1999) correlate with their children's TOM performance. This relationship between SES and TOM may be explained by differences in the frequency, content, and form of parent-child conversations, especially those about inner states (Cutting & Dunn, 1999). Maternal talkativeness is related to SES and both overall conversation and child-directed conversation are generally reduced in low SES families (Hoff, Laursen, & Tardif, 2002). The association between parental education and adolescent RF is fully mediated by parental RF.

Parenting Behavior and Adolescent Outcomes

In this study, parenting behavior (i.e., warm, involved, and not overcontrolling parenting) was consistently associated with positive adolescent outcomes, especially among boys. Involvement and Warmth were associated with fewer Internalizing and Externalizing Symptoms and with a more positive Self-Perception, while Overcontrol was associated with more Externalizing Symptoms and less positive Self-Perception. The only exception was the positive association found between paternal Overcontrol and girls' RF.
These findings are consistent with the conclusions of a recent literature review, which found that parental warmth was related to adolescents' positive adjustment outcomes within and across Western and non-Western cultures (Rohner & Britner, 2002), and with the reported associations of parental warmth and involvement with adolescents’ lower levels of anxiety, depression, and aggression (Heider, Matschinger, Bernert, Alonso, & Angermeyer, 2006; Barber et al., 2005; Goldstein, Davis-Kean, & Eccles, 2005). However, reported findings on the influence of parental overcontrol on adolescent adjustment have been less consistent (Heider et al., 2006). The uncertain relationship between parental overcontrol and adolescents' outcomes has also emerged in cross-cultural studies. Adolescents' anxiety and depression were found to associate with parental overcontrol in European-Americans, but not in African-Americans (Carter, Sbrocco, Lewis, & Friedman, 2001). College students viewed family relations as more positive when mothers, rather than fathers, were presented as permissive and when fathers rather than mothers were depicted as authoritarian (McGillicuddy-De Lisi & De Lisi, 2007). Thus, perceived control by the father may be more acceptable and even have positive effects, as compared with perceived control by the mother.

These mixed results are probably due to the ambiguous definition of the variable Parental Control / Overcontrol. It has been pointed out that while Warmth is clearly defined and supported empirically by factor analytic studies as a major parental dimension, Overprotection (i.e., Overcontrol) is more difficult to define and has lower interrater reliability and validation values (Parker et al., 1979). Several authors have suggested to divide the Overcontrol dimension into two separate factors: intrusiveness and restrictiveness (e.g. Martin, Bergen, Roeger, & Allison, 2004). Different kinds of control have been reported to be associated with different outcomes. Whereas flexible behavioral control has been linked with positive adolescent outcomes, rigid or psychological control seems to have negative effects on adolescent adjustment and to be linked with externalizing and internalizing symptoms (Barber et al., 2005; Laible & Carlo, 2004; Gray & Steinberg, 1999). However, lack of parental control (i.e., permissive parenting) has been linked to substance abuse, school failure, and antisocial behavior (Baumrind, 1991; Barber et al., 2005). Adolescents who perceived themselves as having high levels of freedom in 7th grade were more likely to engage in unsupervised socializing in 8th grade, which in turn placed them at risk for problem behavior in 11th grade. However, adolescents who perceived of their parents as being intrusive were also likely to engage in unsupervised socializing in 8th grade and were at greater risk for problem behavior in 11th grade as compared to adolescents who didn't perceive their parents as being intrusive (Goldstein et al., 2005).
These findings highlight the challenging balance that parents must maintain in the amount of autonomy they grant to their adolescent children (Goldstein et al., 2005; Smetana, 2000). The individuation process implies a negotiated balance between separateness and connectedness in the adolescent’s relationship to the family (Bartle et al., 1989). From the adolescent's perspective, control involves a parental attempt to limit his or her activities (Gecas & Schwabe, 1986), while parents may perceive their control as protecting adolescents (Demo, Small, & Savin-Williams, 1987). It has been argued that the relative level of control within the family should increase as the level of stability and structure in the society decreases (Bronfenbrenner, 1985).

Our finding that higher levels of parental Overcontrol are related to higher levels of RF in girls is consistent with the reported association between parental control and a measure of adolescents' relationship-specific mentalizing ability (Humfress et al., 2002). The authors of this earlier study measured adolescents' mentalizing abilities using an interview, with a subsequent assessment of the coherence of the subjects' answers about their attachment relationships. This method is closely related to our measure of adolescents' RF levels.

**Parental RF Versus Parenting Behavior and Adolescent Outcomes**

Multivariate analyses of the combined effect of parental RF and parenting behavior on the variance in adolescents' outcomes revealed that (a) parental RF, but not parenting behavior, predicts adolescents' RF and Social Competence; (b) parenting behavior, but not parental RF, predicts adolescents' Externalizing Symptoms; and (c) both parental RF and parenting behavior predict Internalizing Symptoms and Personal and Social Self-Perception. Thus, parental RF is particularly significant for adolescent RF and Social Competence, but also affects adolescents' Self-Perception and Internalizing Symptoms.

These findings are consistent with the conclusions of previous studies that the associations between parental variables and adolescent adjustment varied as a function of the outcome assessed (Lamborn et al., 1991). Specifically, it was reported that parental psychological control was associated with psychosocial development and internal distress, while parental behavioral control better predicted externalizing problems (Gray & Steinberg, 1999; Barber, Olsen, & Shagle, 1994).

Moreover, parental RF interacts with parenting behavior and moderates the relationship between these variables and the different adolescent outcomes. Specifically, high parental RF enhances the positive effects of parental Warmth and Involvement, while low parental RF enhances the negative effects of parental Overcontrol. The associations between parental
Warmth and Involvement on the one hand, and adolescents' outcomes on the other, are stronger when levels of parental RF are high. The associations between parental Overcontrol and negative adolescent outcomes are stronger when levels of parental RF are low. These findings suggest that parental RF is important as a superordinate dimension that influences the associations between parenting behavior and adolescent outcomes. In other words, parental RF enables the parents to be involved and to control their child in a supportive and appropriate way. This is particularly important in light of the reported inconsistency in the effect of parental control on adolescent outcomes that we described earlier. This inconsistency may be explained by the presence or absence of parental RF. Parental RF (i.e., the ability to take into account the complexity of both the child’s and the parent’s perspectives) may facilitate the distinction between adequate control and over- or undercontrol.

Our finding that parental RF interacts with parental Overcontrol may also be consistent with the current understanding of various parenting styles and with the distinction between the authoritarian and the authoritative styles of parenting, in particular (Baumrind, 1991). Authoritarian parents demand obedience and punish bad behavior; whereas authoritative parents reason with the child and take into account the child’s needs, and this requires RF. Indeed, it has been reported that higher levels of parental reasoning were related to authoritative patterns of childrearing (Dekovic & Gerris, 1992; Gerris, Dekovic, & Janssens, 1997). The frequently reported finding that parents with lower SES exhibit a more authoritarian parenting style than parents with higher SES has traditionally been explained by differences in value orientation that affect the relative importance placed on conformity and obedience, as opposed to autonomy and self-determination among members of different socioeconomic groups (e.g., Kohn, 1976). Our findings suggest a complementary explanation, namely, that the authoritarian style of low SES parents is related to their lower levels of education and RF, and not only to their value orientation. Indeed, parental perspective-taking ability has been found to explain the relationship between social class and parental childrearing behaviors better than parental value orientation does (Gerris et al., 1997).

Maternal Versus Paternal Variables and Adolescent Outcomes

As compared to mothers, fathers’ characteristics explained more of the variability in most of the adolescent outcomes. Father’s RF is associated with adolescent RF, Internalizing Symptoms, Personal Self-Perception, and Social Competence. Mother’s RF is associated with adolescent RF and Social Self-Perception only. Mother’s influence is more apparent in the
negative effects of Overcontrolling behavior, while father’s influence is more apparent in the positive effects of Warmth.

These findings are consistent with reports that fathers make a unique contribution to their adolescent children’s psychological wellbeing, beyond that of mothers (Videon, 2005), and that paternal warmth is a more significant predictor of adolescents' aggression than maternal warmth (Veneziano, 2003). These findings also support previous research that found that fathers dominate the emotional state of the family and its general mood (Larson & Richards, 1994), father's support is more important than mother’s support in predicting adolescent social initiative (Barber et al., 2005), and that adolescents who perceive their fathers as uncaring and their mothers as overcontrolling have the worst outcomes (Cubis, Lewin, & Dakes, 1989).

We found interactions between maternal and paternal RF scores and between maternal and paternal levels of Overcontrolling behavior. The level of adolescent’s Externalizing Symptoms is highest when both parents are Overcontrolling and in families with a discrepancy between the RF levels of the two parents. Adolescent RF is highest when the RF levels of both parents are high. These findings are consistent with previously reported interactions between mothers’ and fathers’ parenting styles (e.g., Forehand & Nousiainen, 1993; Laible & Carlo, 2004) and suggest that the way in which each parent contributes to his/her child’s outcomes depends on the actions of the other parent.

Therefore, our findings suggest that (a) the assessed fathers' characteristics are more strongly associated with adolescent outcomes than the mothers' characteristics, and make a unique contribution to explaining adolescent emotional and behavioral adjustment; (b) the predictive values of maternal and paternal RF and parenting behaviors vary not only according to the outcome measured, but also according to whether the influence of the other parent is taken into account; and (c) a warm and reflective father and a mother who is not overcontrolling are especially important for adolescents' adjustment.

**Parental Variables and Outcomes of Adolescent Girls Versus Those of Boys**

The associations between parental variables and adolescent outcomes vary by adolescent gender. Boys' Self-Perception is associated with parenting behavior, whereas girls' Self-Perception is not. Boys’ outcomes are associated mainly with parental Warmth and Involvement, while girls’ outcomes are mainly associated with parental Overcontrol and RF. Overall, these findings suggest that parenting behavior and parental RF may have different effects on boys and girls.
Our finding that boys' outcomes are more strongly associated with parenting behavior than those of girls contradicts the pervasive perception of males as more inclined to separateness and autonomy, and of females as more inclined to interpersonal relatedness and connectedness (e.g. Gilligan, 1982). The findings of studies comparing parental influence on adolescent boys and girls are inconsistent. On the one hand, it has been found that individuation from families is related to parenting style in adolescent girls, but not boys (Bartle et al., 1989) and that poor relations with parents decreased girls’ levels of self-esteem (Rice, 1990) and internalizing symptoms (Leadbeater, Kuperminc, Blatt, & Hertzog, 1999), but did not have these effects on boys. On the other hand, some studies have found no differences in the effects of parental influence on boys as compared to girls (Goldstein et al., 2005; Laible & Carlo, 2004), while still others have found boys to be more influenced by their parents. For example, parent-adolescent relationships were more predictive of psychosocial maturity in boys than in girls (Bomar & Sabatelli, 1996). Adolescent boys' self-esteem has been shown to be more strongly related to family relations than that of girls (Demo et al., 1987; Bush, 2000) and the relationship between parent attachment and adolescent self-esteem has been found to be significantly stronger for boys than for girls (Laible, Carlo, & Roesch, 2004).

These inconsistencies may be related to the changes that took place in the orientation of adolescents toward parents and peers between the 1960s and 1980s. It has been shown that girls were highly parent-oriented and boys highly peer-oriented in the 1960s. However, by the '80s, this pattern had been reversed and girls exceeded boys in peer orientation, while boys exceeded girls in parent orientation (Sebald, 1986). Another explanation for the greater effect of parenting behavior on boys than on girls could be that adolescent girls have closer relationships outside of the family (Bukowsky, Hoza, & Boivin, 1994) and higher levels of peer attachment than boys (Laible et al., 2004). It has been reported that adolescent girls turn to the evaluation of peers, rather than parents (Gecas & Schwalbe, 1986). Boys experience an increase in close friendships only in the later high school years, while girls experience an increase in close friendships during both the earlier and later high school years (Shapka & Keating, 2005). A review of gender differences in peer relationships revealed that, as compared to boys, girls are exposed to a wider variety of stressors in the broader peer group and in their friendships and are more likely to seek support, express their emotions, and ruminate in response to distress with peers. In contrast, boys are exposed to more direct physical and verbal victimization by peers, are more likely to use humor in response to stress, and receive fewer emotional provisions in their friendships (Rose & Rudolph, 2006).
A third possible explanation for the finding that boys' outcomes are more strongly associated with parenting behavior than those of girls may be the latter's higher level of maturity and greater need for autonomy from parents. Parents tend to grant more autonomy to boys (Bulcroft, Carmody, & Bulcroft, 1996). However, adolescent girls have been found to score higher than boys on a psychosocial maturity scale (Bomar & Sabatelli, 1996), on various measures of autonomy (Steinberg & Silverberg, 1986), and in terms of level of ego development (Cohn, 1991). Girls also go through puberty, on average, 18 months earlier than boys (Brooks-Gunn & Reiter, 1990). In the current study, girls' greater need for autonomy may be reflected in the fact that the association between girls' symptoms and parental Overcontrol was stronger than the association between their symptoms and parental Warmth. Thus, it would appear to us that an adolescent boy needs warmer, more involved parents, while an adolescent girl needs more reflective and less controlling parents.

Maternal Versus Paternal Variables and Adolescent Girls' Outcomes Versus Those of Boys

The associations between parenting variables and adolescent outcomes are influenced by both parent gender and the gender of the adolescent child. Also, there are more interactions between the paternal variables and adolescent gender than between the maternal variables and adolescent gender. In other words, fathers’ relationships with their adolescent sons and daughters are characterized by a stronger gender differentiation than mothers’ relationships with their adolescent children.

This finding is consistent with those of previous studies, which have shown that fathers treat their sons quite differently than they treat their daughters (Cowan et al., 1993) and engage in differential socialization of emotional expression for boys and girls (Chaplin et al., 2005; Lytton & Romney, 1991). In contrast, there is little evidence that mothers are differentially involved in caring for sons versus daughters (Lytton & Romney, 1991).

The clinical literature points out that adolescent boys are preoccupied with assessing their fathers and their relationships with them and often express a wish for close, significant relationships with their fathers, which, in many cases, is in sharp contrast with their experiences of their fathers’ detachment and distancing behavior (Herzog, 1982; Pollack, 1999). While daughters appear to grow emotionally distant from their fathers from early to late adolescence (Youniss & Smollar, 1985), the adolescent boy attempts to disengage himself from his mother, while forming a new attachment with the father (Pollack, 1999). The findings of the present research provide additional evidence to support these clinical reports. Adolescent boys' outcomes were strongly related to fathers' behavioral variables, especially Warmth and
Involvement. This finding is in line with the assumption of increased gender-differentiated interaction patterns between parents and their children during adolescence (Brody, 1999).

The associations between paternal RF and daughters' outcomes are interesting considering that father-daughter relationships are considered to be the most difficult relationships during this developmental period (Larson & Richards, 1994). Moreover, a pattern of cross-gendered effects (i.e., mother-son and, especially, father-daughter) is apparent in the associations between parental RF and adolescents' Internalizing, Self-Perception, Social Competence, and RF, but not in the associations with the parenting behavior variables. Similarly, mothers' and fathers' psychological control, and not behavioral control, has been found to have a cross-gendered influence on adolescent boys' and girls' levels of depression (Stolz, Barber, & Olsen, 2005).

Correlations Among Personal Variables

Parental RF and Parenting Behavior

There is no association between parental RF and the parenting behavior variables. This lack of association suggests that the RF construct captures a distinct feature, which is different from the other parental characteristics. This finding is consistent with previous reports that did not find significant associations between parental personality characteristics and parenting behavior. For example, parents' impulsivity was unrelated to their self-reported affection toward their children or restrictive discipline (Brook, Richter, & Whiteman 2000) and no relation was found between parental empathy and warmth (Strayer & Roberts 2004) nor between mothers' self-reported constraint and their observed warmth toward their infants (Mangelsdorf, Gunnar, Kestenbaum, Lang, & Andreas, 1990). On the other hand, it has been reported that high parental regulation is associated with more positive parenting behavior (Cumberland-Li, Eisenberg, Champion, Gershoff, & Fabes, 2003).

The lack of association between parental RF and parenting behavior in the present study may be related to the methods we used to assess RF and behavior variables. We used interviews with the parents to assess parental RF and adolescents' self-report questionnaires to assess parenting behavior. In contrast, the associations between high parental regulation and more positive parenting behaviors, reported in studies which we cited earlier, were found only when both of these variables were self-reported by mothers, but not when the parenting behavior was observed by the researcher (Cumberland-Li et al., 2003). Another possible explanation for the lack of association between parental RF and parenting behavior is that children of parents with high levels of RF may be less defensive and less influenced by social
desirability than adolescents with less reflective parents and, therefore, more likely to report negative parenting behaviors. Finally, we must also take into consideration the possibility that there is indeed no association between parental RF and parenting behavior (i.e., RF may not directly associate with reported parental behaviors).

*Parental RF and Parental Education*

Parental level of education is associated with parental RF. This finding is consistent with the reported relationship between maternal education, a mother’s willingness to attribute mental states to her infant, and her understanding of the mind (Cutting & Dunn 1999; Reznick 1999); and the reported relationship between parental education and parental reasoning complexity (Dekovic & Gerris 1992). This finding may also explain why mothers of lower SES, with presumably lower levels of education, were reported to place more importance on the physical aspects of health than on psychosocial issues (Cheng, Savageau, DeWitt, Bigelow, & Charney, 1996).

*Adolescent RF and Adolescent Outcomes*

Similar to parental RF, adolescent RF is associated with higher levels of adolescent Social Competence and Prosocial Behavior, on the one hand, and more Internalizing and Externalizing Symptoms and Social Problems and lower Personal Self-Perception on the other. Adolescent RF is the main mediator of the association between parental variables and adolescent outcomes.

These findings are consistent with those of other authors who have suggested that understanding one’s own mind and the minds of others carries both benefits and costs. First, our finding that adolescent RF is associated with Social Competence and Prosocial Behavior is consistent with previous studies that have shown an association between understanding of others’ minds (TOM) and social competence. For example, an understanding of others' minds has been shown to be related to social skills and moral sensibility in preschool children (Dunn et al., 2000), to social competence and prosocial behavior in preschool children (Cassidy, Werner, Rourke, Zubernis, & Balaraman, 2003), and to social competence in preadolescents (Bosacki & Astington, 1999). The cognitive processes of perspective-taking and emotional understanding have been found to be antecedents of sympathy and empathic emotions (Betancourt, 1990), prosocial behavior (Eisenberg & Fabes, 1998), and morality (Kochanska & Thompson, 1997). According to Damon (1984), moral behavior is rooted in the individual’s
understanding of his/her self, and only during adolescence does an integration between the self system and moral judgment enable a reciprocal relationship between these two factors.

Second, our finding that adolescent RF is associated with more Internalizing and Externalizing Symptoms and Social Problems and lower Personal Self-Perception is consistent with prior studies that found negative consequences for understanding one’s self and others. For example, in 10- to 17-year-old children, self-awareness has been reported to be associated with an increased risk for internalizing and externalizing symptoms (Steinhausen & Winkler-Metzke, 2001). Introspection was positively correlated with depression, anxiety, and various physical symptoms in adolescents (Hansell, Mechanic, & Brondolo, 1986). Similarly, several studies have found an inverse relationship between self-consciousness and self-esteem. Adolescents who reported higher self-consciousness in math rated themselves lower in math ability and those who were highly self-conscious amongst friends rated themselves lower in their ability to make friends (Yee & Flanagan, 1985). It has been suggested that self-awareness forces a recognition of the discrepancies between the real and the ideal self, which causes decreased self-esteem (Duval & Wicklund 1972) and that self-scrutiny invariably includes self-criticism (Horowitz, Markman, Stinson, Fridhandler, & Ghannam, 1990). In adolescent girls, higher levels of interpersonal orientation and involvement have been associated with higher levels of depression (Gore, Aseltine, & Colten, 1993) and high levels of empathy and concern for others have been associated with feelings of guilt, depression, and being burdened by the needs of others (Radke-Yarrow et al., 1994).

Furthermore, kindergarten children who, at the age of 40 months, were more successful in explaining others’ behavior in terms of their beliefs were more likely to describe difficulties with teachers, peers, and various kindergarten activities than children who did less well on the false belief task (Dunn, 1995). They were more sensitive to teacher criticism and more likely to judge their own work harshly, although they had no major difficulties in adjusting to kindergarten. Rather, they were more likely to describe the reactions of others toward them in guarded or slightly negative terms and to mention their own difficulties and inadequacies. Thus, early understanding of the minds of others did not appear to guarantee an easier life at school. Instead, these children were particularly sensitive to, and aware of others’ judgments (Dunn, 1995).

Another study examined individual differences in sensitivity to failure and teacher criticism in first-graders and found that children with more advanced understanding of the mind (TOM) were more sensitive and more likely to rate themselves poorly following failure and teachers’ criticism (Cutting & Dunn, 2002). In reviewing the literature on the links between
TOM and social relations, Hughes and Leekman's (2004) concluded that, "…developments in theory of mind may have positive, neutral or even negative implications for social relations" (p. 607).

The finding that a high level of RF carries benefits as well as costs has also been reported among adults. For example, high levels of thinking, defined as better awareness of feelings and emotions, greater breadth of outlook (greater temporal and conceptual perspective), and a higher degree of self-reflection correlated with higher levels of depression and anxiety (Pennebaker, Czajka, Cropanzano, & Richards, 1990). In reviewing the literature on the connection between self-complexity and wellbeing, Rafaeli-Mor and Steinberg (2002) found that high self-complexity had a mild depressogenic effect and was associated with poorer wellbeing. Finally, denial, self-deception, suppression, and overly positive self-evaluations have each been reported to correlate negatively with anxiety and depression (Taylor & Brown, 1988).

In line with these findings, psychological mindedness has been reported to be associated with lower self-esteem, increased self-criticism, and feelings of anxiety (Farber, 1989). The greatest difference between highly psychologically minded individuals and others is in their increased perception of less benign emotions (those related to hate and sadness); there is no significant difference in their experiences of the emotions related to happiness (Farber, 1989). It has been concluded that:

A high level of psychological mindedness enables one to stay attuned to one's emotional world, but this ability also creates difficulties: one is attuned not only to benign, positive emotions but to less benign, more pessimistic emotions as well. Psychological-mindedness brings with it an ineluctable awareness of the painful aspects of human existence …. In this sense, highly psychologically minded individuals are wiser but also sadder… the benefits of psychological mindedness… are inextricably linked to its costs (Farber, 1989, p. 216).

These findings underscore the self-absorption paradox, which states that frequent inspection of one's feelings and thoughts seems to improve the accuracy of self-knowledge, but at the cost of psychological distress. Trapnell and Campbell (1999) tried to resolve this paradox by making a distinction between ruminative and reflective self-focus. However, they concluded that "…accurate self-perception involves both costs and benefits. Removing the rose-colored coating from one's looking glass is unlikely to enhance self-confidence and optimism. The
interpersonal benefits of accurate self-perception may, however, be substantial” (Trapnell & Campbell, 1999, p. 299).

It may be concluded that RF involves intellectual and emotional awareness of both the pleasant and stressful aspects of life. It seems that one needs a minimum level of RF/self-understanding/self-awareness/psychological mindedness in order to be aware of the negative aspects of one’s own self and to present internalizing symptoms or social problems. Higher levels of RF allow one to reflect on one’s self and to experience depressive affect and lower self-perception. However, there are benefits as well, specifically more accurate perception of one’s self and others, more awareness of one’s own distress and that of others, and thus the possibility of higher levels of social competence and prosocial behavior.

Adolescent RF emerged as a main mediator of the association between the parental variables and adolescent outcomes. This finding underscores the significance of adolescent RF as a mechanism through which reflective parenting affects adolescents’ adjustment. Several other studies have found that related constructs mediate the association between parental characteristics and children’s outcomes. For example, adolescents' perspective-taking was found to mediate the association between maternal perspective-taking and support and adolescents' friendship quality (Soenens et al., 2007). Additionally, children’s empathic orientation was found to mediate the relationship between parent-child connectedness and children's peer relationships (Clark & Ladd, 2000); and emotional competence was found to mediate the link between attachment security and social behavior (Laible, 2007).

Adolescent RF emerged as a much more important mediator of the association between parental variables and adolescents' outcomes than Self-Perception. This is in line with the contention of Baumeister et al. (2003) that high levels of positive self-perception do not lead to anything but happiness. It is possible that taking into account adolescent RF as a mediator of the link between parenting and adolescent outcomes may resolve some of the inconsistencies in the existing research concerning the relationship between parenting behavior and adolescent behavior. It would appear to us that the relevant factor in this relationship is adolescent RF, because it is the main predictor of adolescents’ outcomes.

Gender Differences

Differences Between Mothers and Fathers

In this study, mothers scored significantly higher than fathers for RF and for the parenting behavior variables: Involvement, Warmth, and Overcontrol. The magnitude of these differences varied; the largest difference was in the level of Involvement, and the smallest
difference was observed for Overcontrolling behavior. Even though men in contemporary society are more involved in childrearing than in the past, there appears to be a continuing gap between paternal and maternal involvement in parenting activities.

Our results are consistent with the findings of earlier studies that addressed the difference between fathers' and mothers' levels of parental involvement in Israel (Canetti, Bachar, Galili-Weisstaub, Kaplan De-Nour, & Shalev, 1997) and in various Western countries (e.g., Wood & Reppetti, 2004). Similarly, mothers were rated significantly higher than fathers for levels of acceptance, involvement, cognitive understanding, and strict control (Liable & Carlo, 2004; Forehand & Nousiainen, 1993). The observed difference between fathers' and mothers' RF levels is consistent with earlier reports that women are more aware of emotions in both themselves and others (Barrett, Lane, Sechrest, & Schwartz, 2000), that women are more inclined to take the perspective of another person (Davis & Franzoi, 1991), and that women experiencing their first pregnancy have higher levels of RF than their husbands (Lis et al., 2000). Recently, Baron-Cohen (2003) proposed that the mind has two dimensions: empathizing, similar to RF, is a drive to identify the mental states of others and to respond to them in an appropriate way; whereas systemizing is the drive to analyze a system in terms of its rules in order to predict its behavior. Men were found to score significantly higher than women on systemizing tasks and significantly lower on empathizing tasks (Lawson, Baron-Cohen, & Wheelwright, 2004).

These gender differences are probably due to social expectations (Brody, 1999; Eisenberg & Lennon, 1983), context, motivation (Ickes, Gesn, & Graham, 2000) and, to a lesser degree, biological differences. The picture of the brain that has emerged from decades of neuroscience research is one in which precious little is fixed at birth. Gender differences appear to be elicited mostly through interactions between certain biological predispositions (biological preparedness) and the environment. The environment plays a very large role in determining whether and how certain biological predispositions are expressed (Cummins, 2000).

Our findings indicate that although less reflective and less involved, fathers seem to be more influential than mothers. The apparent contradiction between the fathers' lower levels of involvement and RF on the one hand, and higher associations with adolescents' outcomes on the other, may have several explanations, including fathers' dominance in society, in general, and in the family, in particular (Larson & Richards, 1994). Shulman and Klein (1993) explained this apparent contradiction by stating that, "...fathers, by not being too involved and by showing respect for adolescent strivings for independence, serve as an adequate model and facilitate the separation-individuation process in adolescence" (p. 41).
Finally, the father’s parental characteristics, because of their lower levels, may play a more salient role in an adolescent’s life than the mother's, when they are present (Forehand & Nousiainen, 1993). It seems that there is an increase in the significance of fathers as the child develops and that, particularly during adolescence, the father plays a unique and significant role.

Differences Between Adolescent Girls and Boys

Adolescent girls scored significantly higher than adolescent boys for Social Self-Perception. Boys reported more Externalizing and fewer Internalizing Symptoms. In contrast, this pattern was reversed among girls. Girls reported more Internalizing Symptoms and fewer Externalizing Symptoms.

Our findings are consistent with previous reports that girls scored higher than boys in measures of social self-perception, while boys tended to have more positive physical self-perceptions (Shapka & Keating, 2005). It has also been reported that adolescent girls experience more internalizing symptoms and more negative emotions than adolescent boys (Steinhausen & Winkler-Metzke, 2001; Leadbeater et al., 1999) and are also more prone to self-criticism (Cheng & Furnham, 2003).

The Construct of RF in Light of the Present Findings

The findings of the present study support the contention that RF is at the heart of various psychosocial phenomena, such as empathy, self-awareness, emotion regulation, prosocial behavior, and various social skills, and that the RF construct captures important characteristics of the parent-child relationship.

We found a strong association between parental and adolescent RF. In other words, parental RF emerged as an important factor in the development of children’s RF levels. This finding underscores the importance of relationships and communication as a way of confirmation and expansion of the self. The child's engagement with a social world, especially the world of complex interactions mediated by language, is the immediate cause of the child's acquisition of an understanding of his or her own mental states, as well as those of others (Olson, Astington, & Zelazo, 1999). During adolescence, parental RF helps parents to understand their developing child’s needs for autonomy and separateness, while negotiating their relationship.

We also found that parental and adolescent RF levels were significantly associated with adolescent outcomes, and that adolescent RF was the main mediator between parental
characteristics and adolescent outcomes. These findings provide additional support for the contemporary movement in the social sciences toward a relational approach to human nature. The premise of this movement is that people are fundamentally social and that relationships are part of the fabric of being human (Noam & Fischer, 1996). Parent-child interactions are especially important for this socialization process and crucial for the transmission of cultural values and appropriate behavior patterns. This premise departs from the liberal, individualist view that emphasizes self-containment and autonomy in facilitating adolescent self-regulation and individuation.

We found that RF carries both benefits and costs. It is associated with social competence and prosocial behavior, as well as heightened awareness of social problems, internalization of problems, and low self-perception. In the literature dealing with social development, the predictor variables tend to have either positive or negative antecedents and outcomes. The variable RF appears to be more complex in the sense that some of its correlates are adaptive, while other correlates seem to be maladaptive. In other words, the overall impact of RF may be related to adjustment trade-offs. Indeed, several theorists and therapists (Maslow, 1970; Rogers, 1961) have claimed that understanding and acceptance of both the desirable and undesirable aspects of one’s self are prerequisites for a healthy and rewarding social life:

Clearly, one might have to endure some negativity to be healthy. Society has an obsessive focus on strategies aimed toward reducing the awareness of unpleasant emotions… One cannot ascribe too much importance to positivity by neglecting what appears to be a necessary psychological cost... The path to a satisfying and fulfilling life does not bypass difficulties and negative thoughts and feelings (Niederhoffer & Pennebaker, 2005, pp. 581-582).

Our findings indicate that the association between RF and negative emotions is present both in the intrapersonal sphere (i.e., self-awareness that entails self-criticism and distress) and in the interpersonal sphere (i.e., an awareness of the feelings of others that entails guilt and distress). RF is based on both self-awareness and an awareness of others, as well as a capacity to cope with the negative thoughts and feelings that accompany this awareness. On the intrapersonal level, our finding that parental RF was linked to adolescents' personal and social self-perception is important because it underscores the cost of a mature understanding of the self, specifically awareness to its negative aspects, self-criticism, and lower self-esteem.
Still, the benefits of RF, specifically social competence and prosocial behavior, as well as the minimal benefit of high self-esteem (Baumeister et al., 2003) strongly suggest that accurate self-perception (i.e., higher RF) is more important than high self-esteem. This conclusion challenges the prevailing assumption, held by parents, teachers, and therapists, that an effort should be made to boost self-esteem. Rather than aiming to boost self-esteem, parents should emphasize the importance of learning, of appropriate performance, and of appropriate behavior (Baumeister et al., 2003), as well as the importance of reflective self-criticism. This conclusion also challenges the pervasive use of self-esteem as an indicator of personal adjustment (e.g. Bartle et al., 1989).

On the interpersonal level, the association between parental and adolescent RF and prosocial behavior indicates that RF entails an ability to see things from the other’s perspective, a concern for other people, and a social commitment. Several emotions, including guilt, shame, and empathy, have been labeled as self-conscious emotions because the individual's understanding and evaluation of the self are fundamental to these emotions. Guilt involves concern for others' feelings, while shame is based on an awareness of the self from the vantage point of the other. An understanding of emotions and of the perspectives of others, and a willingness to bear the costs of such an understanding are the foundations of morality (Kochanska & Thompson, 1997; Eisenberg, 2000).

It is interesting to note that the Hebrew word for morality, musar, is derived from the root-word meaning suffering. In analyzing the origins of morality, Loevinger (1996) asserted that:

[C]onscience is above all a reflexive concept. It implies self-criticism and hence self observation... All such reflexive terms apply only to a person with some articulated sense of self…. Perhaps the most essential aspects of conscience are the emotional components of self-criticism, including shame, being ashamed and guilt (pp. 397-398).

Adolescence, with its characteristic increase in perspective-taking ability as well as an emerging ideological perspective, seems to be a particularly critical and sensitive period for the development of prosocial behavior and moral reasoning.

Reflective function entails greater awareness and acceptance of negative feelings. Reflective individuals appear to be less defensive and to more readily report their negative traits and feelings. There are two possible explanations for this. RF may be associated with either lower levels of social desirability or higher awareness of negative emotions and feelings,
as discussed earlier. The first explanation is related to situational defensiveness; the second explanation is related to a more stable personality characteristic. Self-reports may reflect, at least in part, situational social desirability (defensiveness) and/or the level of self-awareness (Vaillant, 1998). Therefore, our findings raise questions regarding the validity of self-report questionnaires, in general, and in studying RF, in particular. In light of the present research, the difficult task of separating defensiveness and social desirability from the variables measured appears to be worthy of serious consideration.

We found that parental RF interacts with parenting behavior and moderates the relationship between these variables and adolescents’ outcomes. This finding underscores the significance of RF as a context for parenting behavior. Thus, in the presence of higher levels of parental RF, parenting behavior has more positive outcomes. The findings of the present study show that parental RF is important in coping with the complex issue of parental control and may contribute to the understanding of how authoritative parenting is associated with better adjustment of children and adolescents.

In addition, we found that parental control was associated with adolescent RF. This association between RF and control is consistent with the reported relationship between RF, the processing of affective experiences, and self-regulation (Fonagy et al., 2002). Understanding mental states and one's inner life is connected to better self-control (Frye, 1999). Understanding of the self and others has been linked with various ego executive functions, such as inhibitory control, and appears to play a critical role in the development of TOM (Moses, Carlson & Sabbagh, 2005). Findings from empirical studies suggest a robust relationship between TOM development and executive functions (Hughes & Ensor, 2007). Thus, the significance of RF extends beyond an insight into specific contents of one’s own inner world or those of others; its significance lies in its relation to more mature ego functions.

The Contribution of the Present Study to Existing Knowledge

The present study has four main advantages over other studies of the effect of parenting on adolescent adjustment. First, it included both mothers and fathers and both adolescent boys and girls. Second, it included both parental RF and parenting behavior, which allowed for the examination of both behavioral and intrapsychic variables. This study also included a range of adolescent outcomes, both adaptive and maladaptive. Thus, in contrast to previous research in this field, which has focused on the effect of parental RF in early childhood (e.g. Fonagy et al., 1991), the influence of mothers’ characteristics on their children's development (e.g. Soenens et al., 2007), and TOM development in children under the age of five (e.g. Hughes & Ensor, 2007), the present study adds a new perspective on the relationship between parental RF and adolescent adjustment.
2007); this study assessed the effect of parental RF on adolescents, the influences of both maternal and paternal characteristics on child development, and adolescent RF. Our study permits new and more differentiated insights into the relationship between parental characteristics and adolescents’ outcomes. The findings suggest a more complex pattern of parenting influences that goes beyond direct effects, toward models that consider parenting in the context of other factors and which can be used to examine the moderating influences of different variables.

Third, it has been stated that, "Studies that deal only with surface variables, overt behaviors and conscious content, are apt to miss the main motives of behavior" (Scheff & Fearon, 2004, p. 87). A major strength of our study lies in its combined use of questionnaires and semistructured interviews, which allowed the collection of both qualitative and quantitative data from different sources concomitantly, thereby overcoming the problems of shared method variance and single report. Despite the open-ended question format of the semistructured interview, the PDI’s variables performed well, with high interrater reliability and internal consistency. The large sizes of the observed effects are still more impressive in light of the differences in assessment methods used (interviews and self-report questionnaires) and the multiple reporters (parents and adolescents).

Finally, we found that parental RF is a significant moderator of the outcomes of parenting behavior, that parental RF has both benefits and costs, and that adolescent RF is a major mediator of the association between parental characteristics and adolescent outcomes. The associations of RF with adolescents’ outcomes and interactions between parenting behavior and parental RF contribute a novel perspective to the study of parenting and adolescent development.

**Implication for Clinical Practice**

A focus on RF as a metacognitive capacity may have important clinical implications. First, it is a parsimonious construct that provides an opportunity to both understand the effects of parenting and translate this understanding into practice. In other words, use of the RF construct may simplify the translation of research findings into practical applications. Rather than trying to delineate what a parent should do in a specific context at a specific stage in the development of his/her child, our findings suggest that it may be more effective to train parents to increase their awareness and understanding of their own thoughts and feelings about their child, of their child's way of thinking and feeling, and of the processes underlying their own and their child's behavior. Rather than offering, and perhaps confusing, parents with advice on
specific types of behavior that may occur in complex configurations, it seems more effective to communicate a small number of conditions that facilitate parental relationships with their children.

For example, the presented findings regarding parental control highlight the fine balance that parents need to maintain in controlling their children's behavior. Granting too much freedom and autonomy may place adolescents at risk for problem behavior. On the other hand, an overcontrolling and intrusive parenting style may increase an adolescent’s externalizing symptoms and reduce his/her self-perception. Raising the awareness of parents to the issue of control, in general, and to their adolescent child’s needs and feelings on this issue, in particular, may be more effective than specific advice, and may thereby prevent adolescents’ difficulties in adjustment. Although it has been defined as a cognitive capacity, RF also depends on motivation and on the context within which it is exercised. RF implies that the parent has to deal with affective and cognitive information about himself or herself, about the child, and about the parent-child relationship. This requires time and motivation, beyond a metacognitive capacity for RF. Our findings suggest that such motivation may be particularly relevant for fathers.

Second, the importance of RF for adolescents’ adjustment underscores the facilitating role of communication between parents and their adolescent children (Sillars, Koerner, & Fitzpatrick, 2005). Encouraging family conversations may also foster RF in adolescents. Indeed, various intervention programs have been described that aim to increase parents’ awareness, self-awareness, mindfulness, and intentionality in responding to their children's needs. One such program has been successfully implemented with parents of preschoolers following divorce (Altmaier & Maloney, 2007). Another reflective parenting program has been implemented among low-and high-risk parents of young children (Slade, 2006). A range of mentalization-based therapies for both adults and children have been developed by Fonagy and his colleagues (Allen & Fonagy, 2006). Our findings suggest that such interventions may also be effective for parents of adolescents.

Finally, our findings establish the applicability and reliability of an adapted interviewing guide for assessing the RF levels of parents of adolescents. At the clinical level, this guide may assist in the intake process. Understanding the ways that parents think about parent-child relationships and parenthood may give the clinician better insight into why parents in both problematic and unproblematic situations behave as they do, and help those clinicians to plan their interventions accordingly. Assessments of parental RF may constitute a helpful
indication of the parents' personality integration and maturity, as well as of the depth and quality of their relationships with their children.

**Limitations of the Present Study**

The present study has two main limitations. Most families were recruited through the snowball technique and included two parents married to each other. Therefore, it is possible that our findings can not be generalized across other types of families. Second, the cross-sectional design of our study precludes any inference of cause-effect relations. It can be argued that the direction of causality is actually the reverse of what we supposed; that is, that children's characteristics influence the level of RF of their parents, or that reciprocal and cyclical associations exist between family interaction and youth behavior. Previous theoretical and longitudinal research has suggested that parents affect the adjustment of their children and, therefore, provides some evidence of the causal precedence of the family experience (e.g., Barber et al., 2005).

**Future Research**

Three of the findings of the present thesis call for further research. First, the finding that RF was also associated with costs was unexpected. As such, it requires confirmation, even though it seems to be supported by previous research. Second, our hypotheses did not include a prediction of prosocial behavior. Therefore, the association between RF and prosocial behavior needs further support. Finally, the association between RF and control, in general, and parental RF and control, in particular, needs further investigation.

Our findings clearly indicate the need to include considerations of the gender of both parents and children into studies of the relationships between parental characteristics and adolescent children's outcomes. In other words, it seems crucial that researchers consider separately the influences of maternal and paternal parenting dimensions on the outcomes of adolescent boys and girls. Each parent appears to contribute uniquely and differentially to adolescents’ outcomes. Fathers appear to make a major contribution, and this underscores the importance of including fathers in child development research projects, in general, and projects involving adolescents, specifically. Future studies may also examine whether special circumstances, such as adoption or coping with an illness or other source of stress, call for higher levels of parental RF. In other words, whether RF can provide a buffer against child maladjustment in more complex situations, so that the more stressed individuals benefit most.
We believe that future research should also refine the construct of RF by differentiating between its emotional and cognitive aspects. Indeed, it has been shown that children's understandings of the mind and understandings of emotions predict different social outcomes (Cassidy et al., 2003). In addition, an effort should be made to differentiate between low RF due to low cognitive ability or level of education and low RF due to emotional factors, such as high levels of defensiveness or social desirability. RF may be seen as a skill that is characterized not only by the person’s ability, but also by the context within which the skill is exercised. Future research might examine the fluctuation of RF levels over domains of interpersonal interaction, as well as over time and across situations (Fischer & Ayoub, 1996), in order to differentiate between a general capacity and a more relationship-specific RF capacity. For example, an effort should be made to differentiate between high potential for RF, but low awareness of the child’s inner world because of a specific context, such as a child’s characteristics (e.g., non-communicative) or certain parental characteristics (e.g., disengaged or absent parent), on the one hand; and low RF combined with a close and involved relationship, in which the parent knows the child, but not on a complicated level, on the other hand.

Future research may also focus on postadolescent age groups. It is possible that the benefits of RF will be more apparent in later years, as adolescents grow up and face the complex tasks of managing adult life and establishing relationships with others. Adolescents with low levels of RF may be at risk for interpersonal difficulties because of their restricted range of emotional responses and their simplistic thinking about others. They may face frustration and limitation in their close relationships and exhibit more defensiveness as well as impulsivity. Adolescents with higher levels of RF, in contrast, may have more flexible and adaptive means of self-regulation, a greater capacity for establishing productive and sustaining relationships, and may demonstrate higher levels of social commitment and concern for other people.

Final Thoughts

When we began this study, we thought that RF was the key for understanding social and psychological adjustment. However, this contention appears, in hindsight, to have been overly simplistic. As shown in the previous sections, RF carries benefits and costs. The realization that it is associated with both adaptive and maladaptive outcomes raises the question of whether clinical psychologists should promote reflectivity. What is the trade-off between the utility and disutility of such a promotion?
The main goal of psychological support is to improve an individual's wellbeing and increase his/her happiness. Self-esteem is known to predict happiness. However, both self-esteem and happiness may be reduced by RF (i.e., by the understanding of one’s self and others). How then can reflectivity be promoted, if it may increase one's insight into one’s own weaknesses, feelings of inadequacy and internalizing symptoms, as well as sensitivity to the sorrows of others? Is it ethically permissible to engage in the promotion of reflectivity without informing one’s clients of its expected costs and benefits?

While we do not have ready answers to these questions, we believe that promoting RF is a worthwhile endeavor and that its benefits by far outweigh its costs. Several authors have underscored the importance of constructs that are similar to RF or to its main aspects. Karl Mannheim (1950) has stated that "…reflectiveness preserves life by helping us to adjust to new situations so complex that in them the naive and unreflective man would be utterly at a loss" (Mannheim, 1950, p. 57).

George Herbert Mead (1934) thought that the capacity to take the perspective of the other and see things from the vantage point of a friend, a spouse, an enemy, the community, and even the whole of humanity is a defining attribute of human beings. By imaginatively "taking the role of the other", Mead said the individual is able to control not only his or her conduct, but also to empathize, to feel what the other is feeling and not only think what the other is thinking:

It is generally recognized that the specifically social expressions of intelligence, or the exercise of what is often called 'social intelligence', depend upon the given individual's ability to take the roles of, or 'put himself in the place of', the other individuals… These specifically social expressions of intelligence, of course, acquire unique significance in terms of our view that the whole nature of intelligence is social to the very core – that this putting of one's self in the places of others, this taking by one's self of their roles or attitudes, is not merely one of the various aspects or expressions of intelligence or of intelligent behavior, but is the very essence of its character (Mead, 1934, p. 141).

We believe that the main goal of psychological support is to help individuals grow, develop, and adjust to their surrounding, rather than to achieve immediately enhanced wellbeing and happiness. Our findings suggest that RF is more than a mere capacity for attribution of mental states to one’s self and others that can improve every day predictions and explanations of human behavior. We believe that RF is the foundation for the control and
regulation functions of the self. Any system, whether physiological or social, will go wild in the absence of adequate control and feedback regulation. RF enables self-control, as well as flexibility, complexity of thinking, and openness. RF is also the foundation for concern for the other and meaningful relationships. Concern for others and meaningful relationships are particularly pertinent components of RF, because they are the roots of moral behavior and imply willingness to bear the costs of morality.

Consequently, it would appear to us that RF is needed today more than ever. The capacity for understanding one’s own mind and the minds of others imparts an evolutionary advantage as it allows humans to live in social organizations. In the absence of this solely human ability, we are all confronted with lower levels of understanding between individuals and groups and with more alienation and aggression. Social relationships form an essential foundation for the development of human beings, both as individuals and as members of families, societies, and nations. As a society, we need to encourage the development of RF and to succeed in coping with and containing its costs in order to enjoy its benefits. The quest for a better society and a better individual is advanced by any discourse that explores the nature of the social bond and by practices that seek to enhance it. Reflective function is one such practice.
References


Appendix A: Written informed consent

ה FETCHihu להשתתפות במחקר Benny

כתב הסכמה להשתתפות ב המחקר Benny

גב’נעמי בר-בסט הוזמינה אותי להשתתף במחקר על הסתגלות בגיל התבגרות

1. מטרת המחקר היא ללמוד על גורמים המשפיעים על התנהגות

2. השתתפות במחקר כוללת בפגישה שלי של בן/בת זוגי של בנינו

3. אני יכול להפסיק את השתתפותי במחקר בכל עת.

4. מובטחת סודיות וخصوصיות של כל הנתונים שיאספו, ע”י

5. אם אני רוצה בכך, בין Benny תשתף אותי במסקנות המחקר

6. אם יגלה שאלות מיחשוב לגבי המחקר, אני יכול להתקשר

חתימה: ____________________

1. מטרת המחקר היא ללמוד על גורמים המשפיעים על התנהגות

2. השתתפות במחקר כוללת בפגישה שלי של בן/בת זוגי של בנינו

3. אני יכול להפסיק את השתתפותי במחקר בכל עת.

4. מובטחת סודיות וخصوصיות של כל הנתונים שיאספו, ע”י

5. אם אני רוצה بذلك, בין Benny תשתף אותי במסקנות המחקר

6. אם יגלה שאלות מיחשוב לגבי המחקר, אני יכול להתקשר

חתימה: ____________________
Appendix B: Written explanation about the study

Dr. Israeli

"Explanation about the study"

1. The purpose of the study is to learn about factors influencing the behavior and feelings of children during adolescence. It is known that this period is often accompanied by difficulties for the teenager and the parents. We check different factors that may be significant, such as: the characteristics of the teenager's relationship with the father and mother, the level of involvement of each parent, patterns of communication between parents and their children, and so on. The study includes many families, including those by adoption, which may be of great importance due to the added complexity and challenge. The study's conclusions will allow a deeper understanding of the processes during adolescence, and will help the teenager and parents in finding appropriate strategies.

2. Assured confidentiality and anonymity of all data collected, by using numbers only, without mention of names.

3. If there are any questions regarding participation in the study, you can contact Nami Ben-Baesi by phone at 647-2067-08 (work) or 9965197-08 (home).


5. Thank you very much for your cooperation.

In the name of:

Professor Batia Franiel and Nami Ben-Baesi
Appendix C: Demographic Questionnaire

TELEVISION

 משחק המגורים: אה. בית ב. קנה ד.ишוב קהילתי ה. אחר:  עיר ב. מושב ג. קיבוץ ד. ישוב קהילתי ה. אחר.

 גיל בת-זוג:  נישואים ראשונים: אלה ב. לא

 הפרשנות שנות נישואים: אלה ב. לא

 ארץ לידה: של האמה: של האם: של אב בת-זוג: של אב בת-זוג:

 מקצוע: נישואים ראשונים: אלה ב. לא

 מקצוע: של האם: של האם: של אב בת-זוג: של אב בת-זוג:

 עיסוקך עיסוקך עיסוקה עיסוקה: אלה ב. לא

 עיסוקך עיסוקך עיסוקה עיסוקה: אלה ב. לא

 השכלה: השכלה: השכלה: השכלה:

 מקצוע: מקצוע: מקצוע: מקצוע:

 מספר החדרים בבית: מספר הנפשות בבית: מספר הילדים בבית: גילאי孩子们: 1 2 3 4 5.

 מספר הילדים בבית: גילאי孩子们: 1 2 3 4 5.

 מספר הילדים בבית: גילאי孩子们: 1 2 3 4 5.

 מספר הילדים בבית: גילאי孩子们: 1 2 3 4 5.

 מספר הילדים בבית: גילאי孩子们: 1 2 3 4 5.

 מספר הילדים בבית: גילאי孩子们: 1 2 3 4 5.

 מספר הילדים בבית: גילאי孩子们: 1 2 3 4 5.

 מספר הילדים בית: גילאי孩子们: 1 2 3 4 5.
Appendix D: The Parent Development Interview

The Parent Development Interview

I will ask you a number of questions about your child and you as a parent. There are no right or wrong answers. I am interested in how parents experience their connection with their child.

1. Can you briefly describe your family? Who lives at home? How many children do you have? What are their ages?

2. Are there any special circumstances in your family - such as divorce, or the loss of a family member - in the past?

3. Has your child/child's behavior changed in recent years? In terms of relationships, social, academic.

4. What are the things that make your child/child happy?

5. What are the things that make your child/child sad or stressed?

6. If your child/child was sad recently, can you give an example of what happened?

7. How do you respond when your child/child is sad? What are your feelings, thoughts?

8. In your opinion, how do your relationships with your child/child affect his personality or development?

9. What do you enjoy most in your relationships with your child/child?

10. When do you feel closest to your child/child?

11. What is the hardest thing for you to deal with in your relationship with your child/child?

12. Are you feeling angry towards your child/child? If so, in what situations do you feel like this? Example from the past?

13. Are you feeling guilty as a parent? If so, in what situations do you feel like this?

14. Do you feel like you need someone to support you, help you? In what degree do you feel supported by your partner?

15. What is, in your opinion, the most important goal in raising children?
Appendix E: Examples of parental answers indicating low and high levels of RF:

להמה נמוכה של רפלקטיביות:

ש: מה הדברים שגורמים לשרה (שם בדוי) עצב או מצוקה?
ת: תהיי ברורה שאם קורה משהו בבית אז זה ברור ש... אהה...
ş: מה הדבר הבא כדי להבין שהאם נפגעה? זה מתרחש בﬀadvertisement או פĳו כך...
ת: אי אפשר... או כיון שהם יוצאים נ攀升ים, או איך הם פĳו כל זה, הם יוצאים פĳו של אותו מקום ו... אי אפשר...
ש: האםlico לקיים כלים נוספים? עצב או מצוקה
ת: עצב או מצוקה.
ש: איך אתה מגיב כששרה עצובה? מה אתה מרגיש או חושב?
ת: מדבר איתה, מנסה להסביר, אםבאי הבנה даже ומה היא אי הבנה. ו... אם היא עדיין בעצבים, אז היא פĳו מהמר זמן.print하기 לאーズ.o
ש: אתה יכול לחשוב על דוגמה מהזמן האחרון שלשרה העצובה מיקום האזור או מה קרה?
ת: עצבה? לא עצובה, היא יכולה להתעצבן אבל לא עצובה, יש הבדל בין המילה עצובה ל... ולהעצבתSeverity Enriqueיה מתחבירה... זה צריך להיות מקרה נדיר.
ש: איך אתה מגיב כששרה עצובה?
ת: אני יכול לדבר על זה שהיא מתעצבנת, אז למשל סתם דוגמה, אם אימא שלה הפסיקה אותה בהכנת העוגות, אז היא התעצבנה ועלתה לחדר )מילים לא ברורות, מרואית "בולע" את המילים(. זה חולף. כאילו לא נתנו לה…..
ש: איך אתה מגיב כששרה עצובה?
ת: אני יכול לדבר על זה שהיא מתעצבנת, אז למשל סתם דוגמה, אם אימא שלה הפסיקה אותה בהכנת העוגות, אז היא התעצבנה ועלתה לחדר )מילים לא ברורות, מרואית "בולע" את המילים(. זה חולף. כאילו לא נתנו לה…..
ש: אתה יכול לחשוב על דוגמה מהזמן האחרון שלשרה העצובה תהיי ברורה?
ת: עצבה? לא עצובה, היא יכולה להתעצבן אבל לא עצובה, יש הבדל בין המילה עצובה ל... ולהעצבתSeverity Enriqueיה מתחבירה... זה צריך להיות случай נדיר.
ש: אתה יכול לחשוב על דוגמה מהזמן últmate שלשרה העצובה תהיי ברורה?
ת: העצבה? לא עצובה, היא יכולה להתעצבן אבל לא עצובה, יש הבדל בין המילה עצובה ל... ולהעצבתSeverity Enriqueיה מתחבירה... זה צריך להיות случай נדיר.
ש: אתה יכול לחשוב על דוגמה מהזמן últmate שלשרה העצובה תהיי ברורה?
ת: העצבה? לא עצובה, היא יכולה להתעצבן אבל לא עצובה, יש הבדל בין המילה עצובה ל... ולהעצבתSeverity Enriqueיה מתחבירה... זה צריך להיות случай נדיר.
ש: אתה יכול לחשוב על דוגמה מהזמן últmate שלשרה העצובה תהיי ברורה?
ת: העצבה? לא עצובה, היא יכולה להתעצבן אבל לא עצובה, יש הבדל בין המילה עצובה ל... ולהעצבתSeverity Enriqueיה מתחבירה... זה צריך להיות случай נדיר.
ש: אתה יכול לחשוב על דוגמה מהזמן últmate שלשרה העצובה תהיי ברורה?
ת: העצבה? לא עצובה, היא יכולה להתעצבן אבל לא עצوبة, יש הבדל בין המילה עצובה ל... ולהעצבתSeverity Enriqueיה מתחבירה... זה צריך быть случай נדיר.
ש: אתה יכול לחשוב על דוגמה מהזמן últmate שלשרה העצובה תהיי ברורה?
ת: העצבה? לא עצובה, היא יכולה להתעצבן אבל לא עצובה, יש הבדל בין המילה עצובה ל... ולהעצבתSeverity Enriqueיה מתחבירה... זה צריך być случай נדיר.
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### Appendix F: The Child Care-giving Involvement Scale

**מס’ סידורי**

אנא, דר Scalars את מידת המעורבות והאחריות שלך בכל תחום

מ - 1 "כלל לא" עד 5 "באמוון מלא".

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<td>4</td>
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<td>5</td>
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<td>4. מארז/ת/ה גרavitוט הקשורים בבניון הילד</td>
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<td>5. משמת/ת/ה בארועים הקשורים לילד (ספיטו, ברואט, זוגית)</td>
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<td>6. מארז/ת/ה גרavitוט הקשורים לילד</td>
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<td>8. מ牝ה/מן בישית/ית נפרת ילד על דובים משטרטיקום אוות</td>
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<tr>
<td>9. מ ואני/י העד חוגה ילד עם מוטש</td>
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<tr>
<td>10. מארז/ת/ה שלחל תכניות פאסיבים ממפיסים בחית (מקורי, קוניו ורד)</td>
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Appendix G: The Parental Bonding Instrument

The Parental Bonding Instrument is a tool used to assess the nature and quality of the bond between a parent and their child. It includes 25 items that describe various positions and behaviors of parents and asks the individual to check the answer that best suits their relationship with their parent.

The questions are:

1. Talks to me in a warm and friendly way.
2. Did not hurt me, or at least not seriously hurt me.
3. Made me feel loved and valued.
4. Made me feel inadequate.
5. Did not make demands on me at home.
6. Always current.
7. Shouts at me.
8. Helped me make decisions about my life.
9. Didn't support me in my autonomy.
10. Helped me understand my feelings.
11. Helped me to feel needed.
12. Didn't talk about me with others.
13. Never talked to me about my parents.
14. Made me feel like I was not wanted.
15. Didn't let me live.
16. Wondered why my parents were not there.
17. Made me believe that I was not important.
18. Didn't use me to get what I wanted.
19. Did not love me.
20. Told me I was not good enough.
21. Didn't support me in my development.
22. Told me I would be used.
23. Told me I had to be perfect.
24. Didn't love me.
25. Told me I had to love them.

The following table lists the questions and answers:

<table>
<thead>
<tr>
<th>Question</th>
<th>No or Not</th>
<th>Yes</th>
<th>Definitely</th>
<th>Very</th>
<th>Absolutely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Talks to me in a warm and friendly way.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>2. Did not hurt me, or at least not seriously hurt me.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>3. Made me feel loved and valued.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>4. Made me feel inadequate.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>5. Did not make demands on me at home.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>6. Always current.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>7. Shouts at me.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>8. Helped me make decisions about my life.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>9. Didn't support me in my autonomy.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>10. Helped me understand my feelings.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>11. Helped me to feel needed.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>12. Didn't talk about me with others.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>13. Never talked to me about my parents.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>14. Made me feel like I was not wanted.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>15. Didn't let me live.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>16. Wondered why my parents were not there.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>17. Made me believe that I was not important.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>18. Didn't use me to get what I wanted.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
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<tr>
<td>19. Did not love me.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>20. Told me I was not good enough.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>21. Didn't support me in my development.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>22. Told me I would be used.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>23. Told me I had to be perfect.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>24. Didn't love me.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
<tr>
<td>25. Told me I had to love them.</td>
<td>No or Not</td>
<td>Yes</td>
<td>Definitely</td>
<td>Very</td>
<td>Absolutely</td>
</tr>
</tbody>
</table>
Appendix H: The Adolescents’ Interview

1. Do you know how the school looks? What are the colors, etc? Describe.
2. Tell me about your family members. Who lives with you? Brothers? Ages?
3. Tell me about yourself.
4. If it’s short: what else can you tell me about yourself? If you have trouble: tell me about yourself.
5. If you have trouble: I’ll tell you three words that describe yourself and ask you to write them down and give me examples or events that illustrate each word. (For example, you might say you’re...
6. What makes you feel happy, satisfied?
7. Can you tell me about a time you were sad, depressed? Did you seek help?
8. Can you tell me about a time you were angry, annoyed? What did you do?
9. Tell me about your mother.
10. In what ways do you want to be like your mother? In what ways do you want to be different from her?
11. What’s important to you? What are her goals, values?
12. Tell me about your father.
13. In what ways do you want to be like your father? In what ways do you want to be different from him?
14. What’s important to you? What are his goals, values?
15. How do you describe your relationship with your mother? (Communication? Do you feel you can talk to her about problems, feelings? Does she understand you?)
16. Have there been changes in your relationship with your mother in recent years?
17. How do you think your mother sees you? (What do you think she thinks of you?"
18. How do you describe your relationship with your father? (Communication? Do you feel you can talk to him about problems, feelings? Does he understand you?"
19. How do you describe your relationship with your father? (Communication? Do you feel you can talk to him about problems, feelings? Does he understand you?"
20. Has there ever been any hurt or pain inflicted by the parents? When? For what reasons? Why do you think the parent(s) behaved that way?
21. Question: If you were to rate your life overall on a scale of 1-5, where 1 is not at all satisfied and 5 is extremely satisfied, where would you place your life? Please explain.

Note: If the respondent says something that seems significant but is not clear enough, ask: Why did you say...

I said you/your mother/your father...
### Appendix I: The Adolescent Self-Perception Profile

**Plug:/dir**


<table>
<thead>
<tr>
<th>מספר</th>
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<td>1. יש ביני תום שעונים טႀים שט_shuffle meaningless words ש蛔יה אוכילה ו telefone</td>
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<tr>
<td>3. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<tr>
<td>5. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>7. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>9. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>11. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>13. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>19. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>21. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>23. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>25. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>27. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכילה ו telefone</td>
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<td>29. יש ביני תום שעונים ש_lane meaningless words ש蛔יה אוכיל halftime</td>
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Appendix J: Tables

Table J1.
*Correlation Coefficients Between Adolescents' Age and Adolescents' Outcomes*

<table>
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<tr>
<th>Adolescents' outcome variables</th>
<th>Internalizing Symptoms</th>
<th>Externalizing Symptoms</th>
<th>Personal Self-Perception</th>
<th>Social Self-Perception</th>
<th>Social Competence</th>
<th>Reflective Function</th>
<th>Social Problems</th>
<th>Prosocial Behavior</th>
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**p < .01, two-tailed.

Table J2.
*Correlation Coefficients Between Parental Demographic Characteristics and Adolescents' Outcomes*

<table>
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<th>Adolescents' outcome variables</th>
<th>Internalizing Symptoms</th>
<th>Externalizing Symptoms</th>
<th>Personal Self-Perception</th>
<th>Social Self-Perception</th>
<th>Social Competence</th>
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<td>-.10</td>
<td>.25**</td>
<td>.34**</td>
<td>.23*</td>
<td>.36**</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01, two-tailed.
Appendix K: Separate path models for mothers and fathers

**Figure K1.** Path model for the obtained associations between maternal variables and adolescents' RF, self perception and outcome variables.

*Note:* $\chi^2/df = 0.91$; CFI = 1.00; NFI = 0.94; RMSEA =0.00.
Figure K2. Path model for the obtained associations between paternal variables and adolescents’ RF, self perception and outcome variables.

Note: $\chi^2/df = 1.52$; CFI = 0.97; NFI = 0.92; RMSEA = 0.07.
הורות והסתגלות מתבגרים: השפעת על היכולת הרפלקטיבית של ההורים

מחקר לשר מילולי חלקי של הדרישות
לקבלת תואר "דוקטור לפילוסופיה"

נאת
נעמי בן-בסט - ליפשיץ

はどうת לסיגנוס אוונברסיטט ב וורייוונ בונג

31.3.2008
כ"ה, אדר ב', תשס"ח

באד שב"ע
הורות והסativoות המתבגרים:
נPhiladelphia של היובלת הרפלקטיבית של ההורות

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נעמי בן-בטס - ליפשיץ

הוגש לסרינות אוניברסיטת בן גוריון בנגב

________________________
איןור המנהלת

איןור דיקן בית הספר ללימודי מחקר מתקדמים

________________________
ע"ש Kıרייתן

31.3.2008
cד', באדר ב', תשס"ח

בואר שבע
העבודה נועשה בהדרכת פרופ' ביאטריס פריאל, במחלקה לפסיכולוגיה, בפקולטה למדעי הרוח והחברה.
תודות

ברצוני להביע את תודהי בריאש ובריאשונה למשתתפי המאבק, האבות והמתבגרים - אחריות. נוכחות השדפים שלדבר על הרשאותיו ומושבותיהן היא ה Adventures להchantment.

ככל.

ללילי מופל, קרר ליבני, ליאור פאר, יפעת בר-סמל, נגה ברלינט, אפרת הראל, חן-יאשל, אראו

נבריסק, שיר רוני, עזר אלי, גלי בר-הילה, ולאיר היי בין הרアジアות וcustomerId, בר cường ולהודות

בסך הכל. למיכל מוסון אוח על מתבודדיה הדקדוקיויתית, שמי משוק, איש, צהרה וכנוי Charlotte, ונהלה.

וניאל.

נумент

perfil אתרי ביצ_batches פריאל, המנהלת שלר, פארמה שליל ומרית, אספה שליל לעתים מחקר זה מאכתייה.INI מודע

הל מ Klanגל בל כלא התמיכות והבלוני לאורכ לדוררות של הדקדוקית בבחינת מבית. הנורית פגעה עם מזון

אבר, על הייינו עינה וסשתטסליים. לכן, הפרופסור וו-בסטי, אשר גם ילבשת או דNullOrを使用

האנגלית. זו ימי, רינה, מסמכי לחוף נבור "ביסס בטוח" בטוע מעורר. ותרומתה חביבה, אני מלאת

זאת לבלשל, אשורת, ולי, עלון, ונה.
תקציר

רפלקטיביות היא יכולת לחשוב על המחשבות והרגשות של העצמי ושל הזולת. היכולת זו חשובה לניבוי התנהגות, לשליטה עצמית, ולשיחות רגשית וליחסים בינאישיים. רפלקטיביות של הורים, אשר מודעות ויודעות את הרגשות והמחשבות של עצמם ושל ילדיהם, מצאكور חזות ליכולת של הילד.

חוקרים על רפלקטיביות של הורים התמקדו באמהות ובילדים צעירים בלבד. עם זאת, סביר להניח, כי רפלקטיביות של הורים חשוב בכל שלבי התפתחות של ילדיהם, במ_filenames בברית.

הילד המתבגר עובר zmגנונים גוף-附加值ים, חשיבות חברתיים. במהלך ההתבגרות, מאפשרת התפתחות חשיבתית רמות תובנה גבוהות יותר, כולל היכולת לראות דברים מנקודת מבט של הזולת. יכולת זו מייצجة את התפתחותה של הבנת העצמי והאחר, של חשיבה הוסרית וסיפוט הערכים.

כל השינויים הללו מחיישים את הגורמים של ההורים ושל ילדיהם המתבגרים. רפלקטיביות של ההורים עשוי לסייע להם להבין טוב יותר את השינויים התפתחותיים שעובר ילדם, וכמו כן, את רגשותיהם ומחשבותיהם שגילהו בתגובהเหลלו.

עד כה, התמקד המחקר על הורות של ילדים מתבגרים בסגנון הורות, כלומר ב来たן התנהגות ההורים. סגנון הורות, המשלב חום קבלת ומעורבות מצד אחד, עם שליטה ופיקוח על התנהגות הילד מתבגר, נמצא קשור לתוצאות חיוביות בניה ובררים בין חכמים ובררים, בין ילדים מתבגרים. עם זאת, מספר מחברים טענו, כי על המחקר להתמקד לא רק בהתנהגות ההורים, אלא גם בהקשר רחב יותר של התפה ובו ההורים, كبידי האבות ליישור desenvויה של התנהלות לבין החכמה החברתית והתרבותית הפרטי.

מטרות המחקר-current היו, אפוא, לבחון את הקשר בין ההתנהגות הורית לרפלקטיביות של ההורים; את הקשר בין מאפיינים הוריים אלה לＲף and רפלקטיביות של בניהם ובנותיהם המתבגרים; ולהשוות את התנהגות הורית והרפלקטיביות של אבות ואמהות.

במהלך המחקר, נמצאו מע.Hidden הקדימה בעליית המחקר של הרפלקטיביות של ההורים, כאשר נמצאו בין הת الفرنות החברתיות והתרבותיות של תובנה החכמה החברית והתרבותית הפרטי.
The study measured various psychological and social constructs among adolescents. Self-efficacy was assessed using the Self-Efficacy Scale (YSR). Self-concept was measured through the Self-concept Scale for Adolescents (SPPA) and reflective thinking of adolescents was measured through a developed interview for the current study and the coding system of Pongi.

Six hypotheses were tested:
1. Higher levels of reflective thinking, interest in school, and self-efficacy are related to parental involvement, social ties, and control.
2. Reflective thinking of parents is positively related to parental involvement and self-esteem, and negatively related to control.
3. Reflective thinking of adolescents is positively related to self-concept and peer acceptance, and negatively related to internalizing and externalizing problems.
4. Reflective thinking of parents is positively related to reflective thinking, self-concept, and social skills of adolescents, and negatively related to internalizing and externalizing problems.
5. Reflective thinking of parents has an impact on parental behavior (levels of involvement, social ties, and control) among adolescents. Unlike retrospective findings, parental reflective thinking is positively related to behavior outcomes among adolescents. Similarly, reflective thinking of adolescents is found to be related to behavior outcomes among adolescents. Reflective thinking is seen as a mediator between parents and behavior outcomes of adolescents. It seems that reflective thinking has a direct impact on internalizing and externalizing problems, but also has a high cost.

Conclusions:

1. The study of the current research concludes that parental self-efficacy is related to self-efficacy, self-concept, and behavioral outcomes among adolescents. On the other hand, parental reflective thinking is positively related to parental involvement, self-esteem, and control.
2. Reflective thinking of adolescents is related to self-concept and peer acceptance, and negatively related to internalizing and externalizing problems.
3. Reflective thinking of parents is positively related to reflective thinking, self-concept, and social skills of adolescents, and negatively related to internalizing and externalizing problems.
4. Reflective thinking of parents has an impact on parental behavior (levels of involvement, social ties, and control) among adolescents. Unlike retrospective findings, parental reflective thinking is positively related to behavior outcomes among adolescents. Similarly, reflective thinking of adolescents is found to be related to behavior outcomes among adolescents. Reflective thinking is seen as a mediator between parents and behavior outcomes of adolescents. It seems that reflective thinking has a direct impact on internalizing and externalizing problems, but also has a high cost.

It is concluded that parental self-efficacy is related to self-efficacy, self-concept, and behavioral outcomes among adolescents. On the other hand, parental reflective thinking is positively related to parental involvement, self-esteem, and control. Reflective thinking of adolescents is related to self-concept and peer acceptance, and negatively related to internalizing and externalizing problems. Reflective thinking of parents is positively related to reflective thinking, self-concept, and social skills of adolescents, and negatively related to internalizing and externalizing problems. Reflective thinking of parents has an impact on parental behavior (levels of involvement, social ties, and control) among adolescents. Unlike retrospective findings, parental reflective thinking is positively related to behavior outcomes among adolescents. Similarly, reflective thinking of adolescents is found to be related to behavior outcomes among adolescents. Reflective thinking is seen as a mediator between parents and behavior outcomes of adolescents. It seems that reflective thinking has a direct impact on internalizing and externalizing problems, but also has a high cost.
between the parents' behavior and the outcomes of their children. In other words, high levels of reactivity lead to the parents' behavior being more closely related to their children's outcomes, and they help the parents in coping with the complex issue of control and monitoring of their children. Therefore, the results of the current research may help us understand how authoritative (authoritative) parenting is related to better adaptation of children and preadolescents.

Finally, the findings suggest that fathers influence their children's outcomes more than mothers, and despite their lower level of involvement and the low levels of reactivity and warmth they display compared to mothers. Furthermore, we found that boys' outcomes were mostly related to the warmth of their parents and their level of involvement in the care of their children, while girls' outcomes were mostly related to reactivity of their parents and their control of their behavior. It seems that boys need the parents, especially the father, to be warm and involved. This conclusion is important in light of the prevalent belief that boys are more independent than girls, and considering the lower level of involvement and warmth of the fathers. These findings indicate that the reactivity and behavior of the parents may have a different impact on boys and girls. This implies the importance of including mothers and fathers in future research and distinguishing between boys and girls.

The results of the current research contribute to an understanding of how parents influence the adaptation of preadolescents in a theoretical, methodological, and clinical perspective. In the theoretical perspective, the findings indicate the possible outcomes of parents' reactivity and their behavior and the relationships between these factors. The findings show how reactivity and parenting styles of mothers and fathers are related in different ways in the preadolescent age group. This research provides a more comprehensive picture of how parents influence the adaptation of preadolescents.

Keywords: Gender differences, parenting, preadolescents, adolescence, parental involvement, parenting style, reactivity, preadolescents' outcomes.