Parental Behaviors and Late Adolescents' Adjustment:

The Role of Emotional Security and Emotional Intelligence

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ABSTRACT

Based on hypothesized relations advanced by Cummings and Davies (1995), the current study tests the hypothesis that parental availability and parental control, experienced during middle adolescence, relate to late adolescents' adjustment through influence on their emotional security. The study also examines the role of late adolescents' emotional intelligence and its relationship with parental behaviors, emotional security, and adolescents' adjustment. This study proposes a model of relationships where emotional security and emotional intelligence influence each other and mediate the relationship between parental behaviors and late adolescents' adjustment. Regression analyses show partial support for the hypotheses.

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Introduction

A large proportion of late adolescents suffer different maladaptive problems such as depression (Kessler & Walters, 1998), suicidal attempts (Benton, Robertson, Tseng, Newton, and Benton, 2003), aggressiveness and antisocial behavior (Straus, Gelles, & Steinmetz 1980; Millstein & Litt, 1993; McCord, 1993), and drug use (Newcomb & Bentler, 1988). There is a clear and well established relationship between parents' parental behaviors during their children's childhood and early adolescence and their children's maladjustment during late adolescence (Jackson, Pratt, Hunsberger, & Pancer, 2005; Anderson, 2005; Parmar & Rohner, 2005). Not so well established, however, is the process linking parental behaviors to late adolescents' adjustment. Emotional security has been identified in other studies (Cummings & Davies, 1995; Davies & Cummings, 1994, 1998; Davies, Harold, Goeke-Morey, & Cummings, 2002; Davies & Forman, 2002; Davies, Forman, Rasi, & Stevens, 2002) as a critical variable that links, at least partially, those variables and explains the appearance of adjustment problems in children and adolescents' lives.

Interparental marital conflict (Davies & Cummings, 1994) and quality of attachment (Bowlby, 1980) have been shown to be sources of emotional security. Parental behaviors may also influence the development of secure late adolescence. Although the research of Cummings and Davies has focused on emotional security in relation to interparental conflict, they have advanced a theoretical model proposing that two parental behaviors could influence their children's emotional security: parental availability and parental control. To date, empirical research has not addressed this proposition directly.

Besides emotional security, emotional intelligence has been linked similarly to positive outcomes in human development (Goleman, 1995; Mayer & Salovey, 1997). A relationship between parental behaviors and emotional intelligence has been found in prior

research (Martínez-Pons, 1998; Alegre & Benson, 2004). Emotional intelligence may play a mediating role between parental behaviors and late adolescents' adjustment, but the hypothesis awaits further research.

The study of emotional intelligence and the study of emotional security have remained to date two completely separate fields. There are reasons to believe that emotional security and emotional intelligence may mutually influence the development of late adolescents' internalizing and externalizing problems. This relationship has yet to be investigated. Therefore, the purpose of this research project is to investigate the potential mediating roles of emotional security and emotional intelligence in the relationship between parental behaviors and late adolescents' maladjustment and to investigate the relationship between both mediating variables.

Hypotheses

According to the research evidence, there are two hypotheses that this research study will be testing: 1) the relationship between parental availability (developed during early adolescence), parental negative control, emotional security, emotional intelligence, and late adolescents' internalizing problems; and 2) the relationship between parental availability, parental negative control, emotional security, emotional intelligence, and late adolescents' externalizing problems.

Internalizing hypothesis. Following Cummings and Davies (1995), it is hypothesized that past parental availability (availability or lack of it shown by parents during their children's early adolescence) and past parental negative control (use of negative consequences and harsh punishment) will influence late adolescents' emotional security in the context of parent-child negative events (such as parents not responding to a child's request, not listening to them and in general being unavailable, or scolding, lecturing, and punishing the late adolescent child). Emotional security in its turn will affect

late adolescents' adjustment. Specifically, the lower the past parental availability and the higher the parental negative control were during children's early adolescence, the lower the late adolescents' emotional security will be and the greater their internalizing problems will be as well. Second, following Mayer and Salovey (1997) and Alegre and Benson (2004), it is hypothesized that past parental behaviors will influence late adolescents' emotional intelligence which in turn will affect their internalizing problems. Third, it is hypothesized that emotional security and emotional intelligence will influence each other.
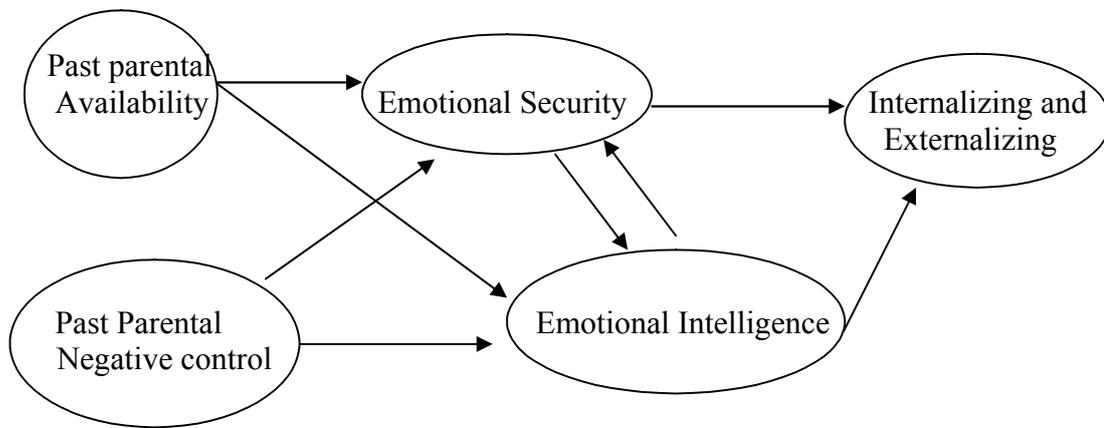
Figure 1. Relationship between past parental availability, past parental negative control, emotional security, emotional intelligence, and adjustment.

Externalizing hypothesis. It is hypothesized that past parental availability and past parental negative control will affect both late adolescents' emotional security and emotional intelligence which in turn will affect late adolescents' externalizing problems (aggressive and delinquent behaviors). Specifically, the lower the past parental availability and the higher the use of negative control were during early adolescence, the lower the late adolescents' emotional security and emotional intelligence will be, and the more externalizing problems the late adolescent will experience.

Again it is hypothesized that both emotional security and emotional intelligence will have indirect effects on late adolescents' adjustment as well, as a result of their mutual influence.

To show research support for the hypothesis, the literature review section of this thesis examines in detail (a) the research studies that have shown a relationship between past parental behaviors and late adolescents' adjustment, (b) the emotional security construct and its relationship to both past parental behaviors and adjustment, (c) the emotional intelligence construct and again, its relationship to both past parental behaviors and adjustment, and finally (d) the relationship between emotional security and emotional intelligence.

Literature Review

Adolescence

The developmental stage of adolescence occurs between the ages 11 and 22. For those individuals who, because of educational goals or other social factors, entry into adult roles is delayed, late adolescence occurs between the ages of 18 to 22 (Elliot & Feldman, 1993). In most western countries adolescence is considered a period of increasing freedom, during which the principal duty is to acquire an education, and during which parent-child relationships are transformed while peer interactions acquire more importance (Elliot & Feldman, 1993). This transformation, however, does not happen at the expense of the parent-child bond. On the contrary, the evidence indicates that most families enjoy warm and pleasant relations during the adolescent years (Steinberg, 1993). Prior research has shown that despite the fact that adolescents tend to have little interaction with adults, parental relationships with their children tend to maintain importance during adolescence (Grotevant & Cooper, 1986). Furthermore, different studies show that parent-early adolescent relationships have consequences for late adolescents and young adults' adjustment (Anderson, 2005, Aronen, 2000, Brody, Moore, & Glei, 1994). This evidence strongly supports the surveying of late adolescents about their prior relationships with their parents during early adolescence.

Adjustment

Adjustment refers to the ability of any individual to adjust to social demands. Maladjustment will be understood as the late adolescents' problems that interfere with the ability to adapt to these social expectations and demands. Much of the research literature has focused on two broad groupings of problems. One group includes anxious and inhibited behavior, and the other includes aggressive and antisocial behavior. These groupings have been designated as internalizing versus externalizing (Achenbach, 1991).

Parental Behaviors

The study of child-rearing by Diana Baumrind (1966) was conceived initially in terms of parenting styles. The original classification of parenting styles was based on four dimensions of child-rearing: parental control, parental communication, parental maturity demands, and parental nurturance. Scores in these four dimensions resulted in the classification in one of three parenting syle categories: the authoritarian, the authoritative, and the permissive parent. Permissive parents are those who behave in a non-punitive, accepting and affirmative manner toward their child's impulses, desires, and actions. Authoritarian parents attempt to shape, control and evaluate the behavior and attitudes of their child in accordance with a set of standards of conduct, usually an absolute standard, often theologically motivated and formulated by a higher authority. Authoritative parents attempt to promote their child's activities in a rational, issue-oriented manner by encouraging dialogue, but exerting firm control at points of parent-child divergence.

In a second study, Baumrind and Black (1967) linked each parenting style to specific outcomes in children's development. Authoritative parents tended to have children who showed high self-reliance, good moods, and self-control. Authoritarian parents tended to have children with low peer affiliation, low moods and low capacity to confront situations. Finally, children with low self-reliance, low self-control, and a tendency to avoid unpleasant situations tended to have permissive parents. Two central dimensions of parenting were later used to explain the parenting styles: responsiveness and demandingness. Responsiveness was composed of warmth, reciprocity and attachment, and demandingness was composed of parental monitoring, ability to confront the child, and consistent and contingent discipline (Baumrind, 1991).

Lewis (1981) reexamined Baumrind's studies and proposed that firm control did not account for the positive results that Baumrind found in authoritative parenting.

Positive outcomes came, according to her, because of parents' respect for the child's

decisions, use of reasoning to obtain compliance, encouragement of verbal give-and-take,

and satisfaction of the child's needs.

Because of Lewis's and other researchers' disagreement with Baumrind, some

researchers have focused on *parental practices* or *behaviors* as predictors of children's

development (Hauser, 1991). A differentiation has been made where parenting styles are

defined as a stable complex of attitudes and beliefs that form the context in which

parenting occurs and where parenting practices are defined as specific goal-directed

behaviors through which parents perform their parental duties (Darling & Steinberg,

1993). Parenting styles are considered to comprise of attitudes and values while practices

entail behaviors, which can be directly assessed with high reliability (Fox, 1992). Several

parental behaviors have been identified: availability (Rothbaum, 1988), control

(Baumrind, 1991; Barber, 1996; Steinberg, 1993), expectations (Featherman, 1980) and

monitoring (Coombs & Landsverk, 1988).

Parental Behaviors and Adjustment

Parental availability has been hypothesized to influence human beings' adjustment

from infancy to late adolescence (Cummings & Davies, 1995; Parmar & Rohner, 2005).

Research across development provides direct support for this hypothesis. Among infants,

maternal responsivity, stimulating behavior, visual attention, and the ability to perceive

and interpret infants' signals and needs significantly improved children's levels of

sociability, self-soothing, and exploration (van den Boom, 1994). In school-age children,

maternal warmth predicted children's adjustment in school (Pettit, Bates, & Dodge, 1997;

Rothbaum, 1986), and involvement predicted academic achievement performance (Melby

& Conger, 1997). Parent-child relationships have been found to be a good predictor of

adolescent identity formation (Grotevant & Cooper, 1986). Parental nurturance and

affection predict fewer adolescents' internalizing and externalizing problems (Rubin, Dwayer, Booth-LaForce, Kim, Burgess & Rose-Krasnor, 2004). Conversely, the lack of warmth and availability has been linked to adjustment problems. Parental hostility increases the likelihood of adolescent emotional and behavioral problems (Conger, Ge, Elder, Lorenz, & Simons, 1994). Parental rejection promotes the use of passive coping strategies (Meesters, & Muris, 2004), and less parental warmth correlates with a depression-loneliness-distress factor (Lempers, Clark-Lempers, & Simons, 1989).

Parental behaviors also have been shown to relate to late adolescents' development. Parental rejection correlated with young adults' substance abuse (Campo & Rohner, 1992) and with stronger prenatal and postnatal depressive symptoms for young women (Crockenberg & Leerkes, 2003). The effect of parental love is not restricted to mothers, however. The lack of love from fathers, during childhood, has been associated with college students' neuroticism (Kraft, 1999).

Parental behavioral control in its forms of contingent discipline and supervision has been linked to reduced externalizing problems. For instance, mothers' competence-oriented demands related to children's personal and social competence and to reduced levels of behavior problems (Kuczyinski & Kochanska, 1995). Mothers' involvement in their children's social contacts, calm discussion of issues, and tendency to prevent problems, predicted children's adjustment in school. Those factors also mitigated the effects of family adversity or harsh punishment on later behavior problems (Pettit, Bates, & Dodge, 1997). Among Head Start mothers with irritable children, maternal use of competent discipline strategies, appropriate praise, and encouragement resulted in significantly fewer conduct problems, less noncompliance, less negative affect, and more positive affect (Webster-Stratton, 1998). Mothers' use of competence-promoting parenting practices also improves children's self-regulation, which in turn improves children's

academic and psychosocial competence (Brody, Flor, & Gibson, 1999). On the other hand, inconsistent parental discipline correlates with adolescent delinquency and drug use (Lempers, Clark-Lempers, & Simons, 1989). Parental control has also been found to influence juvenile delinquent behavior (Wiesner & Sibereisen, 2003), early adult romantic relationships (Jones, Forehand, & Beach, 2000), young adults' achievement (Onatsu-Arvilommi, 1997) and young adult women's problem drinking (Engels, Vermulst, Dubas, Bot, & Gerris 2005). Negative control in the form of parental aggressive attitudes predicted the number of arrests on a young adult female sample (Viemero, 1996).

Although the relationship between parental availability and control and children's, adolescents' and late adolescents' adjustment has been well established, the theory explaining its mechanisms is still not complete. In research with children and adolescents, it has been proposed that parental deficits in availability or control may influence a person's emotional insecurity. More specifically, a person's efforts to regain a sense of security may undermine resources needed in other areas of his or her development, resulting in maladjustment (Davies & Cummings, 1994). To elucidate these mechanisms further, the next section reviews the concept of emotional security and its implications.

Emotional Security

Concept. William E. Blatz defined security as "A state of mind in which one is willing to accept the consequences of one's behaviors" (Blatz, 1967, p. 112). He considered that "all aspects of an individual's behavior in all areas of his life can be interpreted in terms of security" (p. 112). In Blatz's theory the goal of every individual, young or old, is the achievement of a feeling of security or serenity. Individuals constantly strive to achieve this state in a dynamic and constant stream of choices throughout their lifespan.

Abraham Maslow described an insecure person as a person who "perceives the world as a threatening jungle and most human beings as dangerous and selfish; feels rejected and isolated, anxious and hostile; is generally pessimistic and unhappy; shows signs of tension and conflict; tends to turn inward; is troubled by guilt-feelings; has one or another disturbance of self-esteem; tends to be neurotic; and is generally egocentric and selfish" (Maslow, 1942, p. 35). He viewed in every insecure person a continual, never ending longing for security.

Attachment is considered a source of security: "Many of the most intense emotions arise during the formation, the maintenance, the disruption, and the renewal of attachment relationships. The formation of a bond is described as falling in love, the unchallenged maintenance of a bond is experienced as a *source of security*, and the renewal of a bond as a source of joy" (Bowlby, 1980, p. 40).

In this sense, young children with a secure attachment derive their security from the conviction that the attachment figure is in relative proximity and available when needed. Older children derive their feeling of security from the idea that even if not available in the moment, they can count on their attachment figure when needed. This is what scholars have called "confidence in protection" (Goldberg, Grusec, & Jenkins, 1999). Therefore, a securely attached child feels emotionally safe because of the good attachment (Cummings & Davies, 1995).

As a consequence of Bowlby's writings, the concept of emotional security was for many years and is for the most part still now consistently linked to attachment theory. And the study of emotional security, apart from its linkage to attachment theory, was almost forgotten for more than 20 years in psychological research. In 1994, however, the concept reappeared when Davies and Cummings published an article in Psychological Bulletin, "Marital conflict and child adjustment: An emotional security hypothesis." In this article,

the authors built on attachment theory to show that the feelings of insecurity, generally believed to derive from a negative bonding between parent and infant, may also be the consequence of multiple parent-child factors, including the parents' interparental marital conflict. This vision of different sources of emotional security had already been presented by Mary Ainsworth years before when she wrote, "Thus, Bowlby conceives of security as a feeling that can be experienced in the context of attachment, but surely he would not limit the applicability of the feeling to that context any more than he would limit the emotions of anger and fear and joy to attachment-related situations" (Ainsworth, 1988, p. 1).

Marital conflict makes children think that their security is in danger, and consequently they experience feelings of insecurity. Davies and Cummings (1994) proposed that when the individuals feel they have lost security, they mobilize their resources to recover the state of emotional security. Therefore, when exposed to marital conflict children feel insecure and in response develop emotional and behavioral strategies to rapidly recover their sense of security (Davies & Cummings, 1994).

Processes. Emotional security includes three different processes: emotional reactivity, behavioral regulation, and internal representations. Emotional reactivity refers to the fact that, in the presence of potentially threatening situations, the person feels fear or distress and develops attitudes of vigilance or covert hostility. Behavior regulation refers to the regulation of exposure to threatening situations. Insecure people tend to overregulate their exposure to potentially dangerous situations by either overinvolving themselves in the situation or by avoiding it. Finally, internal representations affect conscious or unconscious schemas of potential danger. Insecure appraisals of situations lead insecure people to think that situations will escalate and will affect them personally and negatively (Cummings & Davies, 1995).

Trait versus state emotional security. Tellegen (1988) defines a trait as a psychological structure underlying a relatively enduring behavioral disposition. Harkness and Hogan (1995) add that a trait is a tendency to respond in certain ways under certain circumstances. Emotional insecurity can be triggered by different situations or events. In this sense, security is a state experienced in a particular moment. If continuously triggered, however, it may become chronic. A person may feel insecure often and become oversensitized to events that contain only minimal components of the previous threatening situations (Cummings & Davies, 1995).

Children exposed to conflict develop a conflict schema that includes beliefs, expectations, emotional responses, and behavioral sequences. The more children experience negative and aggressive conflict, the more reactive they will be to future cues and later occurrences. "For some only minimal cues may be needed to activate their schema" (Grych & Cardoza-Fernandes, 2001, p. 171). At the same time, the more consistent the previous experiences have been, the stronger the schema will be. Therefore, the schemas will play a predominant role in the way children react to a conflict in

comparison with the influence of specific characteristics of the conflict itself (Grych & Cardoza-Fernandes, 2001). Schemas can be highly generalizable. Crittenden and Ainsworth (1989) found that physical abuse could lead children to develop working models in which relationships generally are seen as threatening. Dodge, Bates and Pettit (1990) linked children's experiences with conflict and aggression in the family to their tendency to attribute hostility to their peers. In this way emotional insecurity may become a trait and then carry on into late adolescence. Therefore, there is state emotional security and trait emotional security, similarly there is state anxiety and trait anxiety.

Stability and change. Emotional security is the result of a complex combination of genetic and environmental factors. Children's emotional security or insecurity, therefore, will likely show some continuity into late adolescence. Patterns of continuity have been found in security of attachment (Thompson, & Limber, 1990) and in self-confident and self-efficacious children (Bandura, 1997). Nevertheless, since emotional security is not an inborn trait, but the product of environmental influences, it is susceptible to change. Interventions that help parents improve the quality of their relationship with their child, strengthen their attachment, or improve the quality of the marital relationship may change the children's level and quality of emotional security. Evidence exists that security of attachment can be changed (Phelps, Belsky, & Crnic 1998), and marital relationships can change and positively affect children (Davies & Forman, 2002). In sum, emotional security shows both continuity and change.

Emotional security and parental behaviors. Parental behaviors experienced during early adolescence affect later young adults' feelings of security (Weinfield, Sroufe, & Egeland, 2000). Cummings and Davies (1995) propose that an unavailable parent may leave children and early adolescents without the needed support in moments of threat or danger. Therefore, children and early adolescents appraise their parents' emotional

availability or lack of availability in terms of the way that it affects their security. Appraisals of parental availability are based on previous actual experiences, so negative experiences increase children's reactivity to new episodes of parental unavailability. "Children's reactions to parental availability are seen as a function of their own appraisals and constructions of the meaning of the parents' availability for their own sense of emotional security, …it is expected that actual experiences of parental behavior will be strongly related to appraisals" (Davies & Cummings, 1994, p. 174). Those appraisals and mental constructions continue to affect children when they become late adolescents. Late adolescents' negative appraisals of past parental behaviors may then be rigidly used as templates for approaching new or challenging social tasks that may require a degree of flexibility and trust. A relationship between unsupportive parenting and internal representations of security has been found in at least one study (Davies, Harold, Goeke-Morey, & Cummings, 2002).

Parental negative control can also provoke fear or anxiety. Children's distress may disrupt their understanding and acceptance of parental messages and discipline, and result in negative affect. These negative affect, in turn, may also prime a hostile representation of others (Cummings & Davies, 1995). Parental undercontrol or overcontrol may diminish children's sense of security by either increasing feelings of lack of protection or feelings of actual physical or emotional danger in the presence of harsh punishment. Data from one study (Davies et al., 2002) shows correlations between parental psychological control and children's emotional security.

Emotional security and adjustment. Emotional security has been shown to affect internalizing and externalizing (Cummings & Davies, 1998; Davies et al., 2002; Davies & Forman, 2002). In addition, in a study of parenting (Phelps, Belsky, & Crnic 1998), insecure adults showed a tendency to reenact poor parenting practices with their children,

while earned secure people (who had an insecure attachment but later in life were able to develop a coherent perspective of their negative experiences and recover security) did not reenact those practices, even in situations of high stress.

Emotional insecurity can also have effects on aspects of personal adjustment such as self-esteem or the value placed on possessions. Little and Kobak (2003) examined the effect that stressful circumstances have on the self-esteem of children and found that emotional security with teachers moderated this relation. More emotionally secure children reacted with less of a decrease in self-esteem in response to negative peer events or conflict with teachers than did more insecure children. Kasser's investigations in security (2002) led him to conclude that insecure people tend to place more importance on possessions as a way to regain security: "People who value materialistic aims are driven by unmet needs for security and safety, (…) materialistic values are both a symptom of underlying insecurity and a coping strategy (albeit a relatively ineffective one) some people use to alleviate their anxieties" (p. 29).

Emotional security as a mediator. Davies and Cummings (1994) propose that emotional security mediates the relationship between parental behaviors (availability and control) and adjustment. Their *emotional security hypothesis* proposes that when a sense of security has been lost, as a consequence of problems with parental availability or negative control, the efforts of recovering emotional security can have long term maladjustment effects. As a consequence, children can develop either internalizing problems (depression, anxiety disorders) or externalizing (aggression, antisocial behavior) (Davies & Cummings, 1994), and again those adjustment problems may show continuity in late adolescence.

In order to test this hypothesis, it is necessary not only to show that past parental behaviors predict current emotional security and that emotional security predicts late

adolescents' adjustment as done above. It is also necessary to show that the relationship between past parental behaviors and adjustment is substantially reduced when emotional security is partialled out. Direct empirical support is currently lacking. Some support for this hypothesis can be derived, however, from the fact that emotional security has been shown to mediate the relationship between marital conflict and children's adjustment. In one study (Davies & Cummings, 1998), regression analysis showed that the statistical relationship found between marital conflict and internalizing was significantly reduced when some components of emotional security entered into the equation. In two additional studies, published in the same article (Davies et al., 2002), marital conflict also related to a perception of threat and emotional security. These variables strongly related to internalizing and externalizing problems. Findings indicated that interparental conflict was linked to a child's subsequent psychological symptoms through its association with the child's emotional insecurity. In other studies, distress resulting from marital conflict provoked anxiety symptomatology (Kerig, 1998), and a perceived threat mediated the association between children's exposure to conflict and internalizing problems (Grych & colleagues, in press, cited in Grych & Cardoza, 2001)

Davies and colleagues' investigations (Davies & Forman, 2002; Davies et al., 2002) show that children with an insecure-dismissing profile tend to experience higher levels of externalizing symptoms, and children with an insecure-preoccupied profile tend to experience higher levels of internalizing symptoms. Both dismissive and preoccupied children report greater personality and coping difficulties than secure children. Dismissive children also report significantly lower levels of family investment and higher levels of hostile world views, family worries, and disengagement. Preoccupied children also report higher levels of hostile world views and family worries and disengagement than secure children.

Emotional intelligence

　　Concept. Emotional intelligence was initially defined by Salovey and Mayer (1990) as the ability to monitor one's own feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action. Their definition was later extended conceptually by Daniel Goleman (1995) who defined emotional intelligence as a person's ability to know his/her own emotions, to control them, to motivate him/herself, to understand other people's feelings, and to positively handle interpersonal relationships. Baron and Parker (2000) specified the concept in order to create an instrument to measure it, defining emotional intelligence as "an array of emotional, personal and interpersonal abilities that influence one's overall ability to cope with environmental demands and pressures" (p. 33). This array of abilities included intrapersonal intelligence, interpersonal intelligence, a capacity to deal with stress, and a capacity to adapt to new and challenging situations. In contrast with general intelligence, emotional intelligence is hypothesized to be very flexible. A person can become more emotionally intelligent with time, provided he or she enjoys the appropriate experiences (Mayer & Salovey, 1997; Goleman, 1995).

　　Emotional intelligence and parental behaviors. A link between parenting and emotional intelligence has been documented in a small number of studies. Emotionally competent parents have more emotionally competent children (Hooven, Katz, & Gottman, 1994). Children of more democratic parents, enjoy better peer competence (Gottman, Katz, & Hooven, 1997; Pearson & Rao, 2003). Parental empathy-related characteristics and emotion-related child-rearing practices relate to children's competent emotional responding (Eisenberg, Fabes, Schaller, & Miller, 1991). Parental modeling, encouragement, facilitation, and rewarding of emotional intelligent-related behavior predicted children's attention, clarification, and regulation of feelings (Martinez-Pons,

1999). An overcontrolling and a harsh disciplinarian type of parenting negatively related to the development of emotional intelligence in children, while a democratic style positively predicted higher levels of adaptability (Alegre & Benson, 2004). Mothers' tendency to be responsible and demand responsibility from their children also positively related to their children's ability to understand other's emotions, be responsible in social situations, and establish good interpersonal relationships (Alegre & Benson, 2004). Parental monitoring has been found to positively correlate with emotional intelligence (Liau, Liau, Teoh, & Liau, 2003).

Emotional intelligence and adjustment. Some authors have proposed that emotional intelligence could account for 10% of the variance in life outcomes (Mayer & Salovey, 1997), be essential to experience success in life (Goleman, 1995) and directly influence one's general emotional well-being (Baron & Parker, 2000). Researchers have shown relationships between emotional intelligence and externalizing. Emotional intelligence negatively correlated with aggression and delinquency and was also identified as a moderator between parental monitoring and both aggression and delinquency in an investigation of 203 secondary school students' emotional literacy (Liau et al., 2003). It also positively correlated with academic achievement in children (Schute Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998) and with emotional reactivity in adults (Engelberg & Sjoberg, 2004). The ability to recognize the emotional content of visual stimuli and the ability to accurately identify emotion were found to correlate with children's achievement and with adults' competency in the workplace (Finnegan, 1998). Lower emotional intelligence in males has been found to be associated with illegal drug and alcohol use, deviant behavior, and poor relations with friends (Brackett, Mayer, & Warner, 2004) while higher emotional intelligence related to social skills (Bernet, 1996).

Relationships between emotional intelligence and internalizing have also been documented. Schmidt and Andrykowski (2004) investigated psychological adjustment in breast cancer patients. Regression analysis indicated that low emotional intelligence predicted greater depression, anxiety, and distress. Low emotional intelligence was also found to relate to depression, somatic symptomatology, and stress (Dawda & Hart, 2000; Liau et al, 2003), neuroticism (Dawda & Hart, 2000), and loneliness (Engelberg & Sjoberg, 2004). Also, Bernet (1996) found that people who had an effortless, integrated awareness of emotion tended to have significantly better mental health.

Emotional intelligence as a mediator. The mediating role of emotional intelligence between past parental behaviors and late adolescents' adjustment has been indirectly suggested in some publications (Goleman 1995; Mayer & Salovey, 1997). The relationships found between past parental behaviors and emotional intelligence and between emotional intelligence and adjustment further suggest that emotional intelligence may play a mediating role. Because empirical evidence is lacking, however, there is a need for research in this area.

Emotional Security and Emotional Intelligence

Considering that emotional security entails an appraisal and an emotional and behavioral reaction to threat, and that emotional intelligence entails the use of emotional information to behave intelligently, both constructs are connected. Mayer and Salovey (1995) assert that any psychological processes that block the flow of information may reduce emotional intelligence. Information can be blocked by excessive or chronic fear.

When a person feels threatened, his/her ability to attend to feelings other than fear is undermined, compromising his or her reactions. In conditions of threat, individuals focus on the potential danger and often react with short term goals that promote immediate survival (Goleman, 1995). Humans look for ways to overcome danger either by avoiding

or by over controlling the situation (Cummings & Davies, 1995). Chronic insecurity and defensive responses reduce the capacity of behavior to be effective or adaptive. A defensive attitude may divert or foreshorten the processing necessary to make adaptive decisions, leading to reduced sensitivity to others and less social understanding (Mayer, Salovey, Caruso, & Sitarenios, 2003).

In conditions of positive emotional security, however, individuals have been found to use more emotionally competent responses such as tolerance, sensitivity, responsibility, flexible coping, and reality-oriented appraisals of self and others (Helson & Wink, 1987). Additionally, secure people have been found to use positive, adaptive, problem solving responses (Davies, et al., 2002; Phelps, Belsky, & Crnic 1998), and assertive behavior (Patterson, Greene, Basson, & Ross, 2002).

Also supporting the proposition that security and emotional intelligence are related, securely attached people have been found to show different emotionally intelligent competencies. They are more able to postpone gratification in a standard delay of gratification test (Jacobsen, Huss, Frendirch, Kruesi, & Ziegenhain, 1997), and perform better in different emotional understanding tasks (Laible & Thompson, 1998).

Security has been found to relate to emotionally intelligent characteristics across the lifespan. Securely attached children enjoyed an advanced understanding of mixed emotions compared with less secure peers (Steele, Steele, Croft, & Fonagy, 1999). Securely attached married women were found to manage their affect better than insecure wives during problem-solving discussions with husbands (Paley, Cox, Burchinal, & Payne, 1999). Earned secure parents showed a higher ability to improve poor parenting than insecure parents (Phelps, Belsky, & Crnic, 1998).

Security of attachment also relates to individuals' ability to develop better peer relations (Scheider, Atkinson, & Tardif, 2001), to show less disruptive behaviors towards

friends (Zimmermann, Maier, Winter, & Grossman, 2001), to display a higher emotional understanding in the Mother-Infant Separation Test Video (De Rosnay & Harris, 2002), and to show more empathic concern for a stranger's distress (van der Mark, van Ibzendoorn, & Bakermans-Kranenburg, 2002). Insecurity also affects the strength of a person's self-esteem (Little & Kobak, 2003) and social competence (Helson & Wink, 1987).

Summary

In summary, an impressive amount of research studies have shown a relationship between parental behaviors and children's adjustment. This relationship carries on into late adolescence. An emotional security hypothesis has been proposed in which late adolescents' emotional security may mediate this relationship. To support this hypothesis, it is necessary to show three types of evidence: first, that parental behaviors predict emotional security, second, that emotional security predicts adjustment, and third, that the relationship between parental behaviors and adjustment is significantly reduced when emotional security is partialled out. Research has shown support for the first and second type of evidence. There is no empirical support yet for the third one. Some indirect support has been provided, however, by the research showing the mediating role that emotional security plays between intermarital parental conflict and children's adjustment.

Emotional intelligence has been proposed also as a construct that predicts adults' adjustment and behavior. Parental behaviors have been shown to influence emotional intelligence. Although the mediating role that emotional intelligence could play between parental behaviors and late adolescents' adjustment has been suggested before, no empirical support has yet been provided. Emotional security and emotional intelligence are related and may influence each other. To date no empirical research has studied this relationship either. Therefore, the current study examines the relationship between

parental behaviors and adjustment and the interrelation of emotional security and

emotional intelligence as potential mediators between parenting and adjustment.

Methodology

Participants

Participants were recruited in three universities in the states of New Jersey and Pennsylvania. A total of 329 young adults between 18 and 22 years of age answered the questionnaires. Females represented 45% of the sample, and males represented the other 55%. Participants were predominantly of European-Caucasian origin (86.1%) and of middle to upper socio-economic status (72.2%), reflecting the demographics of the universities where the participants were studying.

Procedures

Professors from three departments in three different universities were contacted and asked permission to use their classes to present the study to their students. The three departments were: foreign languages, psychology, and business administrations. In the presentation, students were asked to participate in the study, were given letters of consent to sign, and were given 25 minutes to complete questionnaires reporting on their parents' past behaviors and their own current behaviors and emotions. During the time that students answered the questionnaires, the researcher left the classroom. Participation in each class was between 90 to 95%. No extracredit was offered. The information obtained from participants was used exclusively for research purposes. The study involved no more than minimal risks. All answers were kept completely anonymous. No names or any other identifying information was used in the recording or the analysis of data.

All measures were factor analyzed using oblique rotation to allow for correlation between scales and to ensure a better fit with the data (Kieffer, 1998). Scales were analyzed for internal consistency using Cronbach's reliability coefficient. Correlations were computed among scales. When theoretically and statistically necessary, scales were combined to obtain stronger, more reliable, or more theoretically meaningful variables.

Final variables were regressed to test the model of relationships proposed in the initial hypotheses.

Measures

Participants answered two parental questionnaires: the Warmth/Affection scale of the Parental Acceptance and Rejection Questionnaire (Rohner, 1990) to measure their parents' past availability, and the Discipline and Harsh Punishment Subscales of the Ghen Parental Behavior Scale (Van Leeuwen & Vermulst, 2004) to measure their parents' past negative control behavior. They answered two questionnaires about their feelings and emotions: the Security in the Parent-Child Subsystem Scale (Alegre & Benson, 2005) to measure their emotional security in both the availability and negative control contexts, and the Trait Meta-Mood Scale for Children (Rockhill & Greener, 1999) to measure their level of emotional intelligence. Finally, they answered the withdrawn/anxious, depressive, aggressive and delinquent subscales of the Youth Self Report (Achenbach, 1991) to measure their social and psychological adjustment.

Warmth/Affection scale of the Parental Acceptance/Rejection Questionnaire. This questionnaire is a self-report instrument designed to measure individuals' perceptions of parental acceptance and rejection. It consists of four scales: (1) warmth/affection, (2) aggression/hostility, (3) neglect/indifference, and (4) rejection. The perceived parental warmth/affection scale refers to parent-child relationships where parents are perceived to give love, or affection without qualification but not necessarily with great demonstration. It contains 20 items, and they refer to parental behavior rather than attitudes. Respondents are asked to answer whether each particular item is *almost always true, sometimes true, rarely true, or almost never true* of their parents. The reliability coefficient reported in the manual is $\alpha = .95$. The warmth/affection scale correlates positively with the Child's Report

of Parent Behavior Inventory (CRPBI, Schaefer, 1964) acceptance scale ($r = .90$, $p<.001$), showing support for external validity.

In the present study, the Warmth/Affection scale was factor analyzed using oblique rotation. Although analysis of the scree plot indicated the possibility of one or two factors, only one factor showed eigenvalues greater than 1.0. (See Table 1) The one-factor solution, termed *parental availability,* accounted for 61.14% of the variance. The reliability of the scale was α = .96.

The Discipline and Harsh Punishment Subscales of the Ghent Parental Behavior Scale. This scale is based in social-learning theory. Children rate the frequency of their parent's behavior towards them. The scale has nine subscales. The discipline scale has 6 items and the harsh punishment scale has 4 items. Together, they comprise a negative control scale of 10 items. Van Leeuwen and Vermulst, (2004) conducted a series of studies that provided support for the validity of the scale. Negative discipline correlated with a measure of stress ($r = .13$, $p<.01$), and with the externalizing scale of the CBCL ($r = .23$, $p<.01$). Harsh punishment correlated with stress ($r = .15$, $p<.05$) and with externalizing ($r = .26$, p<.01). The authors reported Cronbach's alphas for the discipline and the harsh punishment scale were .80 or higher.

In this study, the Discipline and the Harsh Punishment scales were also factor analyzed. A two-factor solution confirmed the two scales intended by the authors: parental discipline and parental harsh punishment, accounting for 62% of the variance. (See Table 2). Cronbach's reliability coefficient for the discipline scale was .84 and for the harsh punishment scale was .88.

Assessment of emotional security: Previous measures and current study. Feelings of security are hypothesized to be context-specific. A person may feel insecure when dealing with one type of situation and feel more secure when dealing with another type of

situation. Late adolescents may feel more insecure when dealing with peer rejection for instance than when dealing with teacher rejection.

In most cases, emotional security has been measured only in the context of interparental marital conflict. The measure most commonly used to measure emotional security in the context of parental conflict is the Security in the Interparental Subsystem scale (SIS, Davies, Forman, Rasi, & Stevens, 2002), based on the Emotional Security Hypothesis (Cummings & Davies, 1995), Davies and colleagues use children's self-reports to measure three processes hypothesized to regulate the goal of preserving emotional security in the face of interparental conflict. They include children's emotional reactions to parental conflict, children's behavioral reactions to parental conflict, and also the ideas or internal representations children form from the conflict. Their assessment tool is a questionnaire with 41 items. Children rate each statement based on how true it is for them over the past year using a 4-point continuum raging from 1 (*not at all true*), to 4 (*very true of me*). It is divided into seven subscales with internal consistency coefficients higher than .65. The authors have done extensive work to test content, predictive, and construct validity, with good results (for a review see Davies, Forman, Rasi, & Stevens, 2002).They also report that test-retest reliability coefficients calculated over a 2-week period with a sample of 90 children exceed $r(90) = .70$ for all subscales except behavioral dysregulation which is .59. Correlations between the scales are, on average, .35 (Davies, Forman, Rasi, & Stevens, 2002).

The SIS is linked to the event of parental intramarital conflict, therefore could not be used when trying to measure insecurity in the parental availability context or in the parental negative control context. New instruments needed to be developed to measure late adolescents' insecurity in the event of parents not being available, helpful or supportive or in the event of parents lecturing, scolding or punishing them. The new measures should be

based in the items used in the SIS, since they had successfully measured insecurity in one specific context. Those items, however, needed to be adapted to the new contexts, and then the new scales with the new items should be tested in a pilot-study before being ready for use in any research study.

Pilot research to develop context-specific measures of insecurity. To develop measures of availability insecurity and control insecurity, I conducted a pilot study. For each scale I adapted the 41 items in the SIS to the specific parental behavior context. As in the original SIS, there were items assessing (a) internal representations (b) emotional responses and (c) behavioral responses. Some pre-pilot work had indicated that respondents might respond differently at the time of an unavailability or negative control event by the parent than some time later, after they had had time to calm down and reflect on the event. While some emotional and behavioral dysregulation might be expected right after the negative event, only more insecure adolescents would show insecure symptoms one hour after the negative event. Therefore, items were created using the original items but adding the stern "An hour after my parents …, I still." For instance, the statement "When my parents scold me, lecture me, or punish me, I feel sad" had the following parallel statement: "One hour after my parents scold me, lecture me, or punish me, I still feel sad." Each questionnaire had a total of 82 items, with response choices ranging from 1 (*not at all true of me*) to 4 (*very true of me).*

Undergraduate students in two different courses in the human development department at one State university were asked to participate. The researcher presented the study to them, and gave them the questionnaires and letters of consent. It was made clear that participation was voluntary, that refusal to participate would have no effect in their course grades, and that there was no extracredit offered for participating. A total of 113

students answered the questionnaires. The insecurity-availability scale was answered by 60 students while the insecurity-control scale was answered by 60 students.

Factor analysis of the availability insecurity scale showed one only factor with 25 items that integrated emotional and behavioral insecure reactions and internal representations of the conflict. Internal consistency for the availability insecurity scale was $\alpha = 0.92$. Factor analysis of the control insecurity scale showed also only one factor with 23 items that again integrated emotional and behavioral insecure reactions, and internal representations. Alpha coefficient was 0.89. (See Appendix 5)

Emotional security items in current study. In the prior study, due to the extension of each questionnaire, it was necessary to divide the items into two distinct samples. One subsample (n = 53) answered the availability items. The other subsample (n = 60) answered the negative control items. The separate subsamples allowed for examining consistency within these subscales but not across them. For the current study, the scales comprised of the 23 and 25 items from the pilot study were combined for a total of 48 items. In this way, it was possible to examine the concordance across the initial hypothesized subscales. The initial correlation between these hypothesized subscales (r=.80), however, indicated a level of empirical overlap that would suggest they were measuring the same or a very similar construct. Consequently, an exploratory factor analysis was conducted to determine if one or more factors provided a foundation for the initial hypothesized scales.

Factor analysis of the 48 emotional insecurity items using both oblique and orthogonal rotations yielded almost identical results. Based on the analysis of the scree plots and eigenvalues, the viability of solutions containing two and three factors was examined. The three-factor solution was discarded because of low theoretical meaning. By contrast, the two-factor solution was chosen for stronger theoretical meaning. (See Table

3) The first scale was composed of 26 items coming from the initial internal representation pool of items. Seven of those items were eliminated because of factor loadings in the second factor higher than .20. The remaining 19 items in the first scale, labeled *insecure representations*, referred to internal mental representations of potential future consequences of the event - either lack of parental availability or presence of parental negative control - for the late adolescent child or for the parent-child relationship. The following are some examples of items in this scale: "I will never get them to listen to me," "I am not going to have support when I needed," "I wonder if we will end up hating each other," and "I believe we can work out our differences." The reliability coefficient was (α = .90).

The second scale was composed of 22 items all coming from the emotional and behavioral initial pool of items. Thus, though emotional insecurity items in the interparental marital conflict context elicit different emotional and behavioral responses (see Davies, Forman, Rasi, & Stevens, 2002 factor analysis), emotional insecurity in the parenting context shows more consistency across emotional and behavioral responses. Five of those items were again eliminated because of high factor loadings in the first factor. The remaining 17 items in the second scale, that was termed *insecure reactions*, referred to emotional and behavioral reactions to the described event (e.g. "One hour after the event, I still feel like staying as far away from them as possible" or "One hour after the event, it still ruins my whole day"). Reliability coefficient was α = .93. The two-factor solution accounted for 45.41% of the variance. Scales were consistent with the components of the emotional security construct as stated by Davies and Cummings (1994).

Emotional intelligence. To report on their emotional intelligence, late adolescents answered the Trait Meta-Mood Scale for Children (TMMS-C, Rockhill & Greener, 1999). The authors adapted the Trait Meta-Mood Scale developed by Peter Salovey and Jack

Meyer shortening it so it could be used by children and adolescents. The original Trait Meta-Mood Scale is based in the author's model of emotional intelligence which states that emotional intelligence integrates three dimensions: attention to feelings, clarity of feelings and mood regulation. The new scale with only 16 items is also useful with late adolescents. This instrument uses a 5-point Likert-style format in which respondents are asked to rate each item as to the extent that they relate to them. Responses range from 1 (*very seldom true of me)* to 5 (*very often true of me).* The whole questionnaire can be answered in just 2-5 minutes.

Rockhill and Greener (1999) report that the internal consistencies measured with Cronbach's alpha for the three subscales are .70, .58, .76 respectively. External validity was shown by the subscales' correlations with other measures of emotion. Emotional clarity and emotion repair were negatively correlated to depression and positively with dispositional optimism. Emotional attention correlated positively with social anxiety, suggesting that socially anxious individuals tend to pay more attention to their feelings. Social avoidance negatively correlated with emotional clarity and emotion repair indicating that avoidant people tend to be less clear about their emotions and to do less to repair them. Social competence was positively correlated with emotion repair. All three subscales predicted life satisfaction ($r = .17$, p<.05, $r = .30$, p<.001, $r = .41$, p<.001) providing further validity support for a coefficient of emotional intelligence.

The low reliability reported in Rockhill and Greener's study (1999) for the second subscale – clarity of feelings – is problematic. Therefore, it was necessary, in the current study, to explore the potential of a different factor structure or a single factor. A single emotional intelligence coefficient was computed that combined all aspects of the construct. Reliability of the scale was $\alpha = .82$.

Youth Self-Report. Finally young adults answered the anxious/depressed, withdrawn, aggressive and delinquent behavior subscales from the Youth Self-Report (YSR, Achenbach, 1991). Across all age and gender groups, internal consistencies for the YSR externalizing scores are in the .92 to .96 range. Reliability of the internalizing scale is between .88 and .92. In terms of their validity, the YSR has been extensively used and is considered a standard self-report measure in the field of child psychopathology. Significant and meaningful correlations with other behavior rating scales are well-documented. In the current study, the anxious/depressed, and withdrawn subscales were combined to obtain a single internalizing coefficient. Reliability of the internalizing coefficient was .89. The aggressive and delinquent behavior subscales were also combined to obtain a single measure of externalizing. Reliability of this measure was .89.

Results

The results of this investigation are reported in three sections. The first section provides descriptive statistics for the scales. The second section presents the initial correlations among the scales. The third section presents the regression analysis.

Descriptive Statistics

Means and standard deviations for the different variables are shown in Table 4. Participants reported receiving very high levels of parental availability, medium levels of parental discipline and fairly low levels of harsh punishment. They also reported medium to low levels of insecure representations and insecure reactions, and medium to high levels of emotional intelligence. In terms of adjustment, the sample showed relatively low levels of internalizing and externalizing with a fairly wide range of variance. Sample sizes varied to a small degree across measures due to missing data.

Correlations

I report in this section the relationships among variables that will not be examined later in the regression analysis: the correlations among predictors, the correlations among potential mediators, and the correlation between outcome variables. All correlations are reported in Table 5. Among the parental variables, parental availability correlated negatively with harsh punishment, $r = -28$, but did not correlate with parental discipline. Parental discipline and harsh punishment correlated positively, $r = .36$. Among the potential mediators, insecure representations correlated with insecure reactions, $r = .59$, and insecure representations and insecure reactions, both correlated negatively with emotional intelligence, $r = -.22$, and $r = -.16$. In relationship to the outcome variables, internalizing moderately correlated with externalizing, $r = .42$.

Predictive Analysis

The current study examines two hypotheses. The first hypothesis proposes that insecure reactions, insecure representations and emotional intelligence mediate the relationship between parental behaviors and late adolescents' internalizing problems. The second hypothesis proposes that the same three variables – insecure reactions, representations, and emotional intelligence - mediate the relationship between parental behaviors and late adolescents' externalizing problems.

According to Baron and Kenny (1986) to conclude that there is evidence of a mediated relationship the following conditions must be met: (a) there must be significant relationships between the predictors and the outcomes; (b) there must be significant relationships between the predictors and the mediators; (c) there must be significant relationships between the mediators and the outcomes when all of the variables are entered in the same equation and these relations must reduce the direct effects of the predictors on the outcomes.

To test the first hypothesis, a regression equation was computed to investigate whether the predictors (parental availability, parental discipline, and parental harsh punishment) significantly predicted young adults' internalizing (outcome). Once the direct effects (Condition 1) were established, insecure reactions, insecure representations and emotional intelligence were regressed on the predictors (Condition 2). Finally, the last analysis involved regression for internalizing that included both the predictors and the potential mediators (Condition 3).

Table 8 shows that only parental availability met condition 1. Parental discipline and parental harsh punishment did not significantly predict late adolescents' internalizing problems. Parental availability also predicted the three potential mediators – insecure representations, insecure reactions, and emotional intelligence – as it can be seen in Tables 6 and 7. Therefore the three variables met condition 2.

In order to test condition 3, it was necessary to regress internalizing on parental availability introducing, in a second step, the three potential mediators. Unfortunately, due to the high correlation between insecure representations and insecure reactions, this analysis yielded equivocal results (see Appendix 6). Instead, the potential mediating role of the three variables was examined using separate testing of the Step 2 effect for the three potential mediators. That is, I separately tested what happened to the effect of availability on internalizing for Steps 2 that separately added in separate equations (a) insecure representations, (b) insecure reactions (c) emotional intelligence. Table 9, Step 2.a, shows that the parental availability's ability to predict internalizing was substantially reduced when the variable insecure representations was introduced in the regression equation. Similar results appear for insecure reactions as seen in Step 2.b. There was also a reduction in the relationship between parental availability and internalizing when emotional intelligence was entered in the regression equation as seen in Step 2.c., but this reduction was very modest.

Baron and Kenny's three-step procedure presents a problem. It does not test the significance of the indirect pathway. To be sure that the mediation effect is statistically significant, it is convenient to calculate the indirect effect and test it for significance. Preacher and Hayes (2004) recommend the use of the Sobel test (1982). This test calculates the indirect effect by computing a ratio that can be compared with the critical value from the standard normal distribution appropriate for a given alpha level. In the current study, the Sobel (1982) test of significance showed that the reduction on the relationship between parental availability and late adolescents' internalizing was significant for the three mediators, z = -3.81, -4.83, -2.86, p = .00, .00, .00 (See Appendix 7). Therefore, the three emotional processing variables showed evidence of their partial

mediating role between parental availability and late adolescents' internalizing problems, and satisfied Baron and Kenny's (1986) criteria for mediation.

This method of analysis implies the use of three different regression equations to test the mediating role of each potential mediator. The first equation using parental availability as the predictor and insecure representations as the mediator explained 17% of the variance in internalizing problems. The second equation using parental availability as the predictor and insecure reactions as the mediator explained 29.6% of the variance in internalizing. The third equation using parental availability as the predictor and emotional intelligence as the mediator explained 17.7% of the variance. A regression equation using parental availability as the predictor and the three mediators at the same time – insecure representations, insecure reactions, and emotional intelligence – explained 33.3% of the variance in late adolescents' internalizing problems (See Appendix 7).

To test the second hypothesis, the same three conditions needed to be met, this time in relationship to externalizing. Again, Table 8 shows that only parental availability met condition 1. Parental discipline and parental harsh punishment did not significantly predict externalizing. As explained before, the three potential mediators - insecure representations, insecure reactions, and emotional intelligence - met condition 2 (See Tables 6 and 7).

In relationship to condition 3, again three separated steps 2 were necessary, each one testing one separated potential mediator. Table 9, Step 2.a, shows that insecure representations failed to meet condition 3 since they did not significantly predict externalizing. On the other hand, Table 9, Step 2.b, shows that the parental availability's ability to predict externalizing was reduced when the variable insecure reactions was entered in the regression equation. Additionally, insecure reactions significantly predicted

externalizing. The Sobel (1983) test of significance showed that this reduction was significant, z = -2.22 (See Appendix 7). Therefore, insecure reactions met condition 3.

Finally, emotional intelligence failed to meet condition 3, since it did not significantly predict externalizing (See Table 9, Step 2.c). In summary, only insecure reactions satisfied Baron and Kenny's (1986) criteria for mediation and showed evidence of a mediating role between parental availability and late adolescents' externalizing problems. The regression equation using parental availability as the predictor and insecure reactions as the partial mediator explained 9% of the variance in externalizing problems.

Indirect effects. Despite the fact that parental discipline and parental harsh punishment did not directly predict internalizing, indirect effects between parental harsh punishment and internalizing could be identified. Harsh punishment correlated with insecure representations, r = .26, and insecure reactions, r = .12. In their turn, insecure representations and insecure reactions correlated with internalizing, r = .38, and r = .19. No indirect effect was identified for parental discipline.

Indirect effects could also be identified between harsh punishment and externalizing. Harsh punishment, as shown in Table 4, correlated with insecure representations and insecure reactions, and in their turn, insecure representations, and insecure reactions correlated with externalizing, r = .19 and r = .19.

Demographic variables. Anova and regression analyses showed that none of the demographic variables – gender, age, socioeconomic status, and ethnicity –affected the pattern of relationships proposed in both hypotheses or the pattern of findings explained above (See Appendix 4).

Discussion

The purpose of this study was to test a model of relationships between three types of variables. Those three types were parental behaviors, late adolescents' emotional processing, and late adolescents' adjustment. The parental behaviors studied were parental unavailability and parental negative control. The emotional processing variables studied were late adolescents' feelings of insecurity and late adolescents' emotional intelligence. The adjustment problems under study were late adolescents' internalizing and externalizing problems.

Three different hypotheses were examined. The first hypothesis proposed that late adolescents' emotional intelligence and emotional insecurity mediate the relationship between parental behaviors and late adolescents' internalizing problems. The second hypothesis proposed that late adolescents' emotional intelligence and emotional insecurity mediate the relationship between parental behaviors and late adolescents' externalizing problems. The third hypothesis proposed that late adolescents' emotional insecurity relates to their emotional intelligence.

Each hypothesis was based on theory developed and research findings obtained by previous scholars. The first two hypotheses had two different parts. The first part proposed that emotional security would mediate between parental behaviors and late adolescents' internalizing and externalizing problems. The second part proposed that late adolescents' emotional intelligence also would mediate this relationship.

The first part of these hypotheses was based on Cummings and Davies' (1995) theoretical proposition. These authors argue that parental negative behaviors undermine children's emotional security. Children who feel insecure experience (a) difficulties in regulating their emotions, (b) excessive motivation to regulate the parent-child behavior, and (c) generate maladaptive representations of social relationships. The vigilance,

distress, and preoccupation that result from children's insecurity increase their risk of

experiencing internalizing and externalizing symptoms (Davies & Cummings, 1994).

However, this theoretical proposition was not empirically supported. The authors based

their proposition on their own research and that of their colleagues in the area of parental

intramarital conflict and children's emotional intelligence. In a series of studies, they and

their colleagues confirmed that emotional security mediates between parental intramarital

conflict and children's adjustment (Davies & Cummings, 1994; Davies & Cummings,

1998; Davies & Foreman, 2002; Davies, Harold, Goeke-Morey, & Cummings, 2002).

The current study provides the empirical support that was lacking in the Cummings and

Davies proposition. In this study, late adolescents' emotional insecurity strongly relates to

parental unavailability and negative control during their early adolescence. This emotional

insecurity manifests in two ways: a group of negative emotional and behavioral reactions

and a group of negative mental representations of the parent-child relationship. Both of

which result in late adolescents' internalizing and externalizing problems.

The second part of the first two hypotheses proposed that emotional intelligence

mediated the relationship between parental behaviors and late adolescents' internalizing

and externalizing problems. This proposition was also based on a series of research

findings and theoretical propositions (Goleman, 1995; Alegre & Benson, 2004; Liau, Liau,

Teoh & Liau, 2005); however, no direct empirical evidence had been provided previously

for this proposition either. Thus, this study is the first to show empirical evidence that

emotional intelligence plays such a mediating role.

The third hypothesis, proposing that emotional intelligence and emotional security

are related, had a theoretical base. Emotional intelligence refers to the individual's ability

to process emotional information and positively use it for behavior. Some emotions,

however, can block the individual's ability to process information (Mayer & Salovey,

1995). Insecurity is likely to be one of those emotions. Additionally, an individual's

emotional security partially depends on his or her appraisal of the emotional information

contained in threatening situations. This appraisal will surely be affected by the

individual's general ability to process and understand emotional information.

First Step.
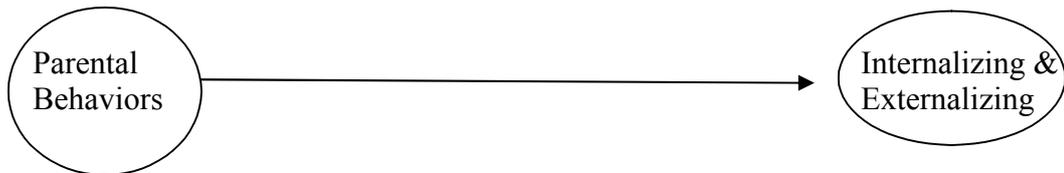
Second Step.
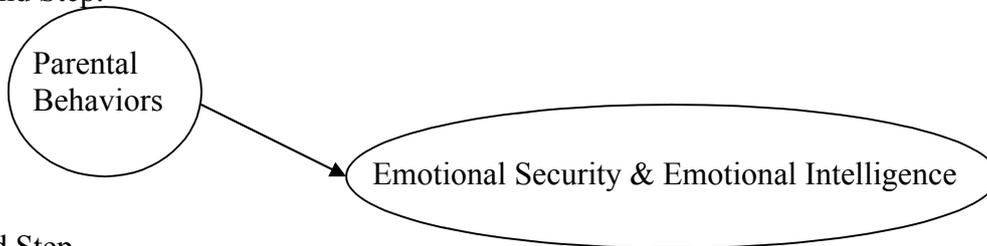
Third Step.
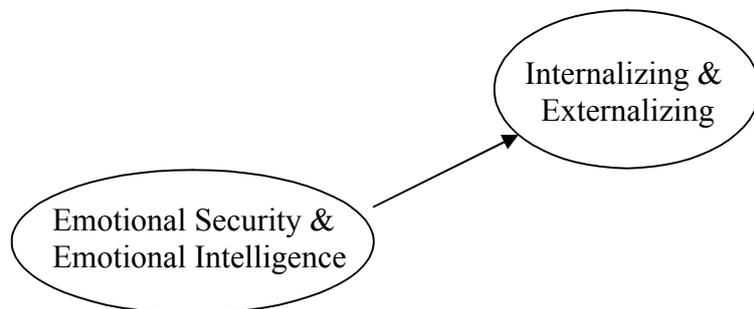
Fourth Step.
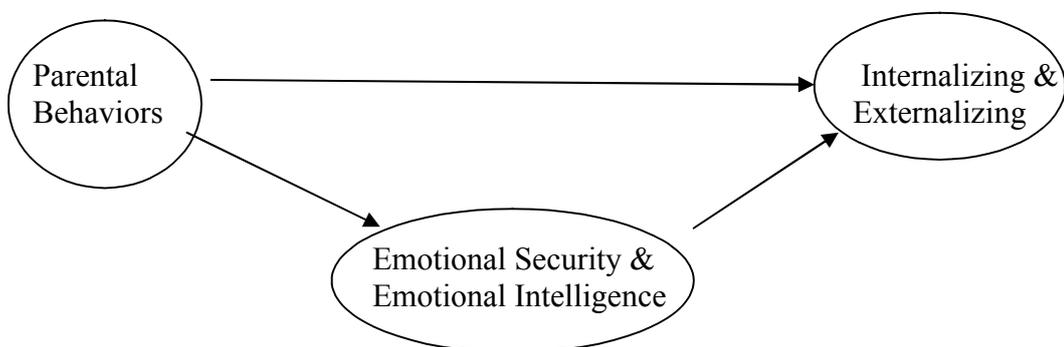
Figure 3. The four-step process to analyze the first two hypotheses.

Now that the hypotheses and what they were based on has been established, it is time to analyze whether the results confirm them. To do this, ideally each hypothesis should be analyzed separately according to the data obtained. However, because the first and second hypotheses are so similar and have so many variables in common, they are analyzed here together. The third hypothesis is analyzed separately.

To analyze the first two hypotheses it is convenient to break them down into a series of common steps that need to be supported by empirical evidence. The first step proposes that parental behaviors relate to and predict internalizing and externalizing problems. The second step proposes that parental behaviors predict emotional insecurity and emotional intelligence. The third step proposes that emotional insecurity and emotional intelligence predict internalizing and externalizing problems. The fourth step proposes that emotional insecurity and emotional intelligence mediate the relationship between parental behaviors and late adolescents' adjustment problems. Below, I discuss the findings related to the different steps.

First Step: Parental Behaviors and Late Adolescents' Adjustment

The first step was to show empirical evidence that parental behaviors predict late adolescents' internalizing and externalizing problems. This study focused on two types of parental behaviors: parental availability and parental negative control. Parental availability was understood as the parents' ability to respond to their children when they needed them in an affectionate and caring way. Parental negative control would be manifested by the use of negative consequences and the use of harsh punishment. Negative consequences included elimination of privileges, taking away nice things, or giving extra chores. Harsh punishment included slapping, spanking, shaking, or yelling at their children. In the following paragraphs, the evidence for parental availability, for parental use of negative consequences, and for parental harsh punishment is reviewed.

The findings show that parental availability moderately relates to late adolescents' internalizing and externalizing problems. They confirm research findings that had already been widely obtained in the past (Lewin, Silverstein, Baumeister, Strawser, & Geffken, 2005; Qui Dong, Wang, & Ollendick, 2002; Khaleque & Rohner, 2002). And because the purpose of this study was to show evidence of a model of relationships, I chose the measures of parental availability and of adjustment that had been used the most in the literature.

Many studies have used a specific measure of parental availability: the Parental Acceptance-Rejection Questionnaire (PARQ, Rohner, 1986). The results of those studies consistently have found that parental availability relates to lower adjustment problems (Khaleque & Rohner 2002). Many other studies that did not use the PARQ, used instead a specific measure of internalizing and externalizing problems: the Child Behavior Checklist (CBCL, Achenbach, 1991). The studies that used the CBCL but not the PARQ –they used some other parenting questionnaire instead– also found the same type of relationship between parental availability and late adolescents' adjustment (Lewin, Silverstein, Baumeister, Strawser, & Geffken, 2005; Qui Dong, Wang, & Ollendick, 2002). Only one study simultaneously used both questionnaires – the PARQ and the CBCL. Lila, García and Gracia (2007), investigated 234 Colombian children and their families, and again they found that parental acceptance related to children's level of psychological and behavioral problems. This study extends the work of Lila, García, and Gracia to individuals that are, on average, 10 years older than the participants in their study. As they did, this study uses the PARQ and the YSR which is the version of CBCL for adolescents. The results corroborate the general findings found in the literature and show that parental availability not only relates to lower adjustment problems during childhood and adolescence, but also during the period of late adolescence.

In regards to parental control, most studies concentrate on parental monitoring or parental supervising, which are generally found to relate to positive outcomes in children (Kuczyinski & Kochanska, 1995; Pettit, Bates, & Dodge, 1997). However not all types of parental control have positive effects. Barber (1996) found that when parents use psychological control rather than behavioral control, children's outcomes turn negative. And not all types of behavioral control seem to be positive. Van Leeuwen and Vermulst (2004) found negative, although modest, relationships between mothers and fathers' use of negative consequences and their children's externalizing problems. Negative consequences entailed the elimination of privileges, taking away nice things, or giving extra chores.

This study wanted to further investigate the role of parental use of negative consequences in late adolescents' adjustment, but, contrary to expectations, it did not find any relationship between negative behavioral control and late adolescents' adjustment problems. The age difference may be responsible for the lack of significant results. Also, the use of negative consequences as a form of behavioral disciplining may, on one hand, serve as an instrument of behavioral control and therefore relate to positive outcomes. On the other hand, negative consequences may often be used in combination with some sort of psychological control and therefore relate to negative outcomes. Both effects may compensate each other.

In relationship to parental harsh punishment, this study found that it related more strongly to late adolescents' externalizing problems than to late adolescents' internalizing problems. In fact, the correlation between parental harsh punishment and internalizing was positive but non significant. The relationship between parental harsh punishment and externalizing was significant but very modest. Parental harsh punishment was measured with the Harsh Punishment Scale (Van Leeuwen & Vermulst, 2004). However, Van

Leeuwen and Vermulst's found stronger correlations between parental harsh punishment and both internalizing and externalizing than the ones obtained in this study. One probable reason for this difference is again the age of the respondents. The relationship between parents' parenting and their children's behavior very likely tends to diminish with age.

Second Step: Parental Behaviors and Emotional Processing

After the relationship between parental behaviors and late adolescents' adjustment problems was reviewed, it was time to review the second step. The second step entailed showing evidence that parental behaviors relate to late adolescents' emotional processing. Emotional processing consisted of three different variables: insecure mental representations, insecure emotional and behavioral reactions, and emotional intelligence. Partially confirming the study's hypotheses, parental availability and harsh punishment predicted late adolescents' insecure emotional and behavioral reactions and insecure mental representations. For these late adolescents, a warm and affectionate type of parenting resulted in (a) calmer and more self-controlled reactions when facing negative events and (b) more positive mental schemas of the conflict and the relationship. Also, for these adolescents, a harsher type of parenting resulted in (c) greater emotional and behavioral dysregulation and (d) more negative internal representations when facing a negative event. Although, a relationship between parental behaviors and children's emotional security had already been proposed (Cummings & Davies, 1995), this study is the first to show empirical data that confirm their theoretical proposition.

There are, however, some differences between Cummings and Davies' research and this study. The emotional security hypothesis (Davies & Cummings, 1994) proposes three dimensions of insecurity: emotional reactions to threat, behavioral regulatory strategies to deal with the threat, and internal mental representations. In the current study, feelings of insecurity showed only two dimensions. The first dimension comprised emotional and

behavioral reactions to negative events, and the second dimension referred to internal mental representations of the conflict. Those internal representations included the ideas that late adolescents had about the causes of the conflict, about its negative consequences, and about their relationship with their parents. In the context of parental marital conflict, emotional reactions can clearly be differentiated from the behavioral regulatory strategies the adolescents use to deal with the conflict. In the context of the parent-child relationship, there is no such distinction. One possible explanation for this discrepancy may be that insecurity in the context of parent-child relationship is in fact a measure of insecurity in two different situations: one of the parents not being available when their children need them, and another of the parent using negative control with their children. The behavioral strategies that late adolescents use to deal with one situation – that of parental unavailability, for instance – may not relate very highly to the behavioral strategies chosen to deal with the other situation – parental negative control. It may happen that different situations require substantially different ways of confronting them. The behavioral strategies chosen in one situation may relate more strongly to feelings of insecurity in general regardless of which situation elicits them.

In other words, conflictive situations may elicit similar feelings but require different behavioral strategies. When answers to both questionnaires are factor analyzed together, behavioral strategies cannot be separated from emotional reactions. The reason is that behavioral reactions in one situation relate more strongly to the emotional reactions in the other situation than to the behavioral strategies chosen in that second situation.

The second step entails showing evidence that parental behaviors relate to late adolescents' emotional intelligence as well. Indeed, parental availability predicted late adolescents' emotional intelligence. The relationship between parental availability and late adolescents' emotional intelligence had not been studied before. However, relationships

between other dimensions of parenting and children's emotional intelligence related abilities had previously been found in a few studies. Gottman (1987) showed that the way parents think about their children's emotions related to the children's emotional competence, and Martinez-Pons (1999) showed that parents can train their children's emotional abilities. Both studies focused on the intentional ways in which parents deal with children's emotions, and showed that they relate to the children's emotional abilities. Alegre and Benson (2004) and Liau and colleagues (2003) made a theoretical and empirical contribution showing that parental styles and behaviors non-intentionally directed towards their children's emotions, also relate to children's emotional intelligence. This study expands on Alegre and Benson, and Liau and colleagues' studies investigating other non-emotion-related parental behaviors that had not been considered before. Those behaviors are parental availability, parental discipline, and parental harsh punishment. It also expands on those authors' work by targeting the emotional intelligence of a different age group: late adolescents.

Contrary to previous findings (Alegre & Benson, 2004), parental harsh punishment did not directly relate to lower levels of emotional intelligence, instead it showed indirect effects. These different results may be due to the different age group studied. Also, Alegre and Benson (2004) used parents' own responses about their parenting, while this study used the late adolescents' report of their parents' parental behaviors. Parents' reports may be more accurate than those of late adolescents, increasing their ability to be related to other variables.

Third Step: Emotional Processing and Late Adolescents' Adjustment

The third step entails showing evidence that emotional insecurity relates to late adolescents' internalizing or externalizing problems. As hypothesized, late adolescents' insecure reactions and insecure representations did correlate with their internalizing and

externalizing problems. The correlations between the insecurity variables and internalizing were notably higher than the correlations between the insecurity variables and externalizing. These results are consistent with previous findings relating emotional insecurity in the context of parental intramarital conflict to children's adjustment (Davies & Cummings, 1998).

Davies and Cummings found that insecure emotional reactions and insecure internal representations predicted internalizing and externalizing. However, their relation to externalizing did not reach statistical significance. They did not find a relationship between behavioral regulatory reactions and either internalizing or externalizing. Compared with those results, this study found stronger correlations with both internalizing and externalizing. One possible explanation is that the insecurity derived from negative parent-child relationships may be more intense than the insecurity derived from parental marital conflict. Children may feel more threatened when something goes wrong in their direct relationship with their parents than when something goes wrong between their father and mother. This higher intensity may result in a stronger difficulty to deal with life challenges in general. Another possible explanation may the different sources of information used in each study. In the Davies and Cummings study, the measures of insecurity incorporated not only children's self-reports but also observers' ratings of behavior in laboratory situations. Their measures of adjustment also incorporated parents' reports. This study may benefit from using only late adolescents as informers of both their own insecurity and their own adjustment.

The third step also entails showing evidence that emotional intelligence relates to late adolescents' internalizing or externalizing problems. In line with previous findings (Liau et al, 2003; Engelberg & Sjoberg, 2004), in this study, emotional intelligence negatively correlated with internalizing, but contrary to expectations it did not correlate with

externalizing. This discrepancy may be the result of using different measures of emotional intelligence and of adjustment problems. It may also be the result of using different ranges of age. While Liau and colleagues studied secondary school students, this study targets college students. Engelberg and Sjoberg also targeted college students but they used a global measure of social skills that does not allow the authors to differentiate between internalizing and externalizing problems.

The Mediating Role of Emotional Processing

Finally, to show empirical support for the first two hypotheses, it is necessary to show that the three emotional processing variables mediate the relationship between parental behaviors and late adolescents' internalizing or externalizing problems. In this study, the relations between the measures of parental behavior, the potential mediating variables and the indicators of adjustment have been tested using a rather rigorous set of criteria (Baron & Kenny, 1986). Results show that both insecurity and emotional intelligence mediate the relationship between parental behaviors and late adolescents' internalizing problems. Therefore the first hypothesis is partially confirmed.

These findings suggest that when parents do not show affection, warmth, or support for their children, or use punishing strategies to control them, children feel insecure (Cummings & Davies, 1995). They do not have a secure base to which to return in situations of danger. The base becomes in fact a source of insecurity instead of a source of security. The need to recover security requires so much energy that late adolescents cannot concentrate their energies on dealing successfully with the outside world, as a result they either withdraw from it or develop depressive tendencies (Cummings & Davies, 1995). Additionally, the negative mental representations that they develop of their relationship with their parents will transfer to new relationships with friends, peers, teachers and other authority figures (Grych, & Cardoza-Fernandes, 2001). Late adolescents' negative

expectations about these new relationships will become self-fulfilling prophecies. Also, parents who do not attend to their children's emotions or who cannot distinguish clearly between their children's emotions will teach children not to attend to their emotions, to confuse the meanings of those emotions and to dismiss emotional information (Gottman, Katz, & Hooven, 1997). The lack of ability to deal with emotional information will then affect children when dealing with other relationships (Goleman, 1995). Children who do not attend to their feelings, do not understand their feelings, or do not know how to regulate their emotions, will develop continuous difficulties when trying to establish friendships and other relationships that can lead to the development of withdrawing or depressive problems.

The second hypothesis could not be completely confirmed. There is no evidence that emotional security and emotional intelligence mediate the relationship between parental behaviors and late adolescents externalizing. Parental availability predicts less externalizing problems, lower emotional security and higher emotional intelligence. However, only insecure reactions to the negative event seem to show a mediating effect. Emotional intelligence and insecure representations do not show a significant relationship with externalizing. The inability to control aggressive tendencies may be more related to the inability to control emotions in threatening situations than to the ideas that late adolescents have about the situation.

Although other studies had already documented the relations between parental behaviors and late adolescents' psychological and social adjustment, less attention had been directed toward clarifying the processes that link parent's child-rearing to their children's later adjustment. This study clarifies some of those links showing evidence that late adolescents' emotional security and emotional intelligence mediate the relationship between parental availability and late adolescents' internalizing. It also shows that

insecure reactions mediate the relationship between parental availability and late adolescents' externalizing problems.

The Relationship Between Emotional Insecurity and Emotional Intelligence

The research study not only proposed that the emotional processing variables mediated between parental behaviors and late adolescents' internalizing and externalizing problems, it also proposed that the emotional processing variables would relate to each other. Specifically, that emotional insecurity would relate to emotional intelligence. Data confirm this hypothesis. These results are consistent with the theory proposed. When a person feels threatened, his or her fear blocks the flow of emotional information (Mayer & Salovey, 1995). The lack of information makes it more difficult for the person to understand the meanings of the emotions he or she is experiencing. At the same time, when a person feels in danger the goal switches from one of optimizing the opportunity to one of minimizing the risk. A secure person tries to optimize the result of the situation. This, generally, implies being able to control emotions to show the most positive behavior. On the other hand, a person feeling insecure tries to minimize the possible danger (Goleman, 1995). In order to minimize danger, individuals may need to show more dysregulated behavior, which ensures survival in the short term. When a person is often overwhelmed by feelings of insecurity, his or her ability to understand emotions and his or her ability to regulate emotions may be more permanently compromised. The more insecure a person feels, the less clearly he or she identifies emotions, which confirms Mayer and Salovey's (1995) statement that fear blocks the flow of emotional information. Also, the more insecure a person feels, the more difficult that it is for him or her to regulate emotions. When under conditions of perceived threat our energies are directed towards the minimization of danger, leaving little resources for the regulation of emotion.

However, the correlation does not show the direction of the relationship. It may also happen that a low ability to understand emotions in a particular situation facilitates feelings of insecurity in that situation. This emotional confusion may provoke more intense emotional and behavioral reactions. Additionally, a low ability to regulate emotions may elicit stronger emotional and behavioral reactions in stressful situations. These stronger reactions may then lead to the internalization of more negative mental representations of those situations. An insecure person may be able to attend to and accept his or her feelings as much as a secure person, but fear may preclude him or her from understanding any emotion other than the fear, which becomes predominant.

Emotional intelligence relates more strongly to insecure internal representations than to insecure emotional and behavioral reactions. Emotional intelligence is a construct that represents a group of abilities that show some degree of stability during a lifespan. Internal mental representations also tend to show a considerable stability (Bowlby, 1983).

Emotional and behavioral reactions, on the other hand, may be more context-specific and more dependent on fine nuances of a situation. Therefore, emotional intelligence may tend to vary more in line with internal representations than with insecure reactions.

Emotional security and emotional intelligence have been, heretofore, studied in isolation of each other. This study is the first one that proposes and shows evidence of a relationship between them. More research is needed to establish the direction of this relationship.

Patterns of Relationships

The analysis of the results also allows for the identification of some patterns in the relationships among the variables. Some of those patterns refer to the parental behaviors' ability to predict late adolescents' emotional processing and adjustment problems, and some refer to the emotional processing variables' ability to predict late adolescents' adjustment problems.

Patterns in the parental behaviors' predictive capability. In this study, parental availability is associated with an array of positive characteristics. For late adolescents in situations of parent-child conflict, parental availability predicts the development of less insecure representations and less insecure reactions. Parental availability also predicts higher levels of emotional intelligence, less internalizing problems and less externalizing problems. These results confirm findings in the literature that consistently found parental availability related to positive outcomes (van den Boom, 1994; Pettit, Bates, & Dodge, 1997; Rothbaum, 1986; Melby & Conger, 1997; Rubin, Dwayer, Booth-LaForce, Kim, Burgess & Rose-Krasnor, 2004).

Parental use of negative consequences as a means to encourage compliance does not seem to be related to positive or negative outcomes. In the current study, parental discipline shows no relationship with any variable except parental harsh punishment. The more parents use negative consequences, the more they tend to use harsh punishment like spanking, yelling, and shaking. Parental harsh punishment, on the other hand, is associated with different negative outcomes. Parental use of a harsher type of discipline predicts late adolescents' more dysregulated emotional and behavioral reactions. It also predicts late adolescents' development of more insecure representations, and more aggressive and delinquent behavior. However, the ability of parental harsh punishment to predict different negative outcomes tends to disappear when it is studied in combination with parental availability. It seems like the influence of parental warmth, affection and acceptance overwhelms the negative effects of harsh punishment.

Patterns in the emotional processing variables' predictive capability. In the model proposed in this study, parental availability and parental harsh punishment predict emotional insecurity which in turn predicts internalizing problems. In other words, emotional insecurity mediates between the two parental behaviors and internalizing.

Emotional insecurity is composed of two dimensions: insecure reactions and insecure representations. The findings confirm the model but show an unexpected pattern. Parental availability and parental harsh punishment correlate more strongly with insecure representations than with insecure reactions. This result could indicate that insecure representations play a stronger mediating role between the parental behaviors and the internalizing problems. However, insecure reactions correlated more strongly with internalizing problems than insecure representations. According to the proposed model of relationship, this finding would indicate that insecure reactions have a stronger influence on internalizing. Therefore, insecure representations cannot be a stronger mediator than insecure reactions. There is also a strong relationship between insecure representations and insecure reactions. This pattern of relationships might indicate that (a) what parents do have an effect on the internal mental representation their children form, (b) those mental representations in turn affect the way children react to potential threat, (c) but what creates the internalizing problems adolescents experience is not so much the ideas they hold about those events but the ways they react to them.

A way to show support for the proposition presented in the previous paragraph is to show that variables that measure emotional and behavioral reactions in a different context also show similar patterns of relationships. Late adolescents' context-specific and general inability to regulate their emotions should relate to insecure representations and internalizing in similar ways. In this study, the general ability to regulate emotions is termed mood repair. Therefore, if insecure representations relate to insecure reactions, insecure representations should also relate, although less strongly and in the opposite direction to mood repair. In turn, if insecure reactions correlate with internalizing, mood repair also should correlate with late adolescents' internalizing problems. Indeed, insecure representations correlate negatively with mood repair (see Appendix 2.3). Moreover, late

adolescents with a higher ability to regulate their emotions tend to experience less

internalizing problems (See Appendix 2.2). However, these relationships are very modest

in magnitude. Therefore, there seems to be some support for this explanation.

In general, the relationship of emotional security and emotional intelligence seems to be

stronger with internalizing than with externalizing. Maybe when children feel insecure,

confused about their feeling, or unable to regulate their emotions, they tend to become

depressed and withdrawn more than they tend to become aggressive or delinquent.

Cummings and Davies (1998, 2002) consistently found emotional security more strongly

related to internalizing that to externalizing. They believe that the worry, vigilance,

preoccupation, and involvement in the conflict reflected in children's emotional insecurity

cohere in broader maladaptive coping patterns (e.g., learned helplessness, ruminative

coping, self-blame) that are especially likely to increase children's vulnerability to

internalizing symptoms. Externalizing problems may be linked not only to feelings of

insecurity but to feelings of anger. Crockenberg and Langrock (2001) propose that

externalizing behavior is linked to feelings of anger derived from threatened personal

goals and from the perception that goals can be reinstated if action is taken.

The findings in this study suggest some parallels to constructs within coping theory

(Lazarus, 1993). The process of feeling insecure and recovering emotional security may

closely resemble the appraisal-coping process that individuals use to deal with life

stressors in general. Lazarus proposes that when confronted with threat, individuals

develop a two-step process. First, they appraise the potential danger and their own coping

resources according to their mental representations. Second they react to the threat

according to their appraisals. Similarly, the results in this study show that internal

representations seem to be more influential in the emotional and behavioral reactions that

late adolescents develop than in their problem behaviors such as internalizing or

externalizing. Maladjustment is mainly related to late adolescents' emotional and behavioral reactions to situations of threat. In consonance with theoretical contributions by Cummings and Davies (1995), it is possible that the efforts dedicated to regain security are subtracted from the efforts to deal effectively with personal and social situations. Late adolescents' hard work to avoid threat and recover emotional peace may leave them little energy to regulate other emotions and behaviors. Continuous dysregulated emotions and behavior would result in internalizing and externalizing problems.

Limitations

Several limitations of the present study are important to note. The correlational nature of these findings precludes them from ascertaining the casual flow among the variables studied. The replication of this study with longitudinal designs would help to clarify the causal nature of these relationships. Also, this study does not include information directly obtained from parents or other sources and relies on questionnaires. Due to shared method variance, the findings may overestimate the effect size of some of the interrelationships. Nevertheless, the patterns observed here provide a basis for future research using multiple reporters and multiple methods. Finally, most participants in this study were of middle and high socio-economic status and for the most part were of European-Caucasian origin. Thus, the generalization of the findings to individuals of other ethnicities or socio-economic status should be made with caution.

Summary

In summary, given the many studies that have found links between parental behaviors and their children's social and psychological adjustment, understanding the processes by which this relation takes place remained a task of the utmost importance. This study proposed a model of relationships between parental behaviors and late adolescents' internalizing problems, where emotional security and emotional intelligence mediated the

relationship. An identical model of relationships between parental behaviors and late adolescents' externalizing problems was also proposed. The findings suggest a process model of parent unavailability, emotional insecurity, and adolescent problems. Within this interpretive model, late adolescents accustomed to parental coldness, distance and general lack of support develop insecure emotional and behavioral reactions. They also develop insecure mental representations of the conflict, its causes and its negative consequences. Moreover, they also develop a deficiency in processing and regulating emotional information. Later, those three deficiencies influence late adolescents' ability to maintain their personal psychological balance.

The current findings extend previous research on emotional security in the context of intramarital conflict (Davies & Cummings, 1994, 1998; Cummings & Davies, 1995; Davies, P. T., & Forman, E. M., 2002; Davies, P. T., Harold, G. T., Goeke-Morey, M. C., & Cummings, E. M., 2002). This study demonstrates the extension of the concept of emotional insecurity to the domain of parent-child relationships and parental child-rearing. Insecurity had been shown to be linked to attachment relationships (Bowlby, 1986) and to parental intramarital conflict. Now, this study provides evidence that insecurity is also linked to parental child-rearing.

This study, also extends previous findings showing relationships between parental behaviors and emotional intelligence (Martinez Pons, 1998; Gottman, Hooven, & Katz, 1997; Alegre & Benson, 2004) and relationships between emotional intelligence and adolescents' adjustment (Liau, Liau, Teoh, & Liau, 2003; Extremera, Durán, & Rey, 2007). Liau and colleagues showed that emotional intelligence moderates the relationship between parental behaviors and children's adjustment. In their research, emotional intelligence is seen as a group of abilities unaffected by parental behaviors. Children may reduce the effects of their parents' negative behaviors in their adjustment if they are

emotionally intelligent. The current study provides support for a process model in which parental behaviors influence late adolescents' emotional intelligence. Emotional intelligence, in turn, allows late adolescents to adjust better to life's social and psychological demands.

Finally, the current findings relate the separate lines of research on emotional security and emotional intelligence by proposing a conceptual relationship and documenting evidence of covariance. This is a field where this study not only supports previous theory, but in fact expands theorizing by proposing a link that had never been proposed before. This relationship, although modest in magnitude, opens the door to the question of directionality of the relationship. Does insecurity hinder the development of emotional intelligence, or does emotional intelligence help late adolescents to feel more secure? More research is needed in this area.

This study has implications for parents, educators, and psychotherapists. Emotional security mediates between parental behaviors and late adolescents' internalizing problems. Parents should analyze their practices in terms of the level of security or insecurity that they help their children to develop. Parenting practices that provide children with an emotionally consistent and safe environment are fundamental for late adolescents' healthy adjustment. Educators should promote emotional security in their classrooms. Psychological interventions need to go beyond cognitive techniques and find ways to nurture the feelings of security that could not be developed in the parent-adolescent relationship.

Emotional intelligence also mediates between parental availability and late adolescents' internalizing problems. Parents need to find ways to help their children understand, and regulate their emotions. Educators should promote emotional intelligence in their

classrooms. Psychological interventions should include ways to develop adolescents'
emotional intelligence.

Harsh punishment predicts externalizing problems. Parents and teachers could avoid harsh
disciplinarian techniques and favor some degree of autonomy. However, parental harsh
punishment does not predict late adolescents' adjustment when parental availability is
entered in the regression equation. Parents should show warmth, acceptance, and support
to ensure children's compliance. Teachers can promote better adjustment by showing
affection and acceptance towards their students.

The literature has shown that attachment is an important source of security. Marital
conflict has also been shown to be an important source of security. This study shows for
the first time that parental behaviors are a third strong source of security. It opens the door
to a new field of research with promising implications for child-rearing, education and
psychotherapy.

Table 1

Factor Loadings of the Factor Analysis of the Warmth/Affection Scale

Statements in questionnaire	1
Make me feel what I did was important	.866
Care about what I thought and like me to talk about it	.847
Say nice things to me when I deserved it	.835
Try to make me happy	.832
Be really interested in what I did	.831
Try to help me when I was scared or upset	.826
Tell me how proud they were of me when I was good	.825
Be interested in the things I did	.823
Make me feel wanted and needed	.819
Treat me gently and with kindness	.803
Let me know they loved me	.787
Talk to me in a warm and loving way	.770
Try to make me feel better when I was hurt or sick	.767
Make me feel proud when I did well	.754
Say nice things about me	.752
Talk to me about our plans and listen to what I had to say	.742
Encourage me to bring my friends home, and try to make things pleasant for them	.698
Make it easy for me to tell them things that were important to me	.697
Let me do things I thought were important even if it was inconvenient for them	.681
Praise me to others	.636

Note. All questions were preceded by the following introduction: "My parents used to."

Table 2

Factor Loadings of the Discipline and Harsh Punishment Scales

Statements in questionnaire	1	2
When I did something wrong, they punished me by taking away something nice (for instance I couldn't watch TV, I was not allowed to go out, I had to be home earlier, I had to go to bed	.869	-.091
When I didn't obey a rule (for instance I came home late without a valid reason; I had not completed a chore), then they punished me	.861	-.020
When I did something that they didn't want me to do, They punished me	.853	-.004
They punished me when I made a nuisance of me (for instance because I nagged, contradicted them, lied, argued)	.789	.088
Sometimes they didn't punish me after I had done something that it was not allowed	-.553	.023
When I misbehaved, they gave me a chore for punishment	.482	.078
They spanked me when I was disobedient or naughty	.088	.873
They slapped me when I had done something wrong	-.059	.834
They spanked me when I didn't obey rules.	.150	.816
They shook me when we had a fight	-.079	.755

Note. All questions were preceded by the following introduction: "When I was an adolescent." 1 = Parental discipline scale; 2 = Parental harsh punishment scale.

Table 3

Factor Loadings of the Factor Analysis of the Two Insecurity Scales Combined

Statements in questionnaire	1	2
I will never get them to listen to me (a)	.790	.030
They are never going to care about me (a)	.763	-.185
I never am going to be able to get their attention (a)	.754	-.011
I am not going to have support when I needed (a)	.746	.017
When problems come they are going to blame me (a)	.726	.076
I believe we can work out our differences (b)	-.692	-.016
I wonder if we will end up hating each other (a)	.687	-.199
One hour later, I still know it's because we don't know how to get along (b)	.684	.076
They are going to think I am an annoying person (a)	.661	.055
If I ask for attention again they are going to be very upset with me (a)	.658	.122
An hour later, I still worry about the future of our relationship (a)	.649	.171
I know we still love each other (a)	-.649	-.080
An hour later, I still know we don't know how to get along (a) *	.638	.216
I know we still love each other (b)	-.613	.071
I worry about the future of our relationship (a)	.595	-.065
One hour later, I still know that everything will be okay (b)	-.592	.058
I know that everything will be okay (a)	-.587	-.126
Everything that goes wrong is going to be my fault (b) *	.556	.331
They are going to be looking for other reasons to punish me (b) *	.548	.310
I am in a bad situation with my parents and I have no escape (b) *	.547	.261
One hour later, I still believe we can work out our differences (b)	-.531	.015
I believe we can work out our differences (a)	-.524	-.163
They are going to be looking for other reasons to punish me (b) *	.524	.332
One hour later, I still know they are going to blame me for everything after that (b) *	.504	.318
Everything that goes wrong is going to be my fault (b) *	.473	.427
One hour later, I still need to do something to get revenge from them (b)	.415	.108

Factor Loadings of the Factor Analysis of the Two Insecurity Scales Combined (cont.)

Statements in questionnaire	1	2
One hour later, it still ruins my whole day (b)	-.128	.760
One hour later, it still ruins my whole day (a)	-.055	.752
One hour later, I still think they are going to be upset with me all day long (b)	.103	.676
One hour later, I still try to get away from them (for example, by leaving the room) (b)	-.061	.668
One hour later Wait and hope things will get better (b) *	-.286	.667
One hour later, I still can't seem to shake off my bad feelings (a)	.170	.658
One hour later, I still feel like staying as far away from them as possible (b)	.051	.654
One hour later, I still feel like staying as far away from them as possible (a)	.157	.646
One hour later, I still feel like they are upset with me (a)	.075	.644
One hour later, I still can't seem to calm myself down (a)	.145	.643
One hour later, I still feel like it is my fault (a)	.145	.641
One hour later I still end up doing nothing even though I wish I could do something (b)	.000	.613
One hour later, I still feel angry (b)	.021	.589
One hour later, I still feel they blame me (a) *	.319	.586
One hour later, I still feel that they blame me (b) *	.271	.575
One hour later, I still feel sorry for both of us (a)	.020	.530
I feel like they are upset with me (a)	.088	.465
One hour later, I still think they are going to blame me for everything after that (b) *	.440	.452
One hour later, I still worry about what are we going to do next (b)	.181	.406
I think they blame me (a) *	.286	.378
One hour later, I still answer back at them telling them is all their fault (b)	.004	.329
I feel unsafe (a)	.034	.298

Notes. (a) These questions used the following prologue: When I try to talk to my parents, or need their help, or need their emotional support or advice, and they have no time, avoid me, get upset with my needs, or in general are unavailable. (b) These questions used the following prologue: When my parents scold, lecture, or punish me. Factor 1 = Insecure mental representations; Factor 2 = insecure emotional and behavioral reactions.

* Items deleted from factor because of factor loading higher than .200 in the other factor.

Table 4

Variable Means and Standard Deviations

Variables	M	SD	Range
Parental Availability	71.67	10.21	23-80
Parental Disciplining	17.48	4.58	6-28
Parental Harsh Punishment	6.48	3.02	4-18
Insecure representations	26.46	9.15	19-64
Insecure reactions	31.83	9.59	17-62
Emotional Intelligence	57.83	8.14	24-77
Internalizing	32.53	8.32	22-66
Externalizing	34.01	7.26	26-78

Note. $N = 329$.

Table 5

Correlations Among Variables

Variables	1	2	3	4	5	6	7	8
1. Availability	-	-.04	-.28**	-.62**	-.36**	.23**	-.36**	-.23**
2. Discipline		-	.36**	.07	.07	-.02	-.02	-.02
3. Harsh Punishment			-	.26**	.12*	-.06	.03	.14*
4. Insecure representations				-	.59**	-.22**	.38**	.19**
5. Insecure reactions					-	-.16**	.48**	.19**
6. Emotional Intelligence						-	-.30**	-.09
7. Internalizing							-	.42**
8. Externalizing								-

* $p < 0.05$. ** $p < 0.01$.

Table 6

Summary of Regression Analysis for Variables Predicting Insecure Variables

Variables	Insecure Representations			Insecure Reactions		
	B	SE B	*ß*	B	SE B	*ß*
Step 1						
Parental availability	-.54	.04	-.60**	-.33	.06	-.34**
Parental discipline	.00	.09	.00	.08	.12	.04
Harsh punishment	.18	.15	.06	-.08	.19	-.03

* *p*< 0.05. ** *p* < 0.01.

Table 7

Summary of Regression Analysis for Variables Predicting Emotional Intelligence

Variables	Emotional Intelligence		
	B	SE B	*ß*
Step 1			
Parental availability	.18	.05	.23**
Parental discipline	.03	.11	-.02
Harsh punishment	.01	.17	.00

* *p* < 0.05. ** *p* < 0.01.

Table 8

Summary of Regression Analysis for Variables Predicting Internalizing and Externalizing

Variables	Internalizing			Externalizing		
	B	SE B	*ß*	B	SE B	*ß*
Step 1						
Parental availability	-.32	.05	-.37**	-.16	.04	-.25**
Parental discipline	.08	.12	.04	-.10	.09	-.07
Harsh punishment	-.08	.19	-.03	.19	.14	.09

* *p* < 0.05. ** *p* < 0.01.

Table 9

Summary of Regression Analysis for Variables Predicting Internalizing and Externalizing Using Separate Steps 2 for each potential mediator

Variables	Internalizing			Externalizing		
	B	SE B	β	B	SE B	β
Step 1						
Parental availability	-.32	.05	-.37**	-.16	.04	-.25**
Step 2.a						
Parental availability	-.17	.06	-.19**	-.11	.05	-.17*
Insecure representations	.25	.06	.27**	.08	.06	.10
Step 2.b						
Parental availability	-.18	.05	-.21**	-.14	.04	-.22**
Insecure reactions	.37	.05	.43**	.10	.04	.14**
Step 2.c						
Parental availability	-.25	.05	-.30**	-.15	.04	-.22**
Emotional intelligence	-.24	.05	-.23**	-.01	.05	-.01

* $p < 0.05$. ** $p < 0.01$.

Appendix 1: Additional Factors Analyses

At the beginning of this study, emotional security was conceptualized as a context-specific construct. Therefore, a questionnaire to measure insecurity experienced by late adolescents in the context of unavailable parents and another questionnaire to measure the insecurity in the context of negatively controlling parents were created. Later, it became necessary to develop an integrated factor analysis because of the high intercorrelation between the availability-insecurity and the control-insecurity scales, $r = .80$. Nevertheless, because of the original conceptualization, there is value in examining the underlying factor structure in the availability-insecurity and control-insecurity scales. Appendix 1 presents a separate factor analysis for each insecurity scale. Appendixes 2.1 and 2.2 show the correlations among the factors obtained for each insecurity scale. Finally, Appendixes 3.1 and 3.2 show the regression analyses with these context-specific factors.

Appendix 1.1: Factor Analysis of the Availability-Insecurity Scale (SPCS-A) and the Control-Insecurity Scale

Factor analysis of the availability-insecurity scale (SPCS-A) showed three factors. (See Table 1.1) Items in the first factor, *availability-spillover*, referred to internal representations of potential future consequences, for the person and the relationship that late adolescents form when they experience instances of lack of parental availability. Items in the second factor, termed *availability-reactions*, referred to emotional and behavioral reactions that late adolescents develop when they experience instances of lack of parental availability. Items in the third factor, termed *availability-representations* referred to positive internal representations of the causes or solutions to the conflict that late adolescents form when they experience instances of lack of parental availability.

Table 10

Factor Loading Matrix of the Factor Analysis of the Availability-Insecurity Scale

	1	2	3
When I try to talk to my parents or need their help or need their emotional support or advice, and they have no time, avoid me, get			
I wonder if we will end up hating each other	.853	-.158	.098
I am not going to have support when I needed	.826	.073	-.004
They are never going to care about me	.809	-.133	-.046
I will never get them to listen to me	.792	.067	-.080
I never am going to be able to get their attention	.773	.086	-.027
I worry about the future of our relationship	.688	.019	.102
When problems come they are going to blame me	.644	.165	-.083
They are going to think I am an annoying person	.628	.085	-.074
If I ask for attention again they are going to be very upset with me	.558	.182	-.154
One hour later, I still worry about the future of our relationship	.510	.190	-.249
One hour later, I still feel like they are upset with me	.033	.801	.083
One hour later, It still ruins my whole day	-.096	.800	-.036
One hour later, I still feel like it is my fault	-.002	.739	-.117
One hour later, I still can't seem to shake off my bad feelings	.122	.717	-.046
I feel like they are upset with me	.037	.700	.090
One hour later, I still feel sorry for both of us	-.067	.691	.000
One hour later, I still can't seem to calm myself down	.062	.675	-.117
One hour later, I still feel they blame me	.077	.637	-.261
One hour later, I still feel like staying as far away from them as possible	.083	.561	-.183
I feel unsafe	.072	.529	-.182
I think they blame me	.011	.484	.132
I know we still love each other	-.066	.047	.867
I believe we can work out our differences	.013	-.017	855
I know that everything will be okay	-.029	-.042	.838
One hour later, I still know it's because we don't know how to get along	.372	.189	-.418

Note. 1 = Availability-spillover; 2 = Availability-reactions; 3 = Availability-representations.

Factor analysis of the control-insecurity scale (SPCS-C), also showed a three-factor solution (See Table 1.2). The first factor, termed *control-spillover*, referred to internal representations of potential consequences, for the parent-child relationship and the person, that late adolescents form when they experience instances of parental negative control. The second factor, termed *control-representations,* referred to positive internal representations of the causes and solutions to the conflict that adolescents form when they experience instances of parental negative control. The third factor, termed *control-reactions*, reflected emotional and behavioral reactions to the same problem.

Table 11

Factor Loading Matrix of the Factor Analysis of the Control-Insecurity Scale

	1	2	3
When my parents scold, lecture, or punish me:			
I think that everything that goes wrong is going to be my fault	.910	.005	.049
One hour later, They are going to be looking for other reasons to punish me	.844	.037	-.031
One hour later, I still think that everything that goes wrong is going to be my fault	.837	.011	-.087
They are going to blame me for everything after that	.837	.029	.002
They are going to be looking for other reasons to punish me	832	.023	.016
One hour later, They are going to blame me for everything after that	.824	.043	-.093
One hour later, Know it's because we don't know how to get along	.699	-.141	.060
I am in a bad situation with my parents and I have no escape	.657	-.103	-.059
One hour later, I still think that they blame me	.558	-.010	-.282
I need to do something to get revenge from them	.454	-.152	.022
One hour later, I still worry about what are we going to do next	.382	.164	-.325
One hour later, I still believe we can work out our differences	.078	.887	.138
One hour later, I still know that everything will be okay	.036	.860	.117
I believe we can work out our differences	-.326	.637	-.029

I know we still love each other	-.299	.579	-.090
One hour later, try to get away from them (for example, by leaving the room)	.053	.034	-.728
One hour later, It still ruins my whole day	-.019	-.116	-.704
One hour later, I still feel angry	-.043	-.215	-.699
One hour later, I still wait and hope things will get better	-.079	.213	-.698
One hour later, I still feel like staying as far away from them as possible	.174	-.046	-.668
One hour later, I still end up doing nothing even though I wish I could do something.	.131	.008	-.613
One hour later, I still think that they are going to be upset with me all day long	.311	.020	-.590
One hour later, I still answer back at them telling them is all their fault	-.003	-.116	-.404

Note. 1 = Control-spillover; 2 = Control-representations; 3 = Control-reactions.

Two main results of these separate factor analyses are worth noting. First, they confirm, as it appears in the main presentation, that in the context of parental behaviors, emotional and behavioral reactions cannot be separated and form a unique factor. Second, they suggest that late adolescents seem to form two types of internal mental representations. On the one hand, they form mental representations about the causes and potential solutions to the negative situations they encounter with their parents. And on the other hand, they form mental representations about the future consequences of those instances of conflict. Again, the high correlation between the feelings of insecurity in both contexts reduced the usefulness of these six context-specific insecurity factors when used in predictive analysis. As a consequence, a unified factor analysis was preferred in the main presentation.

Appendix 1.2: Factor Analysis of Emotional Intelligence Scale (TMMS)

The focus of attention of my study was the concept of emotional intelligence not its components, therefore using a single emotional intelligence coefficient in the main analysis seemed more appropriate. Issues of weak reliability in some of the factors also recommended the use of a single emotional intelligence coefficient. Nevertheless, factor analysis of the Treat Meta-Mood scale may allow some additional analysis. The Trait

Meta-Mood Scale (emotional intelligence scale) consists of three subscales: *attention to feelings*, *clarity of feelings*, and *mood repair* (Rockhill & Greener, 1999). As indicated before, one of the subscales – *clarity of feelings* – showed in the authors' study a very low reliability. Indeed, in the current study, factor analysis of the data did not support the three factor solution. Instead, analysis of the scree plot, the eigenvalues, and the interpretability of factors showed a four-factor solution (See Table 1.3). In this solution, the variable *attention to feelings* was divided between a factor with items related to attention to feelings and another factor with items related to acceptance of feelings. The *clarity* and *mood repair* subscales as constructed were confirmed. The first factor, *clarity,* reproduces the scale proposed by Rockhill and Greener (1999). It contains items that refer to the individual's ability to understand the meaning of feelings and emotions that the person is experimenting (e.g. "I am usually very clear about my feelings, "I usually know which feeling I am having" or "I usually know how I feel about things"). The reliability of the scale was α = .86. The second factor, labeled *mood repair,* also reproduces Rockhill and Greener's mood repair scale and contains items that refer to the individual's ability to control his or her emotions (e.g. "No matter how bad I feel, I try to think about good things" or "When I become upset, I think about all the good things in my life"). The reliability of the second scale was α = .90. The third factor consists of items that describe the participants' ability to accept their feelings and use the emotional information for behavior (e.g. "I believe it's good for you to go ahead and feel whatever you feel"). Internal consistency of the scale was α = .71. Items in the fourth factor, termed *attention,* refer to the individual's ability to perceive the emotions that are affecting him or her (e.g. "I pay a lot of attention to how I feel"). Internal consistency of the scale was α = .76. The third and fourth scales together correspond to the *attention to feelings* scale in Rockhill

and Greener's original measure. Variance explained by the four-factor solution was

64.09%.

Table 12

Factor Loadings of the Factor Analysis of the Trait Meta-Mood Scale

	1	2	3	4
I am usually very clear about my feelings (I usually know which feeling I am having)	.855	.025	.036	-.020
I almost always know how I'm feeling	.783	-.003	.104	-.079
I usually know how I feel about things	.764	-.033	.070	-.127
I am comfortable with my feelings	.710	.126	.199	.018
I am usually confused about my feelings	-.700	.030	.208	-.095
No matter how bad I feel, I try to think about good things	-.028	.934	.007	.029
When I become upset, I think about all the good things in my life	-.016	.902	-.019	.001
I try to think about good thinks no matter how bad I feel	-.044	.889	-.021	-.010
If I find myself getting mad, I try to calm myself down	.057	.439	-.010	-.017
I believe it's good for you to go ahead and feel whatever you feel	.099	-.008	.807	.006
The best way to handle my feelings is to just go ahead and feel whatever I'm feeling	.040	.040	.788	-.065
My feelings help me decide how to act	-.112	.007	.710	.055
I believe you should do whatever your feelings tells you to do	.092	-.059	.680	-.060
I pay a lot of attention to how I feel	-.020	.011	.209	.814
I often think about my feelings	-.059	.050	.142	-.798
It's usually a waste of time to think about your feelings	.102	.031	.254	-.680

Note. 1 = Clarity; 2 = Mood repair; 3 = Acceptance; 4 = Attention.

I chose to use the unitary measure of emotional intelligence in the main

presentation because it simplifies the presentation, clarifies the interrelationships, and

permits a clear test of mediation. Still, the additional analyses using the four subscales

presented in the Appendixes refine the interpretation of emotional intelligence and suggest

focus for future research. In Appendix 2.2, I present the correlations among the emotional

intelligence factors. In Appendix 2.3, I present the correlations between the context-

specific insecurity factors and the emotional intelligence factors, and Appendix 3.3 shows

the regression analysis using both the context-specific insecurity factors and the emotional

intelligence factors.

Appendix 2: Additional Correlations

Appendix 2.1: Correlations Among Insecurity Factors

The intercorrelations among the availability subscales (.64, .58, .58) and among the control subscales (.64, .49, .30) were in the modest to strong range. The correlations between the availability subscales and the control subscales ranged between .39 and .69. (See Table 2.1)

Table 13

Correlations Among Availability-Insecurity Factors and Control-Insecurity Factors

	1	2	3	4	5	6
1. Availability-spillover	-	.64**	.58**	.69**	.39**	.51**
2. Availability-represent.		-	.58**	.69**	.45**	.60**
3. Availability-reactions			-	.67**	.62*	.40**
4. Control-spillover				-	.64**	.49**
5. Control-representations					-	.30**
6. Control-reactions						-

*Note. p < 0.05. ** p < 0.01.*

Table 14

Correlations Between Main Variables and Context-Specific Insecurity Factors

	Availability			Control		
Study Variables	SO	REP	REACT	SO	REP	REACT
Parental availability	-.55**	-.57**	-.36**	-.47**	-.48**	-.30**
Parental discipline	.06	.07	.04	.12*	.03	.08
Harsh punishment	.22**	.24**	.10	.24**	.17**	.08
Emotional intelligence	-.15**	-.17**	-.16**	-.14*	-.28**	-.15**
Internalizing	.36**	.34**	.43**	.41**	.26**	.42**
Externalizing	.17**	.18**	.13*	.21**	.09	.19**

Note. SO = spillover; REP = insecure representations; REACT = insecure reactions.

* *p* < 0.05. ** *p* < 0.01.

Appendix 2.2: Correlations Among Emotional Intelligence Factors

Rockhill and Greener (1999) used three subscales, *attention to feelings*, *clarity of feelings* and *mood repair*. In the current study, the *clarity* and *mood repair* subscales were confirmed, but the subscale *attention to feelings* appeared divided in two more differentiated subscales, one termed *attention* and another termed *acceptance*. Therefore, the current study shows a set of correlations that could not appear in Rockhill and Greener's study. The correlations between *acceptance* and the other three subscales ranged from .08 to .38 (See Table 2.2.1). In relationship with the other three subscales, *attention* correlated, in the current study with *clarity*, $r = .37$, and with *mood repair, r =* .22. In Rockhill and Greener's study, *attention to feelings* showed an identical correlation with *clarity*, $r = .37$, but a much stronger correlation with *mood repair*, $r = .39$. The correlation between *clarity* and *mood repair* was also much stronger in Rockhill and Greener's study, $r = .37$, than in the current study, $r = .17$.

Table 15

Correlations Among Emotional Intelligence Factors

	1	2	3	4
1. Attention	-	.38**	.37**	.22**
2. Acceptance		-	.33**	.08
3. Clarity			-	.17**
4. Mood repair				-

* *p* < 0.05. ** *p* < 0.01.

The differences observed in both studies in reliability coefficients – generally stronger in my study, and weaker in Rockhill and Greener's study – and in correlation coefficients – generally weaker in my study and stronger in Rockhill and Greener's study – may be

due to the difference in the age of respondents. The older age of the participants in my study may have resulted in more differentiated responses to questions in different factors, producing higher reliabilities within each factor and lower correlations among factors.

Results in Table 2.2.2 show that the relationship between emotional intelligence and parental availability seems to be due to the *attention* and *clarity* factors. When parents are more available, late adolescents are more capable of attending to their feelings and to understand the meanings of those feelings. Higher parental harsh punishment relates to lower acceptance of one's own feelings. Higher *acceptance of feelings*, higher *clarity of feelings* and higher *mood repair* relate to lower internalizing problems. These three variables do not seem to relate to externalizing. However, higher *attention to feelings* relates to lower externalizing problems.

Table 16

Correlations Between Predictors and Emotional Intelligence Factors

	Attention	Acceptance	Clarity	Mood repair
Parental availability	.22**	.08	.20**	.11
Parental discipline	-.04	-.09	.03	.05
Harsh punishment	-.02	-.12*	-.00	-.02
Internalizing	-.09	-.14*	-.27**	-.17**
Externalizing	-.15**	-.02	-.01	-.07

†<0.06, * $p < 0.05$. ** $p < 0.01$.

Appendix 2.3: Correlations Between Insecurity and Emotional Intelligence Factors

As shown in Table 2.3, insecure reactions to a threatening situation and the insecure representations derived from the situation relate negatively to the late adolescents' *clarity of feelings* and *mood repair*.

Table 17

Correlations Between Emotional Intelligence Factors and Emotional Security Factors

	Insecure representations	Insecure reactions
1. Attention	-.10	.02
2. Acceptance	--.05	.05
3. Clarity	-.23**	-.21**
4. Mood repair	-.16**	-.14*

* p < 0.05. ** p < 0.01.

The correlations between emotional intelligence factors and availability-insecurity and control-insecurity factors are shown in Table 2.4. *Clarity* and *mood repair* show significant or nearly significant correlations with all six insecurity factors. *Attention* and *acceptance*, on the other hand, only correlate with control-representations.

Most of the identified correlations are very modest in magnitude. *Clarity* and *mood repair* seem to be the emotional intelligence dimensions that more strongly relate to insecurity dimensions. Insecure representations seems to be the dimension that more strongly relates to emotional intelligence factors.

Table 18

Correlations Between Insecure Factors and Emotional Intelligence Factors

	Attention	Acceptance	Clarity	Mood repair
Availability-spillover	-.06	.00	-.17*	-.11†
Availability-reactions	.03	.02	-.23**	-.11†
Availability-representations	.05	.04	-.14*	-.16**
Control-spillover	-.03	.01	-.11*	-.15**
Control-reactions	-.01	.05	-.16**	-.15**
Control-representations	-.12*	-.13*	-.31**	-.19**

†<0.06. * p< 0.05. ** p < 0.01.

Appendix 3: Additional Predictive Analyses

The different variables used in this study plus the different factor analyses conducted allow for several different predictive analyses. Some of them seem more appropriate and relevant to this study. It may be useful to start from the simplest one – the analysis that uses fewer mediators – to the more complex – the analysis that uses more mediators. Appendix 3.1 shows the simplest predictive analysis, using a single comprehensive emotional insecurity coefficient. Appendix 3.2 introduces two context-specific insecurity coefficients – availability-insecurity and control-insecurity. Appendix 3.3 shows the higher complexity, using the context-specific insecurity variables.

Appendix 3.1: Analysis Using One Insecurity Coefficient.

Because insecure reactions and insecure representations are both integral parts of the emotional security construct, they can be added to construct a comprehensive single measure of emotional insecurity. The reliability of the insecurity measure is $\alpha = .95$. This new variable can then be used as a mediator between parental behaviors and both adjustment variables.

As in the main presentation, evidence that insecurity plays a mediating role between parental behaviors and internalizing need to meet Baron and Kenny's (1986) three conditions for mediations. We know already that parental availability predicts internalizing. Therefore condition one is met. Condition two is also met because parental availability correlates with insecurity, $r = .56$. Condition three is also met because the parental availability's ability to predict internalizing becomes non-significant when insecurity is entered in the equation, $\beta = -.08$ and insecurity significantly predicts internalizing, $\beta = .46$ (See Table 3.1). In this way, insecurity meets Baron and Kenny's (1986) criteria for mediation and shows evidence that it mediates the relationship between parental availability and late adolescents' internalizing.

Table 19

Summary of Regression Analysis Using Parental Behaviors and Insecurity to Predict Late Adolescents' Internalizing and Externalizing Problems.

Variables	Internalizing			Externalizing		
	B	SE B	β	B	SE B	β
Step 1						
Parental availability	-.32	.05	-.37**	-.14	.04	-.25**
Parental discipline	.00	.11	.00	-.12	.09	-.09
Harsh punishment	-.25	.17	-.09	.20	.14	.09
Step 2						
Parental availability	-.07	.05	-.08	-.19	.05	-.14*
Insecurity	.16	.02	.46**	.04	.02	.14*

* $p < 0.05$. ** $p < 0.01$.

Again, the same procedure needs to be used to show evidence that insecurity plays a mediating role between parental behaviors and externalizing. Condition one is met because, as we already know, parental availability predicts externalizing. Condition two is also met because, as we have seen in the previous paragraph, parental availability correlates with insecurity. Finally, insecurity reduces the relationship between parental availability and externalizing from $\beta = -.25$ to $\beta = -.14$, while still significantly predicting externalizing, $\beta = .14$ (See Table 3.1). Therefore insecurity mediates the relationship between parental availability and externalizing. Although, this mediation is only partial because $\beta = -.14$ does not drop below the significance threshold.

Although the analysis conducted here with one insecurity variable is simple and clear, it does not provide very much information about the processes taking place when late adolescents feel insecure. A factor analysis of the insecurity scales allows for a more in depth analysis of those processes and for this reason was chosen for the main presentation.

Appendix 3.2: Analysis Using Availability Insecurity and Control-Insecurity.

Another alternative analysis to the one chosen for the main presentation is analyzing separately the availability-insecurity scale and the control-insecurity scale. This analysis has, as I mentioned before, some problems because of collinearity between both scales, but still can offer some useful information. Additionally, two context-specific insecurity coefficients may offer more detailed information than the single insecurity coefficient used in the previous analysis. Therefore, for this analysis, I computed an availability-insecurity coefficient and a control-insecurity coefficient. The reliability coefficients of the availability-insecurity and the control-insecurity scales were $\alpha = .94$ and $\alpha = .93$, respectively. The correlation between both insecurity coefficients was very high ($r = .80$, $p = .000$) and because of that a combined factor analysis was used in the main presentation.

Parental availability significantly predicted young adults' internalizing, $\beta = -.37$, as required by condition one (See Table 3.2). In relation to condition two, parental availability correlated with availability-insecurity, $\beta = -.54$, and control-insecurity, $\beta = -.49$ (See Table 3.3). In relation to condition three, the parental availability's ability to predict late adolescents' internalizing was substantially reduced, from $\beta = -.37$ to $\beta = -.12$, when both context-specific emotional security variables were introduced in the equation (See Table 3.2). The influence of availability-insecurity and control-insecurity on internalizing was significant, $\beta = .23$ and $\beta = .26$. Therefore, the two variables satisfied Baron and Kenny's (1986) criteria for mediation. Overall 27.6% of the variance in internalizing was explained with parental availability and both context-specific emotional insecurity variables. Parental discipline and parental harsh punishment failed to predict internalizing.

Table 20

Summary of Regression Analysis

Variables	Internalizing			Externalizing		
	B	SE B	*ß*	B	SE B	*ß*
Step 1						
Parental availability	-.32	.05	-.37**	-.14	.04	-.22**
Parental discipline	.00	.11	.00	-.12	.09	-.09
Harsh punishment	-.25	.17	-.09	.19	.14	.09
Step 2						
Parental availability	-.08	.05	-.12*	-.10	.05	-.15*
Availability-insecurity	.15	.06	.23**	-.03	.05	-.05
Control-insecurity.	.19	.06	.26**	.11	.05	.20*

* $p < 0.05$. ** $p < 0.01$.

The same process was used to test evidence of the mediating role of emotional security variables between parental availability, parental discipline and parental harsh punishment and late adolescents' externalizing (See Table 3.2). Among the three parental variables, only parental availability showed a significant relationship with externalizing, *ß* = -.22 (Condition one). Parental availability correlated with availability-insecurity, $r = -.54$, p < .01, and with control-insecurity, $r = -.49$, p < .01. In relation to condition three, when entered in the equation both context-specific emotional insecurities, the influence of parental availability over externalizing was reduced but remained significant, *ß* = -.15. However, only control-insecurity predicted externalizing, *ß* = .20. Availability-insecurity failed to predict externalizing, and therefore did not show evidence of a mediating role.

In conclusion, the data showed that availability-insecurity and control-insecurity mediated the relationship between parental availability and internalizing. Control-insecurity mediated the relationship between parental availability and externalizing. However, these results may not be completely valid as they are affected by collinearity

due to the high correlation between availability-insecurity and control-insecurity. For this reason, the main presentation uses a combined factor analysis that substantially reduces the collinearity between scales and offers more valid results.

Appendix 3.3: Analysis Using Six Insecurity and Four Emotional Intelligence Factors

A deeper level of analysis can be shown by introducing in the regression equation the availability-insecurity and control-insecurity scales obtained in Appendix 1.1 and 1.2 and the emotional intelligence scales obtained in Appendix 1.3. This kind of analysis does not solve the problem of collinearity and therefore was not chosen for the main presentation. Still, it may give some clues about which may be the underlying processes that take place when parents are unavailable or negatively controlling and when late adolescents are experiencing internalizing or externalizing problems.

Results showed that the effect of parental availability in late adolescents' internalizing problems was reduced after the mediating variables were considered, although the relationship remained significant, $\beta = -.16$ (See Table 3.3). Control-reactions, acceptance of feelings, and clarity of feelings predicted internalizing, $\beta = .23$, $\beta = -.17$, and $\beta = -.15$.

Table 21

Summary of Regression Analysis

Variables	Internalizing			Externalizing		
	B	SE B	β	B	SE B	β
Step 1						
Parental availability	-.32	.05	-.37**	-.14	.04	-.22**
Parental discipline	.00	.11	.00	-.12	.09	-.09
Harsh punishment	-.25	.17	-.10	.19	.14	.09
Step 2						
Parental availability	-.14	.06	-.16*	-.10	.05	-.15
Availability-spillover	.16	.11	.11	.02	.10	.02

Availability-representations	-.13	.31	-.03	-.45	.27	-.15
Availability-reactions	.17	.09	.14†	-.07	.08	-.07
Control-spillover	.09	.12	.07	-.04	.11	-.04
Control-representations	.34	.23	.10	.26	.20	.10
Control-reactions	.36	.11	.23**	.30	.10	.24**
Attention to feelings	.30	.20	.09	-.35	.19	-.13
Acceptance to feelings	-.47	.16	-.17**	.11	.15	.05
Clarity of feelings	-.36	.15	-.15*	.19	.13	.10
Mood repair	-.14	.12	-.06	-.07	.11	-.04

$* p< 0.05. ** p < 0.01. † p = .051.$

In relation to externalizing problems, results showed that the strength of the relationship between parental availability and externalizing was reduced to the point that it was no longer significant, $\beta = -.15$, when all the potential mediators were considered. Only insecure reactions to events of parental negative control significantly predicted externalizing, $\beta = .24$ (See Table 3.3). Therefore, only one scale showed evidence of a mediating role. This information provided in this analysis is not as rich as information obtained in the primary presentation. Additionally, it does not appropriately solve the problem of collinearity, because correlations among insecurity factors remain very high.

Appendix 4: Demographic Variables in Predictive Analysis

The demographic questionnaire was not incorporated in this research until some time in the middle of the data collection process. As a consequence, the data about demographic variables is incomplete. Not all participants reported on their gender, age, socioeconomic status or ethnicity. For this reason, analysis of demographic variables has been relegated to an Appendix. Nevertheless, incomplete data can give some indication of what the result might be had I collected the complete demographic information for all participants.

Analysis of background variables. One-way ANOVA was used to test the influence of gender, age, ethnicity, and socioeconomic status of respondents on the variables. Gender showed significant differences in harsh punishment, insecure representations, insecure reactions, emotional intelligence, and externalizing (see Table 4.1and Table 4.2). Age was not significant for any main study variable (see Table 4.3). Two ethnic groups were considered: European-Caucasian and non European-Caucasian. Ethnicity showed significant differences in parental availability, harsh punishment, and insecure representations. (See Table 4.4 and Table 4.5).Three groups of socioeconomic status were considered: families with an annual household income lower than $ 40,000, families with an annual household income between $ 40,000 and 60,000, and families with an annual household income higher than $ 60,000 (See Table 4.6). No significant differences between group means were found for any of the study variables.

Table 22

Analysis of Variance for Variable Gender

Source	F	ή	p
Between Subjects			
Parental availability	.07	.00	.80

Parental discipline	3.25	.01	.07
Harsh punishment	12.85**	.05	.00
Insecure representations	4.05*	.02	.05
Insecure reactions	13.53**	.06	.00
Emotional intelligence	14.89**	.06	.00
Internalizing	.57	.00	.45
Externalizing	5.99*	.03	.02

Note. df = 1. Females = 1; Males = 2.

* *p* < 0.05. ** *p* < 0.01.

Table 23

Means and Standard Deviations for Gender

	Gender			
	Males		Females	
Variables	M	(SD)	M	(SD)
Parental availability	71.52	8.47	71.85	10.76
Parental discipline	18.17	4.31	17.10	4.89
Harsh punishment	7.21[a]	3.17	5.83[b]	2.70
Insecure representations	25.31[b]	8.00	27.75[a]	10.59
Insecure reactions	29.59[b]	8.98	34.18[a]	10.01
Emotional intelligence	56.05[b]	8.04	60.05[a]	7.77
Internalizing	31.93	8.08	32.78	7.96
Externalizing	35.36[a]	8.02	32.96[b]	6.59

Note. N = 204. Means with superscript [a] are significantly higher than means with superscript [b].

Table 24

Analysis of Variance for Variable Age

Source	F	ή	P
Between Subjects			
Parental availability	.73	.01	.57
Parental discipline	.54	.01	.70
Harsh punishment	.76	.01	.55
Insecure representations	.87	.02	.48
Insecure reactions	.83	.01	.51
Emotional intelligence	1.67	.03	.16
Internalizing	1.98	.03	.10
Externalizing	.30	.01	.88

Note. df = 4.

Table 25

Analysis of Variance for Variable Ethnicity

Source	F	ή	P
Between Subjects			
Parental availability	6.19**	.06	.01
Parental discipline	.13	.00	.72
Harsh punishment	4.89**	.04	.03
Insecure representations	4.95**	.04	.03
Insecure reactions	2.99	.03	.09
Emotional intelligence	.00	.00	.95
Internalizing	.05	.00	.83
Externalizing	1.09	.01	.30

Note. df = 1, European-Caucasian = 1; Non European-Caucasian = 2.

* *p* < 0.05. ** *p* < 0.01.

Table 26

Means and Standard Deviations for Ethnicity

	Gender			
	European-Caucasian		Non European-Caucasian	
Variables	M	(SD)	M	(SD)
Parental availability	72.08[a]	7.92	66.40[b]	17.94
Parental discipline	18.36	4.22	17.93	4.75
Harsh punishment	7.06[b]	2.96	8.88[a]	3.56
Insecure representations	24.06[b]	7.61	29.53[a]	10.16
Insecure reactions	29.12	8.90	33.53	10.76
Emotional intelligence	56.02	8.35	55.87	6.51
Internalizing	32.23	9.35	32.78	8.22
Externalizing	36.19	8.51	33.80	6.09

Note. $N = 110$. Means with superscript [a] are significantly higher than means with superscript [b].

Table 27

Analysis of Variance for Variable SES

Source	F	ή	P
	Between Subjects		
Parental availability	2.34	.05	.10
Parental discipline	1.40	.03	.25
Harsh punishment	.61	.01	.55
Insecure representations	2.71	.05	.07
Insecure reactions	.35	.01	.71
Emotional intelligence	.31	.01	.73
Internalizing	2.31	.04	.11

Externalizing	2.05	.04	.13

Note. df = 2.

As seen above, only gender and ethnicity showed significant differences in some variables. Therefore, it was necessary to investigate whether the relationship between predictors, mediators, and outcomes would change as a consequence of those two demographic variables. Separate regression analyses were conducted for gender and ethnicity because of the different degree of missing values.

Gender. To find out whether gender affected the pattern of relationship obtained in the main predictive analysis, it would have been necessary to introduce gender in the regression equation. However, because only 240 participants reported on their gender, it became necessary to repeat the entire regression analysis with this smaller sample. The new regression analysis was executed in three steps. The first two steps reproduced, with the smaller sample, the regression analysis conducted in the main presentation. The third step introduced gender to test whether the differences observed between males and females in some of the variables would affect the regression equation. Results in the first and second steps showed basically the same pattern of relationships observed in the main presentation (See Table 4.7): Parental availability predicted internalizing, but parental discipline and parental harsh punishment did not, and the three emotional processing variables – insecure representations, insecure reactions, and emotional intelligence - mediated this relationship. The third step showed that gender had no substantial effect on the relationship between predictors, mediators and internalizing.

The same process was used to test whether gender would affect the pattern of relationship observed in the main predictive analysis between predictors, mediators and externalizing (See Table 4.7). The first two steps showed partially different results than the predictive analysis in the main presentation. Parental availability significantly predicted

externalizing but none of the emotional processing variables showed evidence of a mediating role. The third step revealed that gender significantly predicted late adolescents' externalizing problems but did not substantially alter the relationships between predictors, mediators and externalizing.

Table 28

Summary of Regression

Variables	Internalizing			Externalizing		
	B	SE B	*ß*	B	SE B	*ß*
Step 1						
Parental availability	-.36	.06	-.40**	-.15	.05	-.22**
Parental discipline	.14	.12	.08	-.07	.10	-.05
Harsh punishment	-.33	.19	-.13	.24	.16	.11
Step 2						
Parental availability	-.10	.07	-.11	-.10	.06	-.14
Insecure representations	.19	.08	.21*	.06	.08	.08
Insecure reactions	.25	.06	.30**	.05	.06	.08
Emotional Intelligence	-.14	.06	-.15*	-.01	.06	-.01
Step 3						
Gender	.64	1.07	.04	2.14	.10	.17*
Parental availability	-.10	.07	-.11	-.08	.06	-.12
Insecure representations	.20	.08	.22*	-.08	.08	.11
Insecure reactions	.26	.07	.31**	.08	.06	.12
Emotional Intelligence	-.13	.06	-.14*	.03	.06	-.03

Note. $N = 240$. Female = 1; Male = 2.

* $p < 0.05$. ** $p < 0.01$.

Ethnicity. Only 110 participants reported on their ethnicity. Due to the small number of members of some ethnicities, I created two groups: European-Caucasian, and non-

European-Caucasian. Again, to test whether the pattern of relationships between the study variables would be different for the two ethnic groups created, it would have been necessary to introduce the variable ethnicity in the main predictive analysis. Because such a small number of participants reported on their ethnicity, it became necessary to repeat the entire regression analysis with the smaller sample. The same three steps used in the gender analysis were used here. The first step showed that parental availability predicted internalizing, $\beta = .40$. The second step revealed that only insecure representations mediated the relationship obtained in step one. The third step revealed that ethnicity was a significant predictor of internalizing but did not substantially affect the relationships observed in step two between predictors, mediators, and internalizing.

For externalizing, again the same three steps were used (See Table 4.8). Parental availability predicted externalizing problems in the first step. In the second step, insecure representations and emotional intelligence showed evidence of a mediating role. The third step revealed that ethnicity predicted externalizing but did not substantially alter the relationships observed in step two between predictors, mediators, and externalizing.

The amount of participants that did not report on their gender or ethnicity did not allow the use of the demographic data in the main presentation. The analyses conducted with the smaller samples indicate that bigger gender and ethnicity samples would have not substantially affected the main results. Mean differences were observed for externalizing by gender and for insecure representations by ethnicity. However, the addition of gender or ethnicity to the regression equations failed to change the pattern of relationships observed in the primary analysis.

Table 29

Summary of Regression

Variables	Internalizing			Externalizing		
	B	SE B	*ß*	B	SE B	*ß*
Step 1						
Parental availability	-.41	.10	-.40**	-.17	.08	-.21*
Parental discipline	.42	.21	.21	.05	.17	.03
Harsh punishment	-.17	.30	-.06	.04	.24	.02
Step 2						
Parental availability	-.06	.10	-.06	-.04	.09	-.05
Insecure representations	.53	.14	.48**	.27	.12	.31*
Insecure reactions	.21	.11	.21	.10	.10	.14
Emotional intelligence	-.04	.08	-.04	.16	.08	-.21*
Step 3						
Ethnicity	-4.03	2.00	-.16*	-5.24	1.85	-.28**
Parental availability	-.08	.10	-.07	-.05	.09	-.07
Insecure representations	.56	.14	.50**	.29	.13	.34*
Insecure reactions	.21	.10	.22*	.11	.10	.15
Emotional intelligence	-.05	.08	-.05	.14	.08	-.18

Note. $N = 94$. 1 = European-Caucasian; 2 = Non European-Caucasian.

* $p < 0.05$. ** $p < 0.01$.

Appendix 5. Factor Analysis of the Pilot Questionnaires

In the pilot study previous to the current study, the availability-insecurity questionnaire and the control-insecurity questionnaire were given to two different groups of respondents. Therefore, these questionnaires had to be factor analyzed separately. The results of these two factor analyses are summarized in the main presentation and are presented here in detail.

In the factor analysis of the availability-insecurity questionnaire, the scree-plot and eigenvalues suggested the possibility of one or two factors. Variables in the two-factor solutions were of difficult theoretical interpretation. Therefore a one-factor solution was adopted. The initial one-factor scale was composed of 51 items. For practical reasons, to create a scale that was brief, quick to be completed, and yet highly reliable, I reduced the items in the scale to those items with higher factor loadings. The final scale contained 25 items.

Factor analysis of the control-insecurity pilot questionnaire also suggested the possibility of one or two factors. The two-factor solution was discarded because of low theoretical interpretability. The one-factor solution was adopted with an initial pool of 46 items. The scale was also shortened to 23 items to reduce the time necessary to respond to the scale.

Table 30

Factor Loading Matrix of Availability-Insecurity Pilot Questionnaire

	1
I am not going to have support when I needed	.752
When problems come they are going to blame me	.748
I will never get them to listen to me	.747
I never am going to be able to get their attention	.745
It still ruins my whole day*	.663
I believe we can work out our differences	-.663
They are never going to care about me	.651
If I ask for attention again they are going to be very upset with me	.643
They are going to think I am an annoying person	.642
I still know it's because we don't know how to get along*	.626
I still feel like they are upset with me*	.623
I wonder if we will end up hating each other	.607
I know that everything will be okay	-.604
I feel like they are upset with me	.585
I still can't seem to calm myself down*	.584
I still can't seem to shake off my bad feelings*	.571
I still feel like it is my fault*	.571
I still feel sorry for both of us*	.569
I still worry about the future of our relationship*	.567
I still feel they blame me*	.553
I think they blame me	.544
I still feel like staying as far away from them as possible*	.538
I know we still love each other*	-.528
I worry about the future of our relationship	.524
I feel unsafe	.523

Note. * Sentences start with the stem "One hour later".

Table 31

Factor Loading Matrix of the Control-Insecurity Pilot Questionnaire

	1
Everything that goes wrong is going to be my fault	.833
They are going to blame me for everything after that	.759
They still are going to be looking for other reasons to punish me*	.751
They still are going to blame me for everything after that*	.749
They are going to be looking for other reasons to punish me	.747
I am in a bad situation with my parents and I have no escape	.730
I still fell that everything that goes wrong is going to be my fault*	.714
That they still blame me*	.708
I still feel like staying as far away from them as possible*	.700
I still feel that they are going to be upset with me all day long*	.679
I still feel angry*	.642
I believe we can work out our differences	-.641
I need to do something to get revenge from them	.640
I still answer back at them telling them is all their fault*	.640
I know we still love each other	-.637
I still worry about what are we going to do next*	.629
I still try to get away from them (for example, by leaving the room)*	.625
I still know it's because we don't know how to get along*	.620
It still ruins my whole day*	.616
I still know that everything will be okay*	-.611
I still believe we can work out our differences*	-.608
I still end up doing nothing even though I wish I could do something*	.605
I still wait and hope things will get better*	.601

Note. * Sentences start with the stem "One hour later".

Appendix 6: Regressing Adjustment on Parental Behaviors

As explained in the predictive analysis section, to show evidence that the three emotional processing variables met condition three for mediation, two steps needed to be followed. In a first step, it was necessary to regress the adjustment variables on the parental variables. In a second step, it was necessary to introduce the three emotional processing variables, simultaneously. However, results obtained by a simultaneous entry of the three mediators in step two are affected by collinearity issues. Therefore, they were omitted from the main presentation. For the sake of completeness, they are presented here.

Table 32

Summary of Regression Analysis for Variables Predicting Internalizing and Externalizing

Variables	Internalizing			Externalizing		
	B	SE B	β	B	SE B	β
Step 1						
Parental availability	-.32	.05	-.37**	-.16	.04	-.25**
Parental discipline	.08	.12	.04	-.10	.09	-.07
Harsh punishment	-.08	.19	-.03	.19	.14	.09
Step 2						
Parental availability	-.14	.05	-.16**	-.13	.05	-.20**
Insecure representations	.02	.07	.02	-.01	.06	-.01
Insecure reactions	.34	.05	.40**	.10	.05	.15*
Emotional intelligence	-.20	.05	-.20**	-.01	.05	-.01

* $p < 0.05$. ** $p < 0.01$.

The main presentation (Table 9) documents that both insecure representations and insecure reactions mediate the relationship between parental availability and internalizing. Due to multicollinearity, in the above analysis the representations effect disappears. The main presentation corrects this problem through separate mediation tests of representations and reactions.

Appendix 7: Sobel Test of Significance

The mediation role that a variable plays between an independent variable and a dependent variable can be demonstrated by using Baron and Kenny's test of mediation. However, as explained in the main presentation, this three-step procedure presents a problem. It does not test the significance of the indirect pathway. A way to determine whether the mediation effect is significant is to use the Sobel test.

Consider an independent variable, X, a mediating variable, M, and a dependent variable, Y. Consider a = the unstandardized beta for M regressed on X, Sa = Standard error of a, b = Unstandardized B for Y regressed on M, and Sb = Standard error of b. The indirect effect or the effect of X on Y due to M is computed in the following way: $z = a*b/Sqrt(b^2*Sa^2+a^2*Sb^2)$. Assuming a normal distribution, if the value of z is higher than 1.96 or lower than - 1.96, the mediation effect is significant at the .05 α level. Table 7.1 shows the figures for the test of the mediation effect in the four cases identified in the main presentation.

Baron and Kenny's test of mediation showed that the relationship between parental availability and late adolescents' internalizing problems was reduced when the variables insecure representations, insecure reactions, and emotional intelligence were separately entered in the regression equation. It also showed that the relationship between parental availability and late adolescents' externalizing problems was reduced when insecure reactions were entered in the regression equation. However, without using the Sobel test, it was not clear whether the reductions in the regression coefficient were significant or not. The coefficients obtained using the Sobel test show that in all cases the reduction is significant. Therefore, the evidence shows that insecure representations, insecure reactions, and emotional intelligence partially mediate between parental availability and late adolescents' internalizing problems. Likewise, the evidence shows that insecure

reactions partially mediate the relationship between parental availability and late

adolescents' externalizing.

Table 33

Test of Significance for variable's potential mediating role

X	Parental availability	Parental availability	Parental availability	Parental availability
M	Insecure representations	Insecure reactions	Insecure reactions	Emotional intelligence
Y	Internalizing	Internalizing	Externalizing	Internalizing
a	-.537	-.330	-.330	.182
Sa	.043	.055	.055	.048
b	.252	.366	-.098	-.235
Sb	.063	.045	.041	.054
z	-3.809	-4.828	-2.220	-2.858

Note. z < -1.96 or > 1.96 implies *p* < or =.05.

Appendix 8: Alternative Conceptions of Emotional Security

Emotional insecurity can be studied as a global measure. It can also be studied in relationship to the processes involved in the feelings of insecurity: insecure reactions and insecure representations. It can be studied in relationship with the sources of the feelings of insecurity: insecurity felt in the context of unavailable parents, and insecurity felt in the context of controlling parents. Finally, it can be studied in relation to the processes and the sources combined. The main presentation used the study of the insecurity processes because it offered richer information than the global measure, and because other more detailed analyses presented problems of collinearity. Nevertheless, there was interest in the other possible analyses, which were therefore developed in different appendixes. By using the results of this study in combination with the results shown in the appendixes, the mediating role of insecurity can be analyzed in four different levels.

In the first level of analysis, insecurity taken as a global measure (adding all its components) mediates the relationship between parental availability and internalizing, and between parental availability and externalizing (See Appendix 3.1). In the second level of analysis, two sources of insecurity: episodes of lack of parental availability and episodes of parental negative control, both mediate internalizing, but only control-insecurity mediates the relationship between parental availability and externalizing (See Appendix 3.2). It seems like the aggressive tendencies that late adolescents show may be related, in the context of lack of parental affection, to the level of aggressiveness that their parents show in situations of negative control.

In the third level of analysis, when considering not the sources of insecurity, but the dimensions of insecurity, results show that insecure representations and insecure emotional and behavioral reactions mediate between parental availability and internalizing. However, only insecure emotional and behavioral reactions mediate between

parental availability and externalizing (See Results section). It seems like the influence of emotional and behavioral reactions over adjustment problems is stronger than the influence of mental representations as mentioned above.

In the fourth level of analysis, when combining sources of insecurity with dimensions of insecurity, results show that insecure emotional and behavioral reactions in both the availability context and the control context are the variables that mediate between parental availability and internalizing (See Appendix 3.3). Insecure spillover and insecure representations in both availability and control context do not seem to be as influential. The results also show that insecure emotional and behavioral reactions in the negative control context mediate between parental availability and externalizing. The other insecurity variables do not mediate this relationship.

Finally, availability insecurity and insecure representations mediate most consistently for internalizing only. In contrast, control insecurity and insecure reactions mediate for both internalizing and externalizing. These patterns suggest differential processes that underlie the introjection of emotional insecurity. One process is adolescent's interpretation of availability and the security representations that closely tie to internalizing. The other process is the adolescent's experience of parental unavailability, which relates to insecurities over parent control and insecure reactions that place youth at risk for both internalizing and externalizing.

Appendix 9: Questionnaires

Parental Warmth/Affection Subscale of the Parental Acceptance/Rejection Questionnaire.
(Rohner, 1990). Used by permission of Dr. Rohner.

Please answer how much these statements fit the way your parents used to treat you when you were an adolescent. There are four possible answers after each sentence. **1= Almost Never True , 2= Rarely True, 3 = Sometimes True, 4 = Almost Always True.** Choose one and **only** one answer for each sentence and circle the number that matches your answer. This is not a test; there are not "good" or "bad" answers. You are free not to answer any questions you wish no to.

	My parents used to	Almost never true	Rarely true	Some times true	Almost always true
1	Say nice things about me…………………....	1	2	3	4
2	Talk to me about our plans and listen to what I had to say………………………………….	1	2	3	4
3	Encourage me to bring my friends home, and try to make things pleasant for them………….	1	2	3	4
4	Make it easy for me to tell them things that were important to me………………………….	1	2	3	4
5	Make me feel proud when I did well….……..	1	2	3	4
6	Praise me to others……………………….…	1	2	3	4
7	Talk to me in a warm and loving way………...	1	2	3	4
8	Say nice things to me when I deserved it……	1	2	3	4
9	Be really interested in what I did…………..	1	2	3	4
10	Make me feel wanted and needed……………..	1	2	3	4
11	Tell me how proud they were of me when I was good…………………………………..	1	2	3	4
12	Make me feel what I did was important….……	1	2	3	4
13	Try to help me when I was scared or upset…	1	2	3	4
14	Care about what I thought and like me to talk about it ……………………………………..	1	2	3	4
15	Let me do things I thought were important even if it was inconvenient for them………….	1	2	3	4
16	Be interested in the things I did……..………	1	2	3	4
17	Try to make me feel better when I was hurt or sick ………………………………………..	1	2	3	4
18	Let me know they loved me……………….…	1	2	3	4
19	Treat me gently and with kindness……………	1	2	3	4
20	Try to make me happy………………………...	1	2	3	4

Parental Discipline Scale (Van Leeuwen & Vermulst, 2004)
Used by permission of Dr.Van Leeuwen

Please indicate for each statement how frequently your parents used this way of handling you when you were an adolescent. Choose one and only one answer for each sentence and circle the word that matches your answer. If your mother handled situations with you very differently than your father, choose the one parent that was most influential for you and answer all the questions having this parent in mind. Answer each statement the way you feel your parents really acted rather than the way you might have liked them to do it. There are no good or bad answers. Please do not skip any items. You are free not to answer any questions you wish no to.

When I was an adolescent

1. When I didn't obey a rule (for instance I came home late without a valid reason; I had not completed a chore), then they punished me ……………………………………………....   Never   Rarely   Some-times   Often   Always

2. They punished me when I made a nuisance of me (for instance because I nagged, contradicted them, lied, argued)..   Never   Rarely   Some-times   Often   Always

3. When I did something wrong, they punished me by taking away something nice (for instance I couldn't watch TV, I was not allowed to go out, I had to be home earlier, I had to go to bed earlier)…………………………………………….   Never   Rarely   Some-times   Often   Always

4. When I misbehaved, they gave me a chore for punishment…   Never   Rarely   Some-times   Often   Always

5. When I did something that they didn't want me to do, They punished me……...………………………………………..   Never   Rarely   Some-times   Often   Always

6. Sometimes they didn't punish me after I had done something that it was not allowed……………………………………….   Never   Rarely   Some-times   Often   Always

7. They slapped me when I had done something wrong………   Never   Rarely   Some-times   Often   Always

8. They spanked me when I was disobedient or naughty………   Never   Rarely   Some-times   Often   Always

9. They shook me when we had a fight………………………   Never   Rarely   Some-times   Often   Always

10. They spanked me when I didn't obey rules. …………………   Never   Rarely   Some-times   Often   Always

Note Discipline scale includes items 1 through 6. Harsh punishment scale includes items 7 through 10.

Security in the Parent-Child Subsystem – Parental Availability Form

For each statement below, please circle one number. (1 = not true at all of me, 2 = a little true of me, 3 = somewhat true of me, 4 = very true of me) .You are free not to answer any questions you wish not to.

		Not at all true of me	A little true of me	Some what true of me	Very true of me

When I try to talk to my parents or need their help, or need their emotional support or advice and they have no time, avoid me, get upset with my needs, or in general are unavailable:

1	I feel unsafe (2)..……………………………………	1	2	3	4
2	I feel like they are upset with me (2)..…..………………	1	2	3	4
3	I think they blame me………………………………..	1	2	3	4

After I try to talk to my parents or need their help, or need their emotional support or advice and they have no time, avoid me, get upset with my needs, or in general are not ready to talk:

4	I know we still love each other (1) (r)..……………………	1	2	3	4
5	I know that everything will be okay (1) (r)..……………...	1	2	3	4
6	I believe we can work out our differences (1) (r)..…………	1	2	3	4
7	I worry about the future of our relationship (1)..…………	1	2	3	4
8	I wonder if we will end up hating each other (1)..…………	1	2	3	4
9	I never am going to be able to get their attention (1)..……..	1	2	3	4
10	They are never going to care about me (1)..………………	1	2	3	4
11	I am not going to have support when I needed (1)..…………	1	2	3	4
12	I will never get them to listen to me (1)..………………...	1	2	3	4
13	When problems come they are going to blame me (1)..……..	1	2	3	4
14	If I ask for attention again they are going to be very upset with me (1)..…………………………………………...	1	2	3	4
15	They are going to think I am an annoying person (1)..………	1	2	3	4

An hour after I tried to talk to my parents or needed their help, or needed their emotional support or advice and they had no time, avoided me, got upset with my needs, or in general were not ready to talk:

16	I still feel like they are upset with me (2)..………………...	1	2	3	4
17	I still feel like it is my fault (2)..………………………...	1	2	3	4
18	I still feel they blame me………………………………....	1	2	3	4
19	It still ruins my whole day (2)..……………………………	1	2	3	4
20	I still can't seem to calm myself down (2)..………………	1	2	3	4
21	I still can't seem to shake off my bad feelings (2)..…………	1	2	3	4
22	I still feel like staying as far away from them as possible (2)	1	2	3	4
23	I still feel sorry for both of us (2)..……………………...	1	2	3	4
24	I still worry about the future of our relationship (1)..……...	1	2	3	4
25	I still know it's because we don't know how to get along. .	1	2	3	4

Note. (1) Items included in insecure representations scale. (2) Items included in insecure reactions scale. (r) Items reverse coded in scale.

Security in the Parent-Child Subsystem – Parental Control Form

For each statement below, please circle one number. (1 = not true at all of me, 2 = a little true of me, 3 = somewhat true of me, 4 = very true of me) .You are free not to answer any questions you wish not to.	Not at all true of me	A little true of me	Some what true of me	Very true of me
When my parents scold, lecture, or punish me:				
1 I know we still love each other (1) (r)..……………………	1	2	3	4
2 I believe we can work out our differences (1) (r)……….....	1	2	3	4
When my parents scold, lecture, or punish me, I know:				
3 They are going to blame me for everything after that…….	1	2	3	4
4 Everything that goes wrong is going to be my fault……….	1	2	3	4
5 I am in a bad situation with my parents and I have no escape... ………………………………………………..	1	2	3	4
6 They are going to be looking for other reasons to punish me……………………………………………………………...	1	2	3	4
7 I need to do something to get revenge from them (1)…….	1	2	3	4
An hour after my parents scold, lecture, or punish me, I still feel:				
8 Angry (2)..…………………………………………………..	1	2	3	4
9 That they blame me…………………………………………..	1	2	3	4
10 It still ruins my whole day (2)..……………………………..	1	2	3	4
An hour after my parents scold, lecture, or punish me I still:				
11 End up doing nothing even though I wish I could do something (2)..………………………………………………..	1	2	3	4
12 Wait and hope things will get better………………………	1	2	3	4
13 Feel like staying as far away from them as possible (2)..…	1	2	3	4
14 Try to get away from them (for example, by leaving the room) (2)..……………………………………………………	1	2	3	4
15 Answer back at them telling them is all their fault(2)……	1	2	3	4
16 Know that everything will be okay (1) (r)..………………..	1	2	3	4
17 Believe we can work out our differences (1) (r)………….	1	2	3	4
18 Worry about what are we going to do next (2)..;………..	1	2	3	4
19 Know it's because we don't know how to get along (1)…..	1	2	3	4
One hour after my parents scold, lecture, or punish me, I still think:				
20 They are going to be upset with me all day long (2)..………	1	2	3	4
21 They are going to blame me for everything after that…….	1	2	3	4
22 Everything that goes wrong is going to be my fault……..	1	2	3	4
23 They are going to be looking for other reasons to punish me………………………………………………….………	1	2	3	4

Note. (1) Items included in insecure representations scale. (2) Items included in insecure reactions scale. (r) Items reverse coded in scale.

Youth Self Report (Achenbach, 1991)
Used by permission of Dr.Achenbach

Below is a list of items that describe youth. For each item that describes you **now or within the past six months**, please circle the **2** if the item is **very true or often true** of you. Circle the **1** if the item is **somewhat or sometimes true** of you. If the item is **not true** of you circle the **0**. Please answer all items as well as you can, even if some do not seem to apply to you. You are free, nevertheless, to not answer any question you do not wish to answer.

1=Not True (as far as you know)   2=Somewhat or Sometimes True   3=Very True or Often True

1	I would rather be alone than with others	1	2	3
2	I refuse to talk	1	2	3
3	I am secretive or keep things to myself	1	2	3
4	I am shy	1	2	3
5	I don't have much energy	1	2	3
6	I am unhappy, sad, or depressed	1	2	3
7	I keep from getting involved with others	1	2	3
8	I feel lonely	1	2	3
9	I cry a lot	1	2	3
10	I am afraid I might think or do something bad	1	2	3
11	I feel that I have to be perfect	1	2	3
12	I feel no one loves me	1	2	3
13	I feel that others are out to get me	1	2	3
14	I feel worthless or inferior	1	2	3
15	I am nervous or tense	1	2	3
16	I am fearful or anxious	1	2	3
17	I feel too guilty	1	2	3
18	I am self-conscious or easily embarrassed	1	2	3
19	I am suspicious	1	2	3
20	I worry a lot	1	2	3
21	I don't feel guilty after doing something I shouldn't	1	2	3
22	I hang around with people who get in trouble	1	2	3
23	I lie or cheat	1	2	3
24	I would rather be with older people than with people my age	1	2	3
25	I ran away from my parents' home	1	2	3
26	I set fires	1	2	3
27	I steal at my parents' house	1	2	3
28	I steal from places other than my parents' house	1	2	3
29	I swear or use dirty language	1	2	3
30	I cut classes or skip school	1	2	3
31	I use alcohol or drugs for nonmedical purposes	1	2	3
32	I argue a lot	1	2	3
33	I brag	1	2	3
34	I am mean to others	1	2	3
35	I try to get a lot of attention	1	2	3
36	I destroy my own things	1	2	3
37	I destroy things belonging to others	1	2	3

38	I disobey university rules	1	2	3
39	I am jealous of others	1	2	3
40	I get in many fights	1	2	3
41	I physically attack people	1	2	3
42	I scream a lot	1	2	3
43	I show off or clown	1	2	3
44	I am stubborn	1	2	3
45	My moods or feelings change suddenly	1	2	3
46	I talk too much	1	2	3
47	I tease others a lot	1	2	3
48	I have a hot temper	1	2	3
49	I threaten to hurt people	1	2	3
50	I am louder than other people	1	2	3

Note. The withdrawn scale includes items 1 to 7. The anxious/Depressed scale includes items 8 to 20. The delinquent behavior scale includes items 21 to 31. The aggressive behavior scale includes items 32 to 50.

Your comments will be appreciated, either here or in a separate envelope.

Thank you for your help

Trait Meta-Mood Scale for Children
(Rockhill & Greener, 2000)
Used by permission of Dr. Greemer

Read each sentence and choose the answer that best describes you. There are five possible answers. 1 = Not at all true of me, 2 = Hardly ever true of me, 3 = Sometimes true of me, 4 = Often true of me, 5 = Always true of me. Choose one and only ONE answer for each sentence, and circle the number that matches your answer. This is not a test; there are not "good" or "bad" answers. You are free not to answer any questions that you choose not to without any penalty

1. I often think about my feelings	1	2	3	4	5
2. It's usually a waste of time to think about your feelings	1	2	3	4	5
3. I believe you should do whatever your feelings tells you to do	1	2	3	4	5
4. I pay a lot of attention to how I feel	1	2	3	4	5
5. The best way to handle my feelings is to just go ahead and feel whatever I'm feeling	1	2	3	4	5
6. I believe it's good for you to go ahead and feel whatever you feel	1	2	3	4	5
7. My feelings help me decide how to act	1	2	3	4	5
8. I almost always know how I'm feeling	1	2	3	4	5
9. I usually know how I feel about things	1	2	3	4	5
10. I am comfortable with my feelings	1	2	3	4	5
11. I am usually very clear about my feelings (I usually know which feeling I am having)	1	2	3	4	5
12. I am usually confused about how I feel	1	2	3	4	5
13. If I find myself getting mad, I try to calm myself down	1	2	3	4	5
14. I try to think about good thinks no matter how bad I feel	1	2	3	4	5
15. When I become upset, I think about all the good things in my life	1	2	3	4	5
16. No matter how bad I feel, I try to think about good things	1	2	3	4	5

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