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# Attachment, depression, and perceptions of parenting among adolescent mothers

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ATTACHMENT, DEPRESSION, AND PERCEPTIONS OF PARENTING AMONG  
ADOLESCENT MOTHERS

A Thesis

Presented to

The Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Megan McConnell

May 2008

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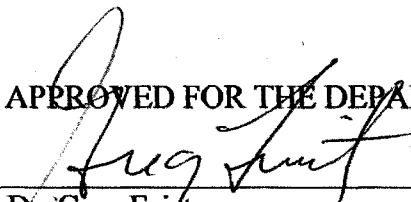
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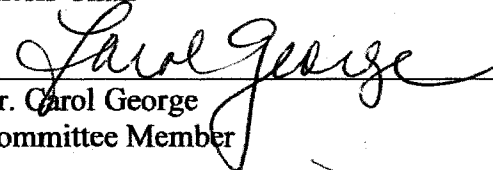
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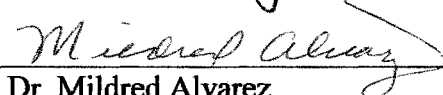
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## ABSTRACT

### ATTACHMENT, DEPRESSION, AND PERCEPTIONS OF PARENTING AMONG ADOLESCENT MOTHERS

by Megan McConnell

This study examines attachment, depression and perceptions of parenting in adolescent mothers. A mother's perception of parenting is highlighted as a separate contribution that influences her interaction and responsiveness to her infant. Twenty-seven adolescent mothers who were 15-19 years of age and had infants 0-8 months of age participated in the study. Mothers' attachment representations were assessed using the Adolescent Attachment Questionnaire (AAQ) and the Adolescent Unresolved Attachment Questionnaire (AUAQ). The Beck Depression Inventory (BDI) was used to measure depression and the instrument, What Being a Parent of a New Baby is Like-Revised (WPL-R) was used to assess adolescent mothers' perceptions of parenting their infant. Results indicated that attachment was related to depression as well as to the evaluation of parenting. Depression however, was not related to the evaluation of parenting. Limitations and directions for future research are discussed.

## ACKNOWLEDGEMENTS

I would like to thank all of the teen mothers who participated in this study and shared their experiences surrounding attachment, depression and perceptions of parenting. Their perspectives on these issues are extremely valuable and will hopefully motivate researchers and clinicians to pursue projects that examine teen mothers and the factors that influence their relationship with their children. I would also like to thank my thesis chair Dr. Greg Feist, who guided me through this project so tirelessly and my mentor, Dr. Carol George, for always supporting my journey through investigating attachment relationships and inspiring me as a professor and researcher. Lastly, I want to extend my gratitude to my parents Dan and Suzy McConnell, who have always provided me with a secure base from which to explore and a haven of safety to return to.

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## Introduction

Today, more than four in ten teenage girls get pregnant before age 20, which translates into nearly 900,000 teen pregnancies per year (National Campaign to Prevent Teen Pregnancy, 2001). There are nearly 500,000 live births annually among 15-to 19 year olds in the United States (National Center for Health Statistics, 1999). According to recent reports, the teen birth rate in the United States for girls 15-19 increased three percent between 2005 and 2006 (from 40.5 births per 1000 to 41.9 per 1,000), which represents the first such increase in 15 years (National Campaign to Prevent Teen Pregnancy, 2006). Previous research has examined the factors that place teens at risk for early parenting as well as the implications involved for the child of a teen mother. In particular, attachment and depression are factors that may affect the way a teen mother parents her child.

### *Attachment*

John Bowlby's theory of attachment (Bowlby, 1969/1982) describes an infant's bond with her primary caregiver, or attachment figure, which persists throughout the life span. Central to attachment theory is the idea of a behavioral system, which Bowlby developed from the ethologists to describe a species-specific system of behaviors that leads to certain predictable outcomes, at least one of which contributes to the individual's reproductive fitness (Bowlby, 1969/1982). Behavioral systems are goal-corrected. That is, goals extend over long periods of time and the behaviors needed to achieve those goals are adjusted flexibly, in a nonrandom fashion, to a wide range of environments and to the

development of the individual (Bowlby, 1982). Attachment behaviors, including signaling in the form of crying and smiling and approach behaviors such as walking or crawling, are all designed to meet the set-goal of the attachment behavioral system: proximity to the attachment figure. The internal dynamics of the attachment system are similar to those of a homeostatic control system, in which a “set goal” is maintained by the constant monitoring of endogenous and exogenous signals and by continuous behavioral adjustment (Bowlby, 1969/1982). As the set-goal of the attachment behavioral system is “felt security” or proximity to the attachment figure, the adaptive function is protection (Sroufe & Waters, 1977). Environmental conditions that may “activate” attachment behavior in a young child who had already become attached to a specific figure are absence of or distance from that figure, the figure’s departing or returning after an absence, rebuff by or lack of responsiveness of that figure or of others and alarming events of all kinds, including unfamiliar situations and strangers (Bowlby, 1969/1982). Among the various internal conditions are illness, hunger, pain and cold. Attachment behavior is “terminated” by conditions indicative of safety, comfort and security, such as reestablishing proximity to the caregiver (Bowlby, 1969/1982).

The attachment relationship is based on an attachment figure’s quality of responsiveness and sensitivity to their infant (Ainsworth, Blehar, Waters & Wall, 1978). An infant develops an internal working model based on the interactions that occur with the attachment figure in infancy (Bowlby, 1969/1982; Bretherton, 1992; Main, Kaplan & Cassidy, 1985). An internal working model is a “complex, dynamic, internal representation of relevant aspects of the self, his or her behavior, the environment, and

the object or person toward whom the behavior is directed” (Marvin & Britner, 1999, p. 48). These models reflect the child’s appraisal of, and confidence in, the self as acceptable and worthy of care and protection, and the attachment figure’s desire, ability, and availability to provide protection and care (Bowlby, 1969/1982). A sensitive, responsive caregiver is of fundamental importance to the development of a secure as opposed to an insecure attachment bond. Security indicates that an infant is able to rely on that caregiver as an available source of comfort and protection if the need arises. Secure relationships promote infants’ exploration of the world and expand their mastery of the environment, because experience tells such infants that if the experience proves unsettling, they can rely on their caregivers to be there and alleviate their fears (Ainsworth, et al., 1978; Bowlby, 1982).

Children with insecure attachments to primary caregivers, lack this representation of caregivers being available and responsive in times of distress (Ainsworth et al., 1978; Bowlby, 1973). Bids for attention may have been met with indifference, with rebuffs or with notable inconsistency (Bowlby, 1973). The result of such histories is that these infants are anxious about the availability of their caregivers, fearing that their caregivers will be unresponsive or ineffectually responsive when needed. Because insecurely attached infants are not free to explore the environment without worry, they cannot achieve the same confidence in themselves and mastery of their environments that securely attached infants can (Bowlby, 1973).

In instances where attachment figures are unable to provide protection to their child, dysfunctional anger often results when the child’s attachment system is strongly

activated but is not followed by caregiver responsiveness (Bowlby, 1973). The child is also left with the emotional appraisal of fear when the attachment figure leaves the child helpless and unprotected (Bowlby, 1973). Therefore, the quality of the attachment relationship in infancy and early childhood is critical since this bond predicts the quality of relationships with others in the future (Bowlby, 1979).

In adolescence, the attachment relationship with caregivers is distinct from the attachment relationship that is formed with caregivers in early childhood. Adolescence is a period during which attachment relationships with parents undergo transformation; as the adolescent seeks increasing autonomy from attachment figures, she or he moves toward managing the “goal-corrected partnership” with caregivers. A goal corrected partnership is a state of relationship in which the child and the mother engage in reciprocal interaction and seek to find a balance between their opposing needs. Although elements of the goal-corrected partnership are evident during the preschool years (Bowlby, 1973), this partnership reaches new levels of complexity and coordination as a result of adolescents’ enhanced perspective-taking ability. During this developmental period, the adolescent is likely to rely, as compared with younger ages, on his or her capacity to conceive of his attachment figure as having their own needs and interests separate from their own and take them into account (Bowlby, 1969/1982). This change reflects the adolescent’s becoming less dependent on parents in a number of ways, rather than the parents becoming unimportant as a whole. Adolescence is a period in which attachment needs and behaviors are not relinquished; rather, it is one in which they are gradually transferred to peers (Allen & Land, 1999). The process of balancing autonomy

and attachment needs in families with secure adolescents is much smoother because these adolescents have more confidence that their relationships will remain intact and functional in spite of disagreements (Allen & Land, 1999). In contrast, insecure parent-teen dyads are more likely to be characterized by lower levels of adolescent confidence in interactions and by higher levels of disengagement and dysfunctional anger (Allen & Land, 1999). Therefore, although the attachment relationship with caregivers in adolescence is distinct from the attachment relationship in early childhood, it is just as important.

### *Caregiving and Attachment*

The caregiving system is another important behavioral system in attachment theory. Bowlby (1969/1982) proposes that caregiving is organized within a goal-corrected behavioral system that is reciprocal to attachment (for complete discussion, see George & Solomon, 1999). The set-goal of the caregiving system is to keep children close or safe and its adaptive function is protection of the young. Situations of danger and safety should activate the caregiving behavioral system. The caregiving system is guided by an internal representation or mental model of caregiving. This system stems from early attachment-caregiver experiences, but is distinct from them. George and Solomon (1999) suggest that the caregiving system becomes consolidated initially in adolescence and undergoes change during the transition to parenthood and as a function of interaction with the child. These authors emphasize that a critical component of the parent, following attachment theory is for the parent to make the shift away from the perspective of being protected, which is the goal of the child, to the perspective of

providing protection, which is the goal of the parent. In more extreme circumstances, an attachment figure may abdicate their caregiving role and the child is left unprotected at the moment the attachment system is aroused (George & Solomon, 1999). Mothers who abdicate their caregiving role evaluate themselves as helpless to protect their children in times of danger, never completely terminating the child's attachment system (George & Solomon, 1996). For these mothers, descriptions of their children often parallel descriptions of themselves. Children are described as being out of control and the mothers themselves as helpless to combat or organize the children's behavior (George & Solomon, 1999). Some mothers however, view their children as completely different from themselves- as precocious and amazingly in control of the situation or of others (George & Solomon, 1999). These children are described as especially sensitive (e.g. skilled caregivers, adultified) or as possessing extraordinary gifts or qualities (George & Solomon, 1999). Therefore, abdication of care results from mothers' interpreting their caregiving as relatively unimportant or ineffective. Following Bowlby (1980) George and Solomon suggest that this helplessness is the product of dysregulation of the information-processing system which is a state in which behavior and thought become disorganized and disoriented by either emotional flooding or attempts to block these emotions from consciousness. In addition to the attachment behavioral system, it is clear that the caregiving behavioral system has an important role in how a mother parents her child.

Another important contribution to parental caregiving is the mother's representation of her own childhood attachment, that is, how she thinks about her

attachment figure's responsiveness and availability when distressed during childhood (George & Solomon, 1999). Previous studies have looked at how a mother's attachment representations can influence parenting. Bosquet and Egeland (2001) have shown that mother's who lack a coherent state of mind with regard to their own attachment experiences have difficulty responding to the needs of their children. State of mind refers to an individual's current state of mind with respect to his or her own attachment experiences (George, Kaplan & Main, 1985). Other research has indicated that maternal security (i.e. integrated thinking) regarding her own childhood experience with attachment figures predicts the capacity to represent high levels of joy in relation to the child which in turn leads to positive mothering behaviors (Slade & Cohen, 1996). Jacobvitz and colleagues (1997) found very strong associations between a prenatal assessment of maternal unresolved loss (attachment state of mind characterized by lapses in reasoning or lapses in monitoring discourse regarding a loss or trauma) on the Adult Attachment Interview (AAI; George et al., 1985) and frightened or frightening interactions with her 8 month old infant. Frightening maternal behaviors included unusual vocal patterns, bared teeth, sudden looming into the infant's face and movements or postures that seemed to be part of a pursuit/hunt sequence (Jacobvitz et al., 1997). Indications that a mother was afraid of her baby included instances in which the mother handled the baby as if it were an inanimate object and in which the mother moved her hand away suddenly as if fearful of being hurt (Jacobvitz et al., 1997). In a meta-analysis conducted by van IJzendoorn (1995), there was an association between parents' representation of attachment and their sensitive responsiveness in free play and



instructional settings. The security of parents' attachment explained 12% of the variation in their responsiveness toward their children (van IJzendoorn, 1995). Autonomous parents appeared to perceive their children's attachment signals more accurately, and they were more able and willing to react promptly and adequately than were insecure parents (van IJzendoorn, 1995).

Researchers looking at teenage mother's attachment in relation to their parenting have shown that a teenager's attachment status predicts both sensitivity to their infant and infant-mother attachments (Ward & Carlson, 1995). These researchers have also observed that at a group level, adolescent mothers may be at an increased risk for nonautonomous working models when compared to older and better educated mothers (Ward & Carlson, 1995). In a study by Levine and Tuber (1991), adolescent attachment status was significantly related to the quality of the infant's attachment to their mother. Results indicated that there was exact agreement in attachment classifications in 26 of 42 cases (62%) and more general agreement between autonomous/nonautonomous adolescent attachment and secure/insecure infant attachment in 35 of 42 cases (83%) (Levine & Tuber, 1991). All autonomous adolescents had secure babies in this study. Clearly, internal working models of attachment influence caregiving behaviors and adolescent mothers who have developed maladaptive working models are at even more at risk for developing problematic maternal behaviors.

### *Depression*

Research has also shown that there is a high incidence of depression in adolescence (Cicchetti & Toth, 1998; Shaw & Dallos, 2005). The term depression

describes a cluster of symptoms that include anhedonia, emotional flatness or emptiness with diurnal variation, low mood, changes in sleep and appetite and the cognitive set of futility and hopelessness (Beck, 1976). Depression in adolescence is thought to result from an adolescent's increased focus on existential and global rather than egocentric issues (Shaw & Dallos, 2005). Adolescence is also a time of transformation where many changes occur that could increase the likelihood of developing depression. Some researchers have suggested that when individuals experience major life events or transitions such as school changes or pubertal development, either in close sequence or simultaneously, those individuals are likely to have negative behavioral and emotional outcomes such as internalizing symptoms (Graber, 2004). Nolen-Hoeksema and Girgus (1994) suggest that the greater prevalence of pre-existing risk factors for depression in girls, in combination with the greater number of social and biological challenges that girls face beginning in early adolescence, leads to the emergence of substantial gender differences in depression. These risk factors include lower instrumentality (less assertiveness), less aggressive interaction style and ruminative style of coping, all of which place girls at a higher risk for developing depression in adolescence (Nolen-Hoeksema & Girgus, 1994).

### *Attachment and Depression*

Researchers have consistently found that attachment difficulties can contribute to the development of depression. Cicchetti and Toth (1998) have developed a developmental perspective in seeking to understand depression in children and adolescents. They incorporate cognitive, socioemotional, representational, neurological

and biological perspectives to explain the onset of depression in adolescence. They argued that depressed adolescents have either formed an incoherent or perhaps even a pathological organization of these systems. They call this “depressotypic organization.” In the case of insecure individuals, their internal representational models of attachment are likely to contribute to a depressotypic organization of psychological and biological systems (Cicchetti & Toth, 1998). Depressive symptoms may overwhelm the individual’s affect regulation system and may thus lead to increased defensive processing and to insecurity (Allen et al., 2004; Bowlby, 1980). Therefore, an individual can develop an internal working model of the self based on early interactions with caregivers that can contribute to the onset of depressive symptoms.

Research shows that insecurely attached individuals are in fact, more prone to depression and depressive symptoms. In studies in which attachment has been assessed using the AAI, unipolar depression tends to be more prevalent among psychiatric patients classified as preoccupied (attachment state of mind characterized by current angry involvement with attachment figures, or by passive speech, such as rambling discourse) than among patients classified as autonomous (attachment state of mind characterized by coherence; the speaker’s representation of attachment experiences is straightforward, clear and consisted with evidence presented) (Cole-Detke & Kobak, 1996; Fonagy, Steele, Steele, Kennedy, Mattoon, Target & Gerber, 1996; Rosenstein & Horowitz, 1996). West and George (2002) have also linked preoccupied attachment to dysthymic disorder in women. In their study, 58% of the 24 women with a diagnosis of dysthymia were classified as preoccupied. Depression is also more common in persons classified as

dismissing (attachment state of mind characterized by lack of recall, idealization of one or both parents or derogation of attachment experiences) on the AAI, than those classified as autonomous (Patrick, Hobson, Castle, Howard, & Maughan, 1994).

### *Depression and Parenting*

Researchers have established a link between maternal depression and parenting, which can affect the attachment relationship between mother and child. In a study by Lesser and colleagues (1999), depressive symptomology predicted problematic maternal behavior. More chronically depressed women were less affectively positive and engaged with their babies than women whose depression was relatively transient (Campbell, Cohn, & Meyers, 1995). In a study by Gelfand and colleagues (1992), depressed mothers reported greater numbers of parenting stress in both child and parent-focused domains. In observations of their interactions with their children, depressed mothers behaved less optimally, and scored lower on scales of sensitivity, warmth, animation and engagement with the infant (Gelfand et. al., 1992).

In terms of maternal depression and quality of attachment, Teti and colleagues (1995) found attachment insecurity was significantly associated with maternal depression among infants and preschoolers. In their study, results indicated that mothers of children who lacked unitary, coherent attachment strategies were more likely to report higher levels of depressive symptomology and parenting stress, and to be rated by blind observers as less competent in interactions with their children (Teti et. al., 1995).

In addition, researchers found a high prevalence of depression in adolescent mothers (Clemens, 2000; Deal & Holt, 1998; Hudson et. al, 2000). Although Deal and

Holt (1998) found a higher incidence of depression in adolescent mothers, the presence of depressive symptoms was associated with Black race, unmarried status, low educational attainment and receipt of assistance through Aid to Families with Dependent Children, food stamps, or WIC. Their findings suggest that maternal depression varies by race and sociodemographic characteristics and is related to inadequate social support and dependence on public assistance (Deal & Holt, 1998). Therefore, adolescent mothers may be at risk for developing depression and exhibiting problematic maternal behavior with their children, which in turn can affect the attachment relationship between mother and child, especially in circumstances of inadequate social support.

Research to date has not examined attachment, depression and perceptions of parenting together in adolescent mothers. Further, previous studies have not examined maternal behavior in adolescent mothers as it relates to the caregiving system in attachment theory. Since an important aspect of parenting behavior is making the shift away from the perspective of being protected to the perspective of providing protection, it will be important to examine in particular how adolescent mothers are making this transition. Allen and Land (1999) stress that developmentally adolescents are both seeking autonomy from attachment figures yet still relying on these figures in times of distress. It will be valuable to see how this is manifested in relation to their perceptions of parenting. This study will examine attachment, depression and perceptions of parenting in adolescent mothers, with an emphasis placed on mother's perceptions of parenting as a separate contribution that influences her interaction and responsiveness to her infant. This study will contribute to advancing attachment theory forward in this

respect. My hypothesis is that attachment and depression will be related to perceptions of parenting during infancy. More specifically, perceptions of attachment figures as available, responsive and able to provide protection combined with a lower level of depression will be related to a more positive perception of parenting during infancy. Perceptions of attachment figures as unavailable, unresponsive and unable to provide protection combined with a higher level of depression will be related to a more negative perception of parenting during infancy.

## Method

### *Participants*

Participants for this study included 27 adolescent mothers who were 15-19 years of age and had healthy infants 0-8 months old. Initially, there were 28 participants. One participant had to be omitted from the analysis due to the fact that her responses were not reliable (e.g. no variability on the Beck Depression Inventory). Participants were recruited from school-based teen parent programs that serve teen mothers and their babies in Alameda County, Mendocino County, Contra County, Lake County, Sonoma County and Santa Clara County. All 27 of these mothers reported that their child did not have a suspected or identified developmental delay or medical condition. There were 11 male (40.7%) and 16 female (59.3%) infants in this study. The sample was predominantly Latina/Hispanic (66.7%) with a mean age of 17.1. Twenty-three of the participants (85.2%) were currently in high school while 3 (11.1%) had graduated from high school and 1 (3.7%) had attended some college. Of the 14 participants who reported their father's occupation, the majority (29.6%) held blue collar jobs while 1 (3.7%) held a white collar position. Of the 21 participants who reported their mother's occupation, both white collar and blue collar jobs were equally represented (22.2%).

### *Procedure*

After obtaining approval from teachers and administrators, the researcher of the current study came into classrooms to recruit adolescent mothers. Participants were given a consent form, and asked to sign if they wanted to participate in the study. If they were under 18, they had to get a parent or guardian's signature of the consent form. A

description of the study was provided on the consent form. Participants were told that the purpose of the study is to examine mother's relationships with parents or caregivers, how they have felt in the past week, and attitudes about being a new parent. One children's book was offered for each mother as incentive to participate in the study. After participants completed and turned in their consent forms, the researcher returned to the classroom to administer the questionnaires. All participants were in a classroom setting and therefore all questionnaires were administered as a group. Before beginning the study, participants were reminded that their responses on each questionnaire were entirely confidential and they could withdraw at any time during the study. All participants received the same instructions. After participants completed the questionnaires, a one-page debriefing protocol was handed to them where the true nature of the study was revealed and hotline numbers were given if participants' felt that they needed personal counseling. Participants were also invited to choose one children's book since they had completed the questionnaires.

### *Measures*

Adolescent mothers' representations of attachment was assessed using the Adolescent Attachment Questionnaire (AAQ) developed by West, Rose, Spreng, Sheldon-Keller & Adam (1998) and the Adolescent Unresolved Attachment Questionnaire (AUAQ) developed by West, Rose, Spreng & Adam (2000). The attachment system, which functions to provide security and care, governs the relationship between children and their attachment figures. These relationship experiences determine the child's perceptions of the availability and responsiveness of the attachment figure



("felt security"). The AAQ was designed to measure these component features of parent-adolescent attachment. The AAQ consists of 9 items that are rated on a 5 point Likert-like type scale. Subscores for the 3 separate scales are produced. Each scale has 3 items, so scores range from 3-15. High scores indicate more problems on the dimension being measured. The AAQ has three scales; *Availability*, *Angry Distress*, and *Goal-corrected Partnership* (see Appendix B). *Availability* assesses the adolescent's confidence in the availability and responsiveness of the attachment figure. High scores on this scale indicate that the adolescent does not have confidence in the availability and responsiveness of their attachment figure. *Angry Distress* taps negative affective responses to the perceived unavailability of the attachment figure. Bowlby (1973) identified anger directed toward an attachment figure as a reaction to the frustration of attachment desires and needs. If the attachment relationship is in jeopardy or the attachment figure is unresponsive, anger is one way of increasing the intensity of the communication to the attachment figure. Thus anger may occur in the service of the attachment relationship. To the extent that the increased emotional signaling works well enough to elicit the partner's ongoing participation in protection and arousal stimulation, the partnership will maintain a consistent and predictable, although possibly insecure, organization (Bowlby, 1973). High scores on the *Angry Distress* scale suggest that the adolescent harbors anger toward their attachment figure. *Goal-corrected Partnership* assesses the extent to which the adolescent considers and is empathetic to the needs and feelings of their attachment figure. High scores on this scale indicate that the adolescent does not consider the needs or feelings of their attachment figure. The validity and

reliability of the AAQ has been established with clinical and nonclinical adolescent populations. Across these sets of subjects, alpha coefficient ranged from 0.62 to 0.80, indicating acceptable structural coherence of the scales (West et al., 1998). Test-retest reliability with a normative sample ranged from .68 to .74, indicating temporal stability (Wes et al., 1998). The AAQ has also demonstrated strong convergent validity with the Adult Attachment Interview (AAI), which is considered the “gold standard” for classifying attachment status (West et al., 1998).

The AUAQ consists of 10 items that are rated on a 5 point Likert-like type scale. Subscores for the 3 separate scales are produced. Each scale has 3 items, except for *Failed Protection* which has 4 items, and scores range from 3-15. High scores indicate more problems on the dimension being measured. The AUAQ is based on features identified as relevant to defining the child’s perceptions of self and the attachment figure (West et al., 2000). These perceptions can grow out of experiences in which the attachment figure abdicates his or her caregiving role (West et al., 2000). Therefore, the AUAQ assesses the caregiving experiences of unresolved adolescents (as recipients of caregiving) (West et al., 2000). The AUAQ has three dimensions: *Aloneness/Failed Protection*, *Anger/ Dysregulation* and *Fear* (see Appendix B). *Aloneness/ Failed Protection* assesses the adolescent’s perception of the care provided by their attachment figure. *Anger/Dysregulation* assesses negative affective responses to the perceived lack of care from the attachment figure. If a child’s increased anger and distress fails to elicit an adequate parental response to the child’s fearful arousal, strategic behavioral organization may break down or take deviant forms as the communication fails to

achieve its goal (i.e. obtaining proximity to the attachment figure) (Bowlby, 1973). High scores for the *Anger/Dysregulation* scale suggests that the adolescent harbors strong feelings of anger in the face of the attachment figure's failure to respond to their attachment signals. *Fear* taps the fear generated by the adolescent's appraisal of failed attachment figure care. People who score high on *Fear* are fearful of their attachment figure. Cronbach's alpha ranged from .66 to .71, indicating an acceptable degree of internal consistency for the AUAQ (West et. al., 2000). Test-retest correlations showed high temporal stability, ranging from .69 to .80 (West et. al., 2000). In addition, both discriminant and convergent validity have been established with the AUAQ (West et. al., 2000).

Depression was measured using the Beck Depression Inventory (BDI) developed by Beck (1961; see Appendix C). The BDI is a frequently used self-report questionnaire designed to measure depressive symptomology. It consists of 21 statements which ask individuals to circle a number, 0-3, next to the statement in each group which best describes the way they have been feeling in the past week. High scores indicate more depressive symptomology. Scores of 5-9 are considered normal, 10-18 indicates mild to moderate depression, 19-29 denotes moderate to severe depression and scores of 30-63 signify severe depression (Beck et al., 1961). Test-retest reliability estimates range from .48-.86 in studies with psychiatric patients and range from .60-.90 in studies with non-psychiatric patients (Beck et. al., 1988). The BDI has high internal consistency, good factor structure, and sensitivity and specificity for detecting depression in both adult and

adolescent populations (Spence, Sheffield, & Donovan, 2002). There are no subscales for the BDI, and therefore one total score is calculated as the index of depression.

Adolescent mothers' perceptions of parenting their infant was assessed using Pridham and Chang's (1989) measure What Being the Parent of a New Baby is Like-Revised (WPL-R; see Appendix D). The WPL-R is a 25-item scale and each of these items is rated by respondents on a 9-point graphic rating scale. The WPL-R has three scales, which are *Evaluation*, *Centrality* and *Life Change*. *Evaluation* represents the personal meaning of the infant to the parent in respect to the relationship with the infant and the infant's care. There are 11 items that make up the *Evaluation* scale which all have scores ranging from 1-9. Higher scores on *Evaluation* indicate a more positive perception of parenting. *Centrality* concerns the importance and priority of the infant in a parent's life and the extent to which the infant occupies the parent's consciousness. There are 8 items on this subscale and scores range from 1-9. Higher scores on *Centrality* indicate that the infant is more central in the parent's life. *Life Change* assesses how much of the mother's life has changed as a result of becoming a parent (changes in a parent's personal life, changes in life and relationships with family members and overall stressfulness of life). There are 6 items on this scale and scores range from 1-9. Higher scores on *Life Change* indicate a greater degree of change and stress in the mother's life. A positive perception of parenting ultimately refers to how much a mother likes being a mother. Across three administrations of the WPL-R, the alpha coefficients of scales at 1 week, 1 month and 3 months were: .87, .90, and .87 for *Evaluation*; .87, .80, and .88 for *Centrality*; and .77, .81, and .81 for *Life Change*

(Pridham & Chang, 1989). The WPL-R has also demonstrated stability across administrations and construct validity (Pridham & Chang, 1989).

A demographic questionnaire was included at the end of the questionnaire packet (see Appendix E). Questions regarding age, race, sex, education, income range were integrated into the demographic questionnaire. Participants were also asked if their child had a developmental delay or medical condition. They were asked to respond in one of 3 ways to these two questions: 1) known 2) suspected and 3) none.

## Results

Table 1 displays the descriptive statistics for this study. For each scale on the AAQ and the AUAQ, scores ranged from 3-15. The sample had a mean of 6.69 for the *Angry Distress* scale on the AAQ. The mean score for the *Availability* subscale was 6.44. For the *Goal-Corrected Partnership* subscale, the mean score was 5.89. On the AUAQ, the scale *Failed Protection* yielded a mean score of 8.72. The mean score for the *Anger/Dysregulation* scale was 7.48. For the *Fear* scale, the mean score was 5.85. The mean score for the Beck total was 11.31, suggesting that in general, participants reported mild to moderate depression. In terms of perceptions of parenting, the mean score for the *Evaluation* scale was 86.70. The *Centrality* scale had a mean score 57.48 and the *Life Change* scale had a mean score of 37.96.

Table 1

Descriptive Statistics of Attachment, Depression, and Perceptions of Parenting.

Variable	N	Mean	Standard Deviation
Ethnicity	27	1.70	1.20
Gender of Child	27	1.59	0.50
Highest Level of Education	27	2.19	0.48
Father's Occupation	14	4.86	2.03
Mother's Occupation	21	4.67	1.68
Angry Distress	26	6.69	2.00
Availability	27	6.44	2.24
Goal Corrected Partnership	27	5.89	1.60
Failed Protection	25	8.72	2.65
Angry Dysregulation	27	7.48	2.56
Fear	26	5.85	2.34
Beck Total	25	11.31	6.18
Evaluation	27	86.70	9.87
Centrality	27	57.48	7.62
Life Change	26	37.96	9.02

Table 2 displays the intercorrelations between the AAQ and AUAQ scales. The intercorrelations of the three AAQ scales, *Availability*, *Goal-Corrected Partnership*, and *Angry Distress* range from .52 to .67, which indicates that these scales are moderately correlated with each other. These results show that each item contributes to measuring a dimension of felt-security. The intercorrelations of the three AUAQ scales, *Failed Protection*, *Anger/Dysregulation*, and *Fear* range from .68 to .74, suggesting that these scales are somewhat strongly correlated with each other. Therefore, each item contributes to measuring a dimension of unresolved attachment.

Table 2

## Intercorrelations Between AAQ Scales, Beck Total Score, and WPL-R Scales

Variable	Angry Distress	Availability	Goal-Corrected Partnership	Failed Protection
Angry Distress				
Availability	0.52**			
Goal-Corrected Partnership	0.67**	0.61**		
Failed Protection	0.79**	0.73**	0.59**	
Angry Dysregulation	0.66*	0.66**	0.61**	0.68**
Fear	0.60**	0.71**	0.45*	0.74**
Beck Total	0.47*	0.15	0.23	0.38
Evaluation	-0.43*	-0.38	-0.48*	-0.43*
Centrality	0.01	-0.30	-0.20	-0.25
Life Change	0.19	0.34	0.13	0.38

\*\* p&lt;.01

\* p&lt;.05

Table 2 continued

Intercorrelations Between AAQ Subscales, Beck Total Score, and WPL-R Subscales.

Variable	Beck Total	Evaluation	Centrality
Beck Total			
Evaluation	-0.21		
Centrality	0.12	0.55**	
Life Change	0.22	-0.35	-0.34

\*\*  $p < .01$ \*  $p < .05$ 

Pearson product moment correlations between the AAQ scales, Beck Total Score and WPL-R scales are reported in Table 2. Confirming previous research linking attachment and depression, the *Angry Distress* scale on the AAQ and the *Anger/Dysregulation* scale on the AUAQ were both positively correlated with the Beck Total score,  $r(26) = .47, p < .05$ ,  $r(27) = .56, p < .01$ , respectively. These results indicate that the more angry and frustrated a person is at their attachment figure for being inaccessible or unresponsive, the more they feel depressed. *Availability*, *Goal-Corrected Partnership*, *Failed Protection*, and *Fear* were not associated with the Beck total score.

The analysis related to the hypothesis that attachment would be associated with perceptions of parenting revealed that *Angry Distress* was negatively correlated with the *Evaluation* scale of the WPL-R,  $r(26) = -.43, p < .05$ , suggesting that the less angry a person is with their attachment figure, the more they are satisfied with the parenting experience. The *Goal-Corrected Partnership* scale of the AAQ and the *Failed Protection* scale of the AUAQ were also negatively correlated with the *Evaluation*



dimension of the WPL-R,  $r(27) = -.48, p < .05$ ,  $r(25) = -.43, p < .05$ , respectively. These results suggest that more the adolescent is empathetic to their attachment figure's needs and feelings and the more they are able to acquire protection from their attachment figure, the more likely they will be satisfied with parenting their child. In addition, the *Anger/Dysregulation* scale was negatively correlated with the *Evaluation* dimension of the WPL-R,  $r(27) = -.47, p < .05$ , signifying that the less anger that the adolescent has toward their attachment figure due to their perceived lack of care, the more likely they will experience parenting satisfaction. However, both the *Availability* and *Fear* scales were not associated with *Evaluation*, *Centrality* or *Life Change* dimensions of the WPL-R.

In sum, *Angry Distress*, *Goal-Corrected Partnership*, *Failed Protection*, and *Anger/Dysregulation* are all related to the *Evaluation* dimension in the perceptions of parenting a child. More specifically, if an adolescent mother views her attachment figure as available, responsive and able to provide protection in relation to these dimensions, the more likely the mother will be satisfied with her experience being the mother of her infant and feel that their relationship is meaningful. This finding partially supports the hypothesis of the present study. However, depression did not significantly correlate with the *Evaluation*, *Centrality* or *Life Change* dimensions of the WPL-R which did not support the hypothesis that depression would also be related to perceptions of parenting in addition to attachment.

A standard multiple regression analysis was conducted in order to determine the relative contribution of the four attachment scales (*Angry Distress*, *Goal-Corrected*

*Partnership, Failed Protection and Anger/Dysregulation*) and depression in predicting the evaluation of parenting. Both the *Centrality* and *Life Change* dimensions were dropped from this final analysis due to the fact that these scales were not related to attachment or depression. Table 3 displays the results from the regression analysis.

*Angry Distress, Goal-Corrected Partnership, Failed Protection, Anger/Dysregulation* and the Beck Total Score together explain 29% of the variance of parenting evaluation, ( $F(2, 21) = 1.73, p > .05$ ), which is not significant. These results suggest that although each of the predictors is related to the *Evaluation* dimension of perceptions of parenting when taken on their own, there is so much multicollinearity between predictors that they lose their significance when they are analyzed as a group.

Table 3

Multiple Regression Analysis of Attachment and Depression as Predictors of Parenting Evaluation on the WPL-R.

Predictors	<i>r</i>	<i>sr</i> <sup>2</sup>	<i>t</i>	<i>cum. R</i> <sup>2</sup>	<i>F</i> <sup>a</sup>
Angry Distress	-0.51	0.00	-0.14	0.29	1.23
Goal-Corrected Partnership	-0.48	0.04	-0.94		
Failed Protection	-0.43	0.00	-0.45		
Angry Dysregulation	-0.47	0.03	-0.77		
Beck- Depression Total	-0.21	0.00	0.12		

\*\* $p < .01$

\*  $p < .05$

## Discussion

The purpose of this study was to examine attachment, depression and perceptions of parenting among adolescent mothers of infant children. The results support previous studies that report a relation between attachment and depression. More specifically, the scales *Angry Distress* on the AAQ and *Anger/Dysregulation* on the AUAQ were positively and significantly related to the Beck total score. From an attachment perspective, *Angry Distress* represents anger that occurs in the service of the attachment system by maintaining a consistent and predictable organization. Therefore, Bowlby (1973) viewed anger as “functional,” that is, a natural response to frustration that serves an important communication signal to the attachment partner that something is awry. The attachment figure is still able to provide protection and the child is able to reach the set-goal of proximity to their caregiver. He viewed more intense anger as “dysfunctional” (Bowlby, 1973), so intense that this anger threatened the relationship rather than served to maintain it. *Anger/Dysregulation* denotes anger that becomes so intense and persistent that it threatens to disrupt and dysregulate the attachment relationship, causing the behavioral organization to break down. This state is associated with experiences of failed protection and care. According to Bowlby (1973, 1980), the precursor experiences of preoccupied attachment in adulthood is likely to consist of contradictory and unpredictable caregiver responses to the child’s attempts to establish safety and security within the attachment relationship. He argued that these interactions with the caregiver contribute to the development of multiple and incompatible models of the self. As a result, information from the attachment system is never integrated to form

a coherent internal representational world. Because of the preoccupied individuals' failure to achieve the integration of attachment experience, memories and affect contributes to an overwhelmed or lost sense of efficacy of the self. From this perspective, then, depression represents a reaction to the frustration experienced by preoccupied individuals in their efforts to achieve an internally coherent representation of attachment (West, & George, 2002). The fact that there was a stronger positive correlation between depression and the *Anger/Dysregulation* subscale suggests that anger toward the attachment figure as a result of their failure to provide protection is an even better predictor of depression than the *Angry Distress* subscale. Therefore, depression is more likely to occur for individuals who have had a breakdown in the organization of the attachment relationship. The results of this study also revealed that the subscales *Availability* and *Goal-Corrected Partnership* on the AAQ as well as the subscales *Failed Protection* and *Fear* on the AUAQ were not related to depression. These findings reinforce the idea that having an angry involvement or preoccupation with attachment figures is a more important predictor of depression than other dimensions of attachment.

In addition, there was an association between attachment and parenting evaluation which is consistent with the hypothesis of this study. In particular, *Angry Distress* and *Goal-Corrected Partnership* on the AAQ as well as *Failed Protection* and *Angry Dysregulation* on the AUAQ were associated with the *Evaluation* dimension of the WPL-R. However, *Availability* on the AAQ and *Fear* on the AUAQ were not related to the *Evaluation* subscale, which might indicate that these facets of attachment are not as important in predicting perceptions of parenting among adolescent mothers. Therefore,

the extent to which the adolescent mother has confidence in their attachment figure as being accessible and responsive and the fear that is generated by the mother's appraisals of failed protection, vulnerability and helplessness do not seem to be important facets of attachment in predicting perceptions of parenting among adolescent mothers. In addition, attachment was not related to the *Centrality* and *Life Change* dimensions of perceptions of parenting which does not support the hypothesis of the current study. Adolescent mothers who reported being less angry and frustrated with their attachment figures, empathized with their attachment figure's needs, and felt that they were protected by their attachment figure, were more likely to be satisfied with parenting, competent in caring for the infant, knowledgeable about their infant and confident in the degree to which parenting self-expectations were met. In other words, representations of attachment can influence perceptions of parenting. Mothers' who have an internal working model of their attachment figures as sensitive, available and responsive are more likely to function effectively in the maternal role and feel confident in providing care and protection. This shift in the perspective of being protected to providing protection is an important part of the caregiving system in attachment theory (George & Solomon, 1999). It seems as though the adolescent mothers in this study are making this shift and are therefore more inclined to develop positive maternal behaviors that have been associated with providing a secure attachment.

The fact that attachment was not related to the *Centrality* or *Life Change* dimensions was surprising. *Centrality* refers to how much the infant is on the parent's mind, including when the parent is away from home or when the parent needs to leave

the infant with another caretaker, and how easy it is for the parent to be distracted from the infant. It appears that representations of their attachment figures are not as important in predicting how much the infant is on the teenaged parent's mind. This is surprising because a desire to be with one's infant and difficulty being away from one's infant suggest attachment and emotional availability. Perhaps adolescent mothers have a more difficult time with this aspect of parenting because of where they are developmentally. Adolescence can be a time of increased introspection and self-examination as one is exploring one's identity. Therefore, adolescent mothers may be more absorbed with thinking about themselves than their infants, which would make it harder for them to attend to their child's needs. Such an outcome would then have a negative impact on their attachment relationship with their children.

The *Life Change* dimension of parenting involves alterations in a parent's own image and self-image, relationships, and general stressfulness in life. In this study, representations of attachment figures were not significant in predicting life change as well. In general, the mothers' in this study experienced very little life change and overall stress since having a baby. This could be because this particular sample of adolescent mothers were in nurturing school environments where they had the support of each other as well as staff that facilitated their learning of academic subjects and positive parenting skills. The importance of education is highlighted in a longitudinal study conducted by Furstenburg, Brookes-Gunn, and Morgan (1987) where 300 urban, mostly Black, low-SES teenage mothers were followed until their children were 18 years of age. A key finding from their study was that adolescent mothers who remained in high school

became considerably more successful than those that dropped out (Furstenburg et al., 1987). Therefore, instituting teen parent programs is important because they may be a buffer for at risk teen mothers in that they encourage the development of positive parenting skills as well as advance mothers toward their educational goals.

Another explanation for why attachment representations were not related to the *Centrality* and *Life Change* subscales is the idea that these dimensions could be related to the caregiving system whereas the *Evaluation* dimension might draw from the mother's own attachment experiences. Although the caregiving and attachment systems are reciprocal, behavior is organized by the attachment system to seek protection; behavior is organized by the caregiving system to provide protection (George & Solomon, 1996). At the time when an individual has a child of his or her own, the parent's own attachment system experiences are expected to be transformed and integrated into a system organized to provide protection for the child (George & Solomon, 1996). George & Solomon (1996) have proposed that the parent's representation of attachment is a mature transformation of the attachment system. In other words, the caregiving system is organized by a representational structure that includes the mother's experiences with her child whereas the attachment system is organized by a representational structure that includes the self as attached. The *Evaluation* dimension of caregiving in this study assesses a mother's a) adequacy of her practice and performance as a caregiver, (b) the quality of her relationship with her infant and c) satisfaction with caregiving as a life function, which are all conditions within the mother. Therefore, the *Evaluation* dimension could be drawing upon the mother's own attachment experiences. The

*Centrality* and *Life Change* dimensions are more related to the mother's experiences with her baby, and could therefore be tapping into the caregiving system. These results highlight a separation of the attachment system with the caregiving system which lends support to the idea that these systems are two distinct models of relationships.

Due to the fact that this sample consisted of Latina mothers, it is possible that there were cultural influences as well. Perhaps these mothers had a very large support system at home that was related to their cultural beliefs in the importance of family. It would then make sense that they would report less life change and stress because of their strong connection with family and availability of family members to share the caregiving tasks.

Another interesting discovery that was made from this study was that depression was not associated with perceptions of parenting. More specifically, depression was not correlated with any of the three dimensions of the WPL-R: Evaluation, Centrality or Life Change. This was not consistent with the hypothesis of this study, namely that depression would be related to perceptions of parenting. Cicchetti, Toth & Rogosch (1999) found similar results in their study investigating the efficacy of toddler-parent psychotherapy (TPP) as a preventative intervention for promoting secure attachment in the offspring of depressed mothers. These authors reported that although offspring in the intervention group attained rates of secure attachment that were comparable with those of youngsters in the non-depressed control group, the intervention did not appear to decrease maternal depressive symptoms to a greater degree in the intervention group as compared with the depressed control group (Cicchetti et al., 1999). In other words, the



intervention changed how depressed mother's parented their children, but there were not changes in her depressive symptoms. Very little depression was reported in the sample of the current study which offers contradictory evidence against the notion that depression is more prevalent in adolescent mothers. Again, perhaps due to the fact that these particular mothers were enrolled in school and had supportive teachers and family members, they did not experience depression. Although Cicchetti et al. (1999) utilized a formal infant mental health intervention, participation in school programs might represent another type of intervention that promotes positive teen parenting skills, but has little effects on depression. Results of this study clearly indicate that representations of attachment relationships, and not depression, are important in predicting parenting evaluation.

### Limitations and Directions for Future Research

Although this study was unique in its examination of adolescent mothers, the small sample size was a disadvantage because it lowered the power of the study (i.e. chance of detecting real effects that exist). An ideal sample size would have been at least 60 mothers but this was impossible to attain due to the time constraints and difficulty in recruiting volunteer participants. In general, teachers and administrators are very reluctant to let researchers come into classrooms or other organizations because adolescent mothers are a very protected population due to their sensitivity to outside influences. Those teachers and administrators that do let researchers come in require a significant amount of documentation assuring that the study is appropriate for their population of teen mothers. And yet despite these difficulties, it is essential that this population be examined so that researchers and clinicians can help guide intervention efforts in relation to teen parenting. The results from this study highlight the importance of teen parent programs that facilitate learning and positive parenting skills. These programs may buffer teens against the onset of depression or other adverse events that can arise.

Future research should include a more diverse sample in terms of ethnic background and education. It would be interesting to have a comparison group in a future research study that does not consist of mothers enrolled in school or other program. Perhaps there might be differences in attachment, depression and caregiving that could aid in our understanding of the relationship between these dimensions.

This study utilized questionnaires in which adolescent mothers were asked to self-report about their feelings in regard to attachment, depression and caregiving. This may have introduced bias in that responses to questions were socially desirable and not indicative of the participant's true feelings about the question. Other researchers should use a combination of designs such as questionnaires, interviews, etc. to gain a more accurate representation of the relationship between these three variables.

Other factors no doubt also mediate the relationship between attachment, depression and perceptions of parenting. Infant temperament, socioeconomic status, race, education, etc. are a few of the many other possible variables that could be influencing the relationship between these dimensions. Future research should include measures that assess the contributions that other variables might have. Studies should also look at anger and other facets of attachment in greater depth to see if there are differences in predicting perceptions of parenting. In addition, another depression measure could be used that better assesses a mother's history, severity and chronicity of depression. The BDI may not have accurately captured the complexity of depression in adolescent mothers.

Despite the limitations of the current study, this exploration of attachment, depression and perceptions of parenting among adolescent mothers of infant children signifies an important contribution to attachment theory by examining these three variables together. No other study has examined these three important variables together in teen-aged mothers. This project symbolizes the beginning of hopefully many more

studies to come that investigate the variables that contribute to parenting in adolescent mothers.

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## Appendix A

## AAQ and AUAQ

*Tell us some more about yourself*

**Instructions:** Answer all of the following questions about your relationship with the person in your life who raised you as a young child – that is, the person who mostly took care of you from the time you were born to age 5. Also please circle the number that indicates the extent to which the statement describes you.

Please indicate who raised you:

Mother \_\_\_\_\_ Father \_\_\_\_\_ Step-mother \_\_\_\_\_ Step-father \_\_\_\_\_

Grandmother \_\_\_\_\_ Grandfather \_\_\_\_\_

Other Please specify: \_\_\_\_\_

**1. I'm confident that my parent will listen to me.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**2. I feel for my parent when he/she is upset.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**3. I think it is unfair to always have to handle problems by myself.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**4. My parent only seems to notice me when I am angry.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**5. I'm afraid that I will lose my parent's love.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**6. I enjoy helping my parent whenever I can.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**7. I can count on my parent to be there for me when I need him/her.**

1	2	3	4	5
---	---	---	---	---

Absolutely Yes      Yes      Neither yes nor no      No      Absolutely not

**8. I get annoyed at my parent because it seems I have to demand his/her caring and support.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**9. I talk things over with my parent.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**10. I get really angry because I never get enough help from my parent.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**11. I often feel angry with my parent without knowing why.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**12. I have a terrible fear that my relationship with my parent will end.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**13. My parent is always disappointing me.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**14. I get really angry at my parent because I think he/she could make more time for me.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**15. I'm certain that my parent will always love me.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**16. I never expect my parent to take my worries seriously.**

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**17. When I'm upset, I am sure that my parent will be there to listen to me.**

---

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**18. I'm confident that my parent will try to understand my feelings.**

---

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

**19. It makes me feel good to be able to do things for my parent.**

---

1	2	3	4	5
Absolutely Yes	Yes	Neither yes nor no	No	Absolutely not

## Appendix B

*Beck Depression Inventory (BDI)*

Beck, A. T. (1967)

This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0,1, 2,3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one.

Be sure to read all of the statements in each group before making your choice.

1.     0     I do not feel sad.  
       1     I feel sad.  
       2     I am sad all the time and I can't snap out of it.  
       3     I am so sad or unhappy that I can't stand it.
  
2.     0     I am not particularly discouraged about the future.  
       1     I feel discouraged about the future.  
       2     I feel I have nothing to look forward to.  
       3     I feel that the future is hopeless and that things can't improve.
  
3.     0     I do not feel like a failure.  
       1     I feel I have failed more than the average person.  
       2     As I look back on my life, all I can see is a lot of failures.  
       3     I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.  
1 I don't enjoy things the way I used to.  
2 I don't get real satisfaction out of anything anymore.  
3 I am dissatisfied or bored with everything.
5. 0 I don't feel particularly guilty.  
1 I feel guilty a good part of the time.  
2 I feel quite guilty most of the time.  
3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.  
1 I feel I may be punished.  
2 I expect to be punished.  
3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.  
1 I am disappointed in myself  
2 I am disgusted with myself.  
3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.  
1 I am critical of myself for my weaknesses or mistakes.  
2 I blame myself all the time for my faults.  
3 I blame myself for everything bad that happens.
9. 0 I don't have any thoughts of killing myself.  
1 I have thoughts of killing myself, I would not carry them out.  
2 I would like to kill myself.  
3 I would kill myself if I had the chance.

10. 0 I don't cry any more than usual.  
1 I cry more now than I used to.  
2 I cry'all the time now.  
3 I used to be able to cry but now I can't cry even though I want to.
11. 0 I am not more irritated now than I ever am.  
1 I get annoyed or irritated more easily than I used to.  
2 I feel irritated all the time now.  
3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.  
1 I am less interested in other people than I used to be.  
2 I have lost most of my interest in other people.  
3 I have lost all of my interest in other people.
13. 0 I make decisions about as well as I ever could.  
1 I put off making decisions more than I used to.  
2 I have greater difficulty in making decisions than before.  
3 I can't make decisions at all anymore.
14. 0 I don't feel I look any worse than I used to.  
1 I am worried that I am looking old or unattractive.  
2 I feel that there are permanent changes in my appearance that make me look unattractive  
3 I believe I look ugly.

15. 0 I can work about as well as before.  
1 It takes an extra effort to get started at doing something.  
2 I have to push myself very hard to do anything.  
3 I can't do any work at all.
16. 0 I can sleep as well as usual  
1 I don't sleep as well as I used to.  
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.  
3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don't get more tired than usual.  
1 I get tired more easily than I used to.  
2 I get tired from doing almost anything.  
3 I am too tired to do anything.
18. 0 My appetite is no worse than usual.  
1 My appetite is not as good as it used to be.  
2 My appetite is much worse now.  
3 I have no appetite at all anymore.
19. 0 I haven't lost much weight, if any, lately.  
1 I have lost more than 5 pounds.  
2 I have lost more than 10 pounds.  
3 I have lost more than 15 pounds.

\* I am purposely trying to lose weight by eating less. Yes \_\_\_\_\_ No \_\_\_\_\_



20. 0 I am no more worried about my health than usual.  
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.  
2 I am very worried about physical problems and it's hard to think of much else.  
3 I am so worried about my physical problems that I can't think about anything else.
21. 0 I have not noticed any recent change in my interest in sex.  
1 I am less interested in sex than I used to be.  
2 I am much less interested in sex now.  
3 I have lost interest in sex completely.

## APPENDIX C

## WPL-R Measure

ID \_\_\_\_\_  
 Child's Birth Date \_\_\_\_\_  
 Date Completed \_\_\_\_\_  
 Visit Number \_\_\_\_\_

## What Being The Parent of a Baby is Like

FOR EACH QUESTION, PLEASE CIRCLE THE NUMBER THAT BEST SHOWS YOUR ANSWER. FOR EXAMPLE:

1. How satisfying has being the parent of a new baby been for you?

1      2      3      4      5      6      7      8      9

Not at all  
Satisfying

Completely  
Satisfying

2. How much has your life changed since you had the baby?

1      2      3      4      5      6      7      8      9

Hardly at all

A great deal

3. How much is the baby on your mind when you are at home with him/her?

1      2      3      4      5      6      7      8      9

Very little

All of the time

4. Overall, how easy is it for you to be distracted from thinking about the baby?

1      2      3      4      5      6      7      8      9

Not east at all

Very easy

5. How much do you think that you positively affect your baby's development?

1      2      3      4      5      6      7      8      9

Not at all

A great deal

6. How much is the baby or the baby's care on your mind?

1 2 3 4 5 6 7 8 9

Very little of

All of the time

7. How much have the tasks of taking care of a new baby been satisfying to you?

1 2 3 4 5 6 7 8 9

Not at all satisfying

Completely Satisfying

8. How much do you think your baby enjoys his/her interactions with you?

1 2 3 4 5 6 7 8 9

Not at all

A great deal

9. How much do you relate to family members in a different way since you have had the baby?

1 2 3 4 5 6 7 8 9

Not at all

A great deal

10. On the whole, how stressful is your life, being the parent of a young baby and perhaps having other things to deal with?

1 2 3 4 5 6 7 8 9

Not at all  
Stressful

Very  
Stressful

11. How much do you look at yourself differently since you have had the baby?

1 2 3 4 5 6 7 8 9

Not at all

A great deal

12. When you go out and leave the baby with someone else, how much do you have the baby on your mind during the time that you are away?

1 2 3 4 5 6 7 8 9

Very little of  
the time

All of the time

13. How much of the time can you tell what your baby needs?

1      2      3      4      5      6      7      8      9

Hardly ever

Almost all of the time

14. How much does the baby seem like a person, with his/her own personality, to you?

1      2      3      4      5      6      7      8      9

Very little of  
the time

All of the time

15. How much is the baby's physical health on your mind?

1      2      3      4      5      6      7      8      9

Very little of the time

All of the time

16. How easy would it be for you to leave the baby with your spouse/partner when you go out?

1      2      3      4      5      6      7      8      9

Not easy at all

Very easy

17. How well do you think that you know your baby?

1      2      3      4      5      6      7      8      9

Hardly at all

Very well

18. How well are you meeting your expectations for yourself as a parent of a new baby?

1      2      3      4      5      6      7      8      9

Not at all

Completely

19. How much has the baby's growth and development been a source of satisfaction to you?

1      2      3      4      5      6      7      8      9

Not at all

A great deal

20. How in tune with your baby do you feel? (How much do you feel like you and your baby are in harmony with each other/)

1      2      3      4      5      6      7      8      9

Not at all  
in tune

Completely  
in tune

21. How much has your life with members of your family changed?

1      2      3      4      5      6      7      8      9

Hardly at all

A great deal

22. How easy would it be for you to leave the baby with someone other than your spouse/partner when your partner when you go out?

1      2      3      4      5      6      7      8      9

Not easy at all

Very easy

23. How satisfied are you with the way that you relate to your baby and your baby's needs?

1      2      3      4      5      6      7      8      9

Not at all  
satisfied

Completely  
Satisfied

24. How much do you feel that having a baby affects what you do and when?

1      2      3      4      5      6      7      8      9

Not at all

A great deal

25. How much does the baby or the baby's care come first in your thoughts, taking precedence over things you would otherwise spend time thinking about?

1      2      3      4      5      6      7      8      9

Not at all

A great deal

26. Please use this space to write anything that you think is important to help us understand what being the parent of a baby is like for you.

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## APPENDIX D

## Demographic Questionnaire

ID Code \_\_\_\_\_

1. What is your age? \_\_\_\_\_
2. Please state your ethnicity/race. \_\_\_\_\_
3. Gender of your child:      Male                  Female
4. Are you a student?      Yes                  No  
    If so what school do you attend? \_\_\_\_\_
5. What is the highest level of education you have completed? Please circle one.  
    Didn't complete    Currently in    Graduated                  Some College  
    High School        High School    from High School
6. Parent's Occupation:  
    Father \_\_\_\_\_  
    Mother \_\_\_\_\_
7. Does your child have a developmental delay or medical condition? Please circle one.  
    1) known                  2) suspected                  3) none