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## Influences of maternal parenting behaviors: Maternal mental health, attachment history and education

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INFLUENCES ON MATERNAL PARENTING BEHAVIORS:  
MATERNAL MENTAL HEALTH, ATTACHMENT  
HISTORY AND EDUCATION

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Psychology:  
Child Development

---

by  
Rebecca Socorro Carreon-Bailey  
September 2006

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## ABSTRACT

The purpose of this study was to examine factors influencing the quality of parenting a mother provides for her child(ren), particularly the relative impact of maternal attachment history, maternal mental health, and maternal education/knowledge of child development on quality of parenting behavior/parent-child relationships. It was expected that mothers' attachment history would directly and also indirectly influence her quality of parenting behavior and hence the parent-child relationship (with maternal education and maternal mental health acting as mediating variables). One hundred fifty mothers whose oldest (or only) child was between the ages of two and five years of age completed a questionnaire consisting of two measures for maternal mental health, two scales of maternal attachment history, three scales for maternal educational history, one measure for parenting behavior, and two measures for parent-child relationships. Overall, results showed that mothers' early attachment history impacted her subsequent parenting behavior (and quality of the parent-child relationship) by first impacting maternal mental health and maternal education/knowledge of child development. These findings suggest that the relationship between mother's attachment and the quality of parent

behavior/parent child relationship is mediated by maternal education/knowledge of child development and maternal mental health.

## ACKNOWLEDGMENTS

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DEDICATION

For my husband and sons:

David, Blake and Everett

Because of our never-ending support and love for each other as a family, we will continue to grow and accomplish great things always.

I love you!

For my parents:

Lily and Ernest Carreon

Thank you for believing in me even when I didn't believe in myself. Your unconditional love and support has helped make me who I am today.

Your loving daughter always

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## CHAPTER ONE

### INTRODUCTION

Studies have found that the type of parenting a child receives affects his or her subsequent development.

Furthermore, research has identified a number of variables which influence the type of parenting style mothers use to raise their children, e.g., a mother's attachment history, education level/knowledge of child development, and mental health. The purpose of this study is to investigate the relative influence of these factors on maternal parenting behavior.<sup>1</sup>

#### Impact of Quality of Parenting on Child Development

Research over the past 50 years on early parent-child attachment and parenting styles has demonstrated that maternal behaviors can significantly affect a child's development throughout his/her lifespan. Each of these areas of research is discussed in turn below.

#### Attachment Research

One of the first researchers to recognize the impact of the quality of mothering on a child's development was

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<sup>1</sup>While it is understood that both mothers and fathers influence children's development, the majority of primary caregivers are still mothers, hence the focus of the current study.

John Bowlby, a clinical psychiatrist. Bowlby's observations of infants deprived of normal "mothering" led him to conclude that the degree to which the child receives sensitive, responsive, and nurturing care between 0-3 years plays a crucial role in later development (Miller, 2002). Bowlby recognized that children who suffer maternal deprivation, i.e., they do not receive nurturant, warm, or responsive caregiving from their mother or they were separated from their mother, were at an increased risk for developing physical and emotional problems (Karen, 1990; Miller, 2002). Bowlby's work significantly altered the current thinking about a child's tie to his mother and the consequences of its disruption through separation, deprivation, and bereavement (Bretherton, 1992). He proposed that the way mothers interact with their children is of key importance in determining the child's subsequent development (Bowlby, 1969; Karen, 1990).

Over time, Bowlby's work attracted the attention of Mary Ainsworth, a clinical psychologist who collaborated with Bowlby and eventually conducted attachment research in a laboratory setting. She provided further confirmation that parenting behaviors do impact children's development: mothers who were sensitive, nurturing, and responsive to

their infant's needs, and familiar and articulate about their child's personality and routines, tended to have infants who were apt to feel secure, explore more, and cry less in the presence of their mother (Bretherton, 1992; Crain, 2000; Karen, 1990). These infants were ultimately classified as "securely attached". By contrast, mothers who were unpredictable and insensitive to their child's emotional cues, as well as uncertain in their ability to relate to the needs of their child, tended to have children who were extremely upset, distressed, clingy, demanding, and anxious (Cassidy & Shaver, 1999; Crain, 2000; Karen 1990). These infants were classified as "ambivalent". Finally, mothers who were emotionally unavailable, unresponsive, insensitive, neglectful, and rejecting, tended to have children who gave the impression of independence in that they portrayed little to no need of their mother as a secure base; however, underneath the façade they were anxious, unresponsive, and defensive (Crain, 2000; Karen, 1990). Ainsworth classified these infants as "avoidant" (Karen, 1990). Ainsworth concluded that when there are no changes in family circumstances, the attachment patterns formed in infancy are critical to a child's development of security, personality, and future relationships (Karen, 1990). Hence, children who develop a

secure attachment in early childhood generally continue to remain within the same attachment status during adolescence, whereas those with an insecure attachment tend to remain within this same insecure status (Jacobsen & Hofmann, 1997).

A secure attachment has a positive effect on children's readiness to explore the world throughout middle childhood and adolescence (Jacobsen, Edelstein, & Hofmann, 1994). Cognitively, securely attached children have a greater attention span, they participate more in school, adapt well to new experiences, are good at abstract thinking and deductive reasoning, obtain significantly higher grades throughout the school year, and are more confident in autonomous problem-solving skills (Jacobsen & Hofmann, 1997; Jacobsen, Edelstein, & Hofmann, 1994; Sroufe, 1983). They approach problems with more enthusiasm, are more persistent, and are more effective in using maternal assistance, e.g., they cooperate more and oppose less, and are ignored less by teachers (Sroufe, 1983). Compared to insecurely attached children, secure children are also more confident and have a greater sense of self-worth, which leads to high self-esteem (Cassidy, 1988). This high level of self-esteem promotes assurance in social settings, leading

secure children to approach new experiences with confidence and trust, to be more emotionally stable, to respond to others in a positive and empathic manner, and to have greater certainty regarding the exploration of their environment (Jacobsen & Hofmann, 1997; Jacobsen, Edelstein, & Hofmann, 1994; Sroufe, 1983). Hence, the quality of the attachment relationship lays the foundation for the sense of self; in particular, a secure maternal attachment in infancy is the basis upon which a person deals with intimate relationships in adulthood (Sroufe, 1983). Securely attached children tend to become happy, friendly, trusting, and successful adults who are respected and well-liked by others. They also tend to accept and support their partner, and their relationships last longer because they are more flexible and understanding (Colin, 1996).

Just as a secure attachment impacts a child's development from infancy through adulthood, so does an ambivalent pattern of attachment (Cassidy & Berlin, 1994). Ambivalent children are described as clingy and difficult by their teachers, primarily because they tend to seek attention in negative ways and constantly need assistance with self-help and management skills (Sroufe, 1983). They tend to be unpopular, have weak social skills, and have



problems coping with stress; over time, these issues present educational as well as classroom management problems (Sroufe, 1983). These children also have low self-esteem, are impulsive, and are overtly anxious and tense. As well, they have a low frustration tolerance and are easily over-stimulated, and they tend to be passive, weak, infantile, and fragile (Cassidy & Berlin, 1994). Socially, these children are often highly active, clingy, immature, overly dependent, and aggressive, and they tend to engage in power struggles with adults. They are also preoccupied with their attachment figures and therefore they tend to limit exploration, and in many cases they feel a sense of helplessness (Cassidy & Berlin, 1994; Karen, 1998; Sroufe, 1983). Adults classified as ambivalently attached tend to have emotional highs and lows; their experiences regarding intimacy involve obsession, extreme sexual attraction, and jealousy. They tend to have the most extreme, passionate, and neurotic sorts of love; they fall in love easily yet have the shortest relationships (Colin, 1996). Additionally, these adults tend to cling to their young children, attempting to derive security from them (Cassidy & Berlin, 1994). They are self-doubting, feel misunderstood and underappreciated, and are lonely (Colin, 1996).

In comparison, children with avoidant attachments tend to receive poor grades, have difficulties with problem-solving skills, participate less in class and with peers, have little concern for their teachers, show oppositional behavior, and are likely to doubt their social and academic abilities (Jacobsen & Hofmann, 1997; Karen, 1998). Their hostility, disconnectedness, and fear of abandonment result in low self-esteem and a tendency to be disliked by others (peers, teachers, extended family) (Cassidy & Berlin, 1994). Throughout middle childhood and adolescence, the identifying social patterns of avoidant children are reclusiveness, isolation, and withdrawal in the face of stress (Sroufe, 1983). They are low on peer interaction and leadership, and are often perceived as bullies (Sroufe, 1983). These children tend to grow to be defiant, aggressive, and hostile, thus placing them at a high risk for psychological problems (Sroufe, 1983). In adulthood, they are apprehensive regarding intimacy, they experience emotional highs and lows, and they tend to be jealous (Colin, 1996).

In the 1980's, Mary Main, a former student of Ainsworth, expanded on Ainsworth's research when she recognized that a percentage of children who exhibited an array of conflicted behaviors during the strange situation

test were "unclassifiable" (Main, 1996). Main revealed that during the years a child is attempting to develop an attachment to their mother, extremely negative parenting behavior is a major predictor of developing a psychopathology. In turn, this will cause a collapse of behavioral strategies, interfering with the child's affective, social, and cognitive information processing (Main, 1996; Soloman & George, 1999). Main classified this attachment relationship as "disorganized" (Main, 1996).

Mothers of children classified as disorganized show out-of-control, helpless, disconnected, and frightening behaviors toward their children that range from inconsistency and insensitivity to violent threats and physical abuse. Children raised in such an environment demonstrate an array of conflicted behaviors, including prolonged states of feeling abandoned or unprotected, rocking on hands and knees with face averted after an abortive approach, a freezing of all movement, and leaning their head against the wall when frightened (Blizard, 2003; Main, 1996; Hesse & Main, 1999; Soloman & George, 1999). Disorganized attachment behaviors are linked to disruptive, aggressive actions throughout middle childhood and adolescence (Main, 1996). These children are fearful and worried about how they are judged by others,

preventing them from engaging in cognitive transactions with their surrounding environment (Jacobsen, Edelstein, & Hofmann, 1994). They have a negative self-concept, view themselves as flawed and unimportant, wrongly underestimate their own ability and values, and lack confidence. This places them in a vulnerable position when approaching new people and situations (Cassidy, 1988; Jacobsen, Edelstein, & Hofmann, 1994; Jacobsen & Hofmann, 1997). Disorganized children have diminished persistence, are agitated, and have high anxiety, all of which interfere with their willingness to explore new situations. They are apprehensive of how others will respond to them, and they are insecure about their own abilities and values (Jacobsen, Edelstein, & Hofmann, 1994). Disorganized attachment causes lower attentional capacity as well as restricting and/or altering the child's cognitive development, leading to poor cognitive functioning and even deficits in formal reasoning (Blizard, 2003; Hesse & Main, 1999; Jacobsen, Edelstein, & Hofmann, 1994; Main, 1996). Main concludes that a disorganized maternal attachment relationship heavily influences a child's development, which ultimately affects the way a child will parent her own children (Bornstein & Lamb, 1999).

## Baumrind's Research on Parenting Styles

In the 1960's, Diana Baumrind began investigating the associations between childrearing patterns and children's developmental outcomes. She distinguished four patterns of parenting that reflect positive and negative valences of potential warmth and control: Authoritative, Authoritarian, Permissive Indulgent, and Permissive Neglectful (Baumrind, 1967). Baumrind described "authoritative" parents as sensitive, nurturing, flexible, and responsive; they affirm the child's qualities, set limits, and model standards for future conduct (Baumrind, 1973). Due to this affirmation, these children tend to be self-reliant, have higher self-esteem, are more independent, explore more, and are more empathetic (Baumrind & Black, 1967). In contrast, "authoritarian" parents are aggressive, forceful, discourage verbal negotiation, and are restricting of their child's autonomy (Baumrind, 1973). Children of these parents tend to be anxious and withdrawn; they have low-self esteem, little achievement and exploratory motivation, and higher rates of anger (Baumrind & Black, 1967; Baumrind, 1973; Bornstein & Lamb, 1999). "Permissive indulgent" parents are warm and accepting, but in turn are also inattentive and overindulgent, which places them in a position of

little control (Baumrind, 1973). Children raised in this environment tend to behave in an immature and irresponsible manner, have little to no control over their impulses, and are overly dependent on and demanding of adults (Baumrind & Black, 1967). Finally, "permissive neglectful" parents are rejecting and display little commitment to their role as a caregiver due to stress and/or depression (Baumrind, 1973). Children of permissive neglectful parents tend to be noncompliant, aggressive, dependent, and impulsive (Baumrind, 1967).

Summary. In sum, studies collectively show that mothers who are warm, nurturing, and responsive tend to set their children on a course for optimal development. Conversely, mothers who neglect, abuse, and/or are unresponsive or are overly harsh tend to have children who display significant deficiencies in their social, cognitive, and emotional growth and development throughout the lifespan. Since the parenting style a mother employs has such a significant affect on her child's development, it is important to more clearly understand the factors that impact the quality of parenting a mother is able to provide for her child(ren).

## Influences on Parenting Behavior

Studies have identified several factors which significantly influence a mother's parenting behavior: mental health, attachment history, education level/knowledge of child development.

Maternal Mental Health. Studies have found that mothers who suffer from poor mental health (e.g., depression, anxiety, substance abuse, and personality disorders) are less capable of providing quality care for their child. Each of these mental health domains and their respective impact on parenting behaviors are discussed in detail below.

Depression includes experiencing a depressed mood, loss of pleasure, apathy, low energy, sleep and appetite problems, and negative view of oneself and the future (Gurian, 2003). These behaviors make mothers irritable, preoccupied, uninterested in others, and they tend to view the world more negatively than non-depressed individuals (Field, 1995). Depression may cause mothers to think and act in ways that decrease their childrearing effectiveness (Gelfand & Teti, 1990). They are more likely to have difficulty nurturing others, being a role-model, and guiding their children through life's issues; as well they tend to be less aware of and/or less sensitive to meeting

their child's emotional cues (Field, 1995; Gurian, 2003). They are unable to track their child's physical activities, including protecting their child from such potential hazards as choking, drowning, burns, or even death (Gelfand & Teti, 1990). Depressed mothers who are fatigued, hostile, and angry are also more likely than non-depressed mothers to be intrusive, controlling, less attentive, and chronically negative (Gauvain & Cole, 2004). They have difficulty setting limits and asserting authority, yet they tend to display harsh authoritarian discipline practices (Gauvain & Cole, 2004; Gelfand & Teti, 1990; Gurian, 2003).

Depression in mothers has been associated with poor physical, mental, and emotional development in children (Gelfand & Teti, 1990; Gurian, 2003). Children of depressed mothers tend to be touched less (Field, 1995), are less active, display fewer contingent responses, and participate in less game-playing compared to their non-depressed counterparts (Field, Sandberg, Garcia, Vega-Lahr, Goldstien, & Guy, 1985; Zuckerman, Buachner, Parker, & Cabral, 1990). Studies indicate that children of mothers with persistent depressive symptoms experience the greatest risk of behavior problems compared to non-depressed mothers (Civic & Holt, 2000). Since these



children are deprived of stimulation and arousal modulation (Field, 1992), they show difficulties in mastering age-appropriate developmental tasks, and they tend to be anxious, drowsy, passive, temperamentally difficult, and less able to tolerate separation (Field, 1992; 1995; Gurian, 2003). They also tend to show less frequent positive facial expressions and vocalizations, and instead display sadness and anger, and are more likely to be aggressive, irritable, and noncompliant (Field, 1984; Gauvain & Cole, 2004; Zuckerman, Bauchner, Parker & Cabral, 1990).

A second mental health domain that impacts mothers' abilities to interact with their children is anxiety. Anxious people tend to feel pervasive and unpleasant feelings of tension, dread, apprehension, and impending disaster. Whereas fear is a response to a clear and present danger, anxiety is often a response to an undefined or unknown threat which may stem from internal conflicts, feelings of insecurity, and/or forbidden impulses (Corsini, 2002; Maxmen, 1986; Moore, Whaley, & Sigman, 2004). Mothers who are anxious tend to grant their children less autonomy and criticize more than mothers who are not anxious (Whaley, Pinto, & Sigman, 1999). These mothers usually expect negative outcomes, and they express

these predictions while conversing with their children (Moore, Whaley, & Sigman, 2004). As well, they often do not participate in recreational and social activities with their children, and they tend to be poor in their communication and problem solving abilities (Whaley, Pinto, & Sigman, 1999). As a result, the home environment is more likely to be conflicted and controlling, and lacking in familial support and cohesion (Whaley, Pinto, & Sigman, 1999).

Studies have found that children of parents who provide low warmth, high criticism, and high control have been consistently associated with anxiety disorder itself (Moore, Whaley, & Sigman, 2004). Anxious mothers tend to parent with a distinct lack of warmth and nurturing, and they are more likely to model fearful cognitive styles that may be imitated by their children (Dadds, Barrett, & Rapee, 1996; Turner, Beidel, & Costello, 1987; Turner, Beidel, & Epstein, 1991) and lead to an increased likelihood for these children to develop an anxiety disorder themselves (Moore, Whaley, & Sigman, 2004). Additionally, children of anxious mothers tend to be more fearful, aggressive, and endorse less control than children of non-anxious mothers (Whaley, Pinto, & Sigman, 1999). Compounding this, research shows that mothers of

anxious children are less warm toward them, regardless of their own personal anxiety level (Moore, Whaley, & Sigman, 2004).

Excessive anxiety is a common problem facing youth that can harm them in many areas of their lives, including school performance and social-functioning (Wood, 2006). Children with anxiety disorders may perform below their ability level in school, which can lead to lower grades on report cards. These children also tend to be overly reticent in social situations, and may avoid peer interaction or act in a less competent manner when around peers because of preoccupation with threat and an inability to focus on the social cues at hand (Wood, 2006).

A third mental health domain that impacts a parent's ability to interact with her child is substance abuse. Substance abuse is defined as being dependent on an addictive substance such as alcohol, illegal and/or prescription drugs, and/or tobacco (Corsini, 2002). It is estimated that up to 15% of all American women between 15 and 44 years of age abuse such substances (Conners, Bradley, Mansell, Liu, Roberts, Burgdorf, & Herrell, 2003). Substance abuse alters a person's state of mind, and leads to significant impairment and distress when it

comes to fulfilling role obligations at work, school, or home (DSM-IV, American Psychiatric Association, 2000; Riggs & Jacobvitz, 2002). Substance abuse is often associated with unresolved trauma, violence, family separations, suicidal behavior, mental illness, and unemployment (Christoffersen & Soothill, 2003; Riggs & Jacobvitz, 2002). Substance-abusing mothers are not consistently available to make children feel loved, wanted, secure, or worthy (Sicher, 1998). They are less accessible and responsive to their children, and are less likely to take their children's thoughts and opinions seriously. They also show less affectionate touching, provide less adequate care and supervision, and are less likely to display any confidence in their children's abilities (Mundal, VanDerWeele, Berger, & Fitsimmons, 1991; Sicher, 1998). Additionally, substance abusers tend to be harsh with punishment strategies, and are more likely to yell, shout, curse, hit, and spank their children (Sicher, 1998).

Children of substance abusing mothers are at high risk for developing biological, developmental, and behavioral problems, including the possibility of developing substance abuse problems of their own (Conners, Bradley, Mansell, Liu, Roberts, Burgdorf, & Herrell,

2003). Children of these mothers stay in the hospital longer after birth, are in intensive care more frequently, and tend to be more withdrawn and irritable compared to children of non-users (Mundal, VanDerWeele, Berger, & Fitsimmons, 1991). They are less likely to feel loved and cared for by their parents, incur more physical abuse, and are at higher risk for feeling physically and emotionally neglected (Sicher, 1998). Children of substance-abusing mothers have a history of inadequate attachments beginning in childhood and carrying on through adulthood (Sicher, 1998). They have difficulty feeling comfortable with closeness and intimacy, and they fear abandonment and non-requited love in relationships (Sicher, 1998). Furthermore, they also have higher levels of anxiety (Sicher, 1998). Their increased feelings of guilt, loneliness, and anxiety often result in a dislike of school, receiving lower grades, skipping class, and dropping out (De Haan & Trageton, 2001; Sicher, 1998). They tend to experience difficulty with self-regulatory processes such as aggression directed towards themselves and/or others, which is brought on by their inability to control feelings of rage, anger, or sadness (Christoffersen & Soothill, 2003; Miller, & Stermac, 2000). All of this contributes to higher rates of

attempted suicide, drug addiction, and teen-age pregnancy in children of substance-abusing parents compared to children of non-users (Christoffersen, & Soothill, 2003; Miller, & Stermac, 2000).

In addition to depression, anxiety, and substance abuse, a fourth mental health domain impacting a mother's ability to interact with her child is the presence of a personality disorder, i.e., long-term behavioral anomalies characterized by maladaptive patterns of perceiving, relating to, and thinking about the environment and others (Maxmen, 1986). Such disorders tend to impair one's social and occupational functioning (Corsini, 2002; Maxmen, 1986). Personality disorders are among the most common of the severe mental disorders, and are often associated with other illnesses such as substance abuse and depression (Brennan & Shaver, 1998; DSM IV, American Psychiatric Association, 2000).

The Diagnostic and Statistical Manual of the American Psychiatric Association (2000) collapses personality disorders into three "clusters," Eccentric, Dramatic, and Anxious. Each of these is discussed in turn below, along with any available information regarding how these disorders may impact parenting.

First, Eccentric Personality Disorders include Paranoid, Schizoid, and Schizotypal classifications. Persons with "Paranoid Personality Disorder" are described as suspicious, aloof, lacking of empathetic feelings, and fearful persecution by others (DSM IV, American Psychiatric Association, 2000). Those who are diagnosed with "Schizoid Personality Disorder" tend to retreat from others and are more likely to isolate themselves from family and friends (Brennan & Shaver, 1998; DSM IV, American Psychiatric Association, 2000). Finally, persons with "Schizotypal Personality Disorder" behave in inappropriate or constricted ways, tending to avoid eye contact with others (DSM IV, American Psychiatric Association, 2000). Because it is nature of these disorders to be devoid of interest in human interaction (Brennan & Shaver, 1998), persons with Eccentric Personality Disorders are less likely to become parents than individuals within the Dramatic and Anxious Personality Disorder clusters (McClure, 2004).

Second, persons in the Dramatic Personality Disorder (Antisocial, Borderline, Histrionic, and Narcissistic) cluster typically have unstable emotions, distorted self-perceptions, and difficulty functioning at home, work, and in relationships (DSM IV, American Psychiatric

Association, 2000). Parents with "Antisocial Personality Disorder" display irresponsible and aggressive behaviors towards their child which often results in minimal hygiene of their child, malnutrition, and frequent illness (DSM IV, American Psychiatric Association, 2000). Children raised by parents having this disorder often disregard and violate the rights of others before the age of 15 (DSM IV, American Psychiatric Association, 2000). Parental rejection, harsh discipline, and inadequate control lead the child to destroying property, harassing others, stealing, and becoming manipulative for profit and/or pleasure (Brennan & Shaver, 1998).

Parents classified as having "Borderline Personality Disorder" tend to have an inadequate capacity to represent a normal state of mind and regulate their emotions (Fonagy, Target, Gergely, Allen, & Bateman, 2003; Riggs & Jacobvitz, 2002). These parents display incompetent behaviors and are consistently neglectful (Cassidy & Shaver, 1999). Mothers with BPD usually produce a disorganized or avoidant-resistant attachment with their child (Colin, 1996), and their children often display violent behavior and have problems differentiating reality from fantasy (Fonagy, Target, Gergely, Allen, & Bateman, 2003).



Individuals with "Histrionic Personality Disorder" typically display excessive emotionality, e.g., overreacting to others; they are often perceived as shallow and self-centered. Their actions are directed toward obtaining immediate personal satisfaction, and they commonly pose suicidal threats to gain attention (DSM IV, American Psychiatric Association, 2000). The nature of this personality disorder tends to cause disruption regarding the mother-child relationship (Herman, Perry & van der Kolk, 1989). The child becomes confused, and grows to develop increasingly maladaptive patterns of coping (Brennan & Shaver, 1998).

Persons with "Narcissistic Personality Disorder" are generally characterized as arrogant, snobbish, and display a patronizing attitude towards others (DSM IV, American Psychiatric Association, 2000). They have a grandiose view of themselves, a need for admiration, and they lack empathy (DSM IV, American Psychiatric Association, 2000). Children raised by a narcissistic mother typically experience feelings of confusion, helplessness, defensiveness, and shame (Karen, 1998).

Third, individuals diagnosed within the Anxious Personality Disorder (Avoidant, Dependent, and Obsessive-Compulsive) cluster usually appear apprehensive

or fearful, and they have difficulty functioning at home, work, and in relationships (DSM IV, American Psychiatric Association, 2000). Those with "Avoidant Personality Disorder" are socially inhibited, feel inadequate, and are overly sensitive to criticism and possibly social rejection. As well, they withhold intimate feelings for fear of being exposed, ridiculed, or shamed (DSM IV, American Psychiatric Association, 2000). Individuals with "Dependent Personality Disorder" show an extreme need to be taken care of: they display a fear of separation along with passive, clinging behavior. They feel uncomfortable or helpless when alone, lack self-confidence, and have difficulty making daily decisions (DSM IV, American Psychiatric Association, 2000).<sup>2</sup> Finally, persons with "Obsessive-Compulsive Personality Disorder" insist that everything go their way, and they tend to maintain a sense of control by focusing on rules, details, lists, and schedules (Corsini, 2002; DSM IV, American Psychiatric Association, 2000). They display high levels of expressed emotion, are critical and over-involved, yet they provide minimal emotional support and closeness toward others

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<sup>2</sup>*There has been very little research regarding the parent-child relationship within Avoidant and Dependent personality disorders.*

project negative feelings and behaviors onto their children, undermining their children's self-esteem and interfering with normal developmental processes.

Overall, parents within the Dramatic and Anxious Personality Disorder clusters are inflexible and self-centered in their behavior and responses toward their children. This rigid style of relating makes them less able to adjust to their child's developmental needs and less likely to be in dynamic synchrony with their children (DSM IV, American Psychiatric Association, 2000; McClure, 2004). Children raised in these types of environments tend to have, at a minimum, an insecure mother-child relationship, which hinders the child's cognitive, social, and emotional development (Brennan & Shaver, 1998).

While personality disorders are an important influence regarding parenting behaviors, the current study will be limited to looking at depression, anxiety, and substance abuse.

Maternal Attachment History. Another factor found to influence the quality of parenting behavior and, consequently, the nature of the mother-child relationship, is the mother's attachment history. Studies show, for example, that parents who were *securely attached* early in life display higher levels of warmth and positive affect

towards their own child (Adam, Gunnar, & Tanaka, 2004). They express more joy and pleasure with parenting behaviors, such as acknowledgement of successful accomplishments and communication of their love (Slade, Belsky, Aber, Phelps, 1999; NICHD, 2000). They are encouraging, supportive, flexible, positive, affectionate, available, responsive, and sensitive to their own child's feelings (Cassidy & Shaver, 1999; Levy, Blatt, & Shaver, 1998).

On the other hand, the behavior of mothers classified as insecurely attached early in life varies according to the type of maladaptive parenting they experienced (Adam, Gunnar, & Tanaka, 2004). For example, women who were raised in an *avoidant* manner early in life tend to become "dismissing" towards their own children, providing for their basic needs yet neglecting their child's emotional needs (Slade, Belsky, Aber, & Phelps, 1999). They may also dismiss and/or devalue their child's attachment needs, providing little to no emotional support (Cassidy & Shaver, 1999). These mothers are often indifferent, aloof, and allow minimal bodily contact (Levy, Blatt, & Shaver, 1998). They tend to be insensitive and rejecting, which in turn leads the child to perceive himself as unlovable (Blizard, 2003). Alternatively, mothers classified as

*ambivalently attached* as young children subsequently become "preoccupied" towards their own children. They tend to be self-absorbed and display anxious behaviors such as rambling on about irrelevant topics and/or losing track of their thoughts (Riggs & Jacobvitz, 2002). They place their own needs before their child's, are insensitive toward their own child's emotional cues, and are uncertain and confused in their ability to communicate and relate to the needs of their child (Cassidy & Shaver, 1999; Levy, Blatt, & Shaver, 1998). These children, in turn, tend to feel uncertain of their lovability, and they grow to become preoccupied due to their constant, futile aim to please their mother (Blizard, 2003). Finally, mothers classified as *disoriented/disorganized* in regard to their attachment history tend to become "unresolved/disorganized" with their own children by displaying disconnecting and frightening behaviors, e.g., insensitivity, intrusiveness, neglect, isolation, and terror (Blizard, 2003; Hesse & Main, 1999; Solomon & George, 1999). These threatening behaviors produce confusing, disorganizing, and disorienting effects in the child, leading to the child's inability to remain organized under stress (Solomon & George, 1999).

Based on their interactions with caregivers during early life, babies as young as *six months* of age construct "internal working models" of relationships, which are cognitive representations of themselves and others (Bowlby, 1973). These in turn shape their subsequent expectations about relationships, their social information processing, and they contribute to their developing working models of interpersonal relationships (Bowlby, 1973). Once formed, these representations instinctually guide the infant's (and later the child's) behavior in new situations and impacts later mental health status (Belsky, Campbell, Cohn, & Moore, 1996; Hesse & Main, 1999, Teicher, 2002; Slade, Belsky, Aber, & Phelps, 1999). This working model also subsequently impacts parent's ability to care for and empathize with his/her own children (Belsky, Campbell, Cohn, & Moore, 1996). In other words, we parent how we were parented (Karen, 1990).

#### Maternal Education/Knowledge of Child Development.

Studies have found that the mother's educational background also influences their child's development. Although parents are directly responsible for establishing a sound base for their child's lifetime physical, social, intellectual, and emotional development, most parents from *all* social classes are relatively unprepared because they

do not have all the knowledge needed for the difficult task of parenting (Vukelich & Kliman, 1985). Also, mothers' knowledge about child development guides her interactions with her child, which subsequently affects their child's developmental outcomes (Tamis-Lemonda, Chen, & Bornstein, 1998; Tamis-Lemonda, Shannon, & Spellmann, 2002). In general, the higher education level/knowledge of child development a mother has, the better the foundation for optimizing her child's growth and development (Benasich & Brooks-Gunn, 1996).

Research suggests that maternal knowledge about the processes of child development influences the way mothers understand the behavior of their children and how they interact (Miller, 1988). Mothers who have accurate conceptions of their child's abilities have a positive influence on their child's development (Miller, 1988). Mothers with this knowledge are more familiar with developmental milestones, more sensitive to their child's initiatives, exhibit more face-to-face interaction, provide more adequate care, manifest more accurate developmental expectations, and support their child's autonomy, all of which has a positive effect on their caregiving skills (Benasich & Brooks-Gunn, 1996; Damast, Tamis-LeMonda, & Bornstein, 1996; Stevens, 1984). Studies

indicate that mothers who are knowledgeable about general developmental sequences are likely to create an environment that is appropriate to their children's developing abilities (Tamis-LeMonda, Chen, & Bornstein, 1998). The greater a mother's knowledge of child development, the greater her ability to design a supportive learning environment, such as providing age-appropriate toys, reading to her children often, talking with her child, and actively assisting in her child's play on a sophisticated level (Benasich & Brooks-Gunn, 1996; Demast, Tamis-LeMonda & Bornstein 1996; Stevens, 1984). This type of structured home environment, along with appropriate parent-child interaction, stimulates and supports the child's exploratory competence as well as his physical, emotional, and cognitive development (Benasich & Brooks-Gunn, 1996; Demast, Tamis-LeMonda, & Bornstein 1996; Stevens, 1984).

In comparison, a mother's lack of knowledge regarding child development also impacts her child's ability to develop at an optimal level (Stevens, 1984). Educators who have offered parent education classes for mothers often hear the comment that "the ones who need it the most aren't here" (Vukelich & Kliman, 1985). Mothers who are less knowledgeable about children's developmental



processes sometimes overestimate their child's developmental and behavioral capabilities, thus believing their child to be "lazy" or "developmentally delayed" (Stoiber & Houghton, 1993; Vukelich & Kliman, 1985). Mothers with limited education also tend to demand a great deal from their children; they have unrealistic expectations regarding their child's development, and they become frustrated when these expectations are not met (Twentyman & Plotkin, 1982). These unrealistic expectations undermine the child's competence, which in turn causes the mother to interact more negatively with her child (Miller, 1988; Stoiber & Houghton, 1993).

A mother's *overall* educational level significantly affects her knowledge pertaining to child development (Vukelich & Kliman, 1985). Studies indicate that the quality of parenting is directly fused to a mother's educational level (Stoiber & Houghton, 1993); mothers with higher education are more sensitive and positively engaged with their child when compared to mothers who have limited education (NICHD, 1999). An education level exceeding high school appears to be a powerful buffer against problematic parenting (Lerner & Alberts, 2004). These mothers are likely to use various legitimate sources to obtain answers to questions pertaining to their child's development, such

as books, magazines, professional advice, and parent-education groups (Vukelich & Kliman, 1985).

In contrast, mothers with an education level of high school or lower tend to utilize family, friends, neighbors, mothers, and/or grandmothers as sources of getting their child-rearing questions answered; these people are potentially unreliable sources of information related to child development, thus many of the myths and inaccurate assumptions about child care and childrearing tend to be perpetuated from one generation to the next (Vukelich & Kliman, 1985). Lower educational level of the mother is also associated with low maternal responsiveness and the lack of an enriched home environment. Both of these conditions lead to negative responsive behaviors from the mother, such as inappropriate, intrusive, and/or inconsistent styles of interaction and discipline resulting in poor developmental progress in the child (Serbin, Peters, McAffer, & Schwartzman, 1991). They respond harshly or negligently, disregarding their child's needs, and their lack of nurturance towards their child may result in child maltreatment (Azar, Robinson, Hekimian, & Twentyman, 1984; Twentyman & Plotkin, 1982). This maltreatment and lack of parental nurturance leads to

a continued cycle of abuse and neglect towards future generations of children (Twentyman & Plotkin, 1982).

#### Summary and Purpose of Study

To date, studies have examined the impact of maternal behavior on children's development and overall well-being. However, since maternal parenting behaviors have such a significant effect on children's development, it is imperative to thoroughly understand the factors that influence the quality of parenting a mother provides to her child(ren). Current studies have examined influences on parenting behavior from a simplistic perspective, but they fail to examine the relationship between a multitude of factors such as maternal mental health (e.g., depression, substance abuse, and personality disorders), attachment history, and education level/knowledge of child development on parenting behavior/parent-child relationships. The purpose of this study is to empirically examine the *relative* impact of these three influences on parenting behaviors, as well as the interrelationship that these factors have with one another.

Hypothesis. It is expected that the quality of mothers' attachment history will both directly and also indirectly influence the quality of parenting behavior/parent-child relationship (with maternal

education/knowledge of child development and maternal mental health acting as mediator variables), (Figure 1).

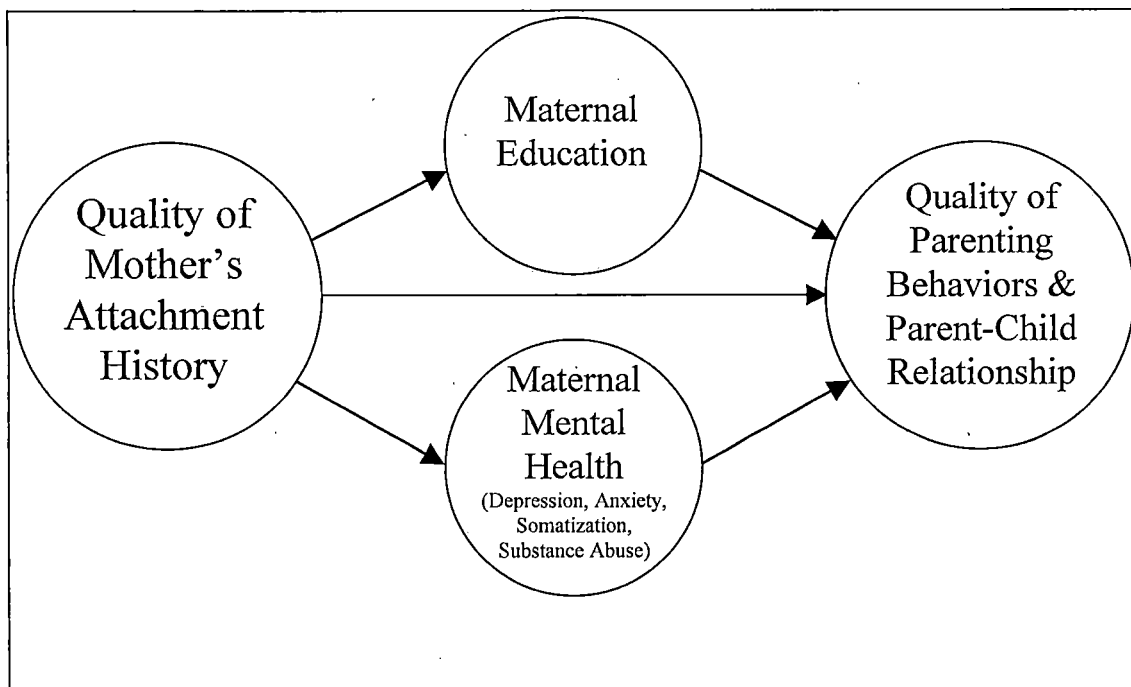


Figure 1. Hypothesized Model

## CHAPTER TWO

### METHOD

#### Participants

Participants consisted of 150 mothers whose oldest (or only) child was currently between the ages of 2 to 5 years. The mothers ranged in age from 18 to 43 years old ( $\bar{X}$  = 27 yrs.) and were recruited from colleges, work environments, and local community organizations (e.g., local Head Start programs) that provide services to mothers of young children throughout several medium-sized southwestern communities. Participants were predominantly Hispanic (54.7%) from lower-middle class backgrounds based on participants' level of education (Table 1).

Table 1. Participants' Demographic Information

Demographic	Percent
Age	
18-25	54.0%
26-33	30.0%
34-43	15.9%
$\bar{X}$ = 27	
Marital Status	
Single	35.3%
Married	50.7%
Separated/Divorced	10.0%
Other	4.0%
Ethnicity	
Asian	3.3%
African American	15.3%
Caucasian	22.7%
Hispanic	54.7%
Other	4.0%

Demographic	Percent
<b>Education of Participant</b>	
Did Not Complete High School	10.7%
High School Graduate	40.0%
Trade School	4.0%
Some College / AA Degree	27.3%
4-Year Degree	11.3%
Some Graduate School	1.3%
Graduate Degree	5.3%
<b>Child Development Classes</b>	
Zero (0)	54.0%
One (1)	17.3%
Two (2)	6.7%
Three (3)	6.7%
Four (4) or more	15.3%
<b>Participant's Primary Caregiver</b>	
Mother	56.0%
Father	15.3%
Mother and Father	20.0%
Grandmother	7.3%
Grandmother and Grandfather	0.7%
Aunt	0.7%
<b>Educational Level of Participant's Father</b>	
Did Not Complete High School	26.7%
High School Graduate	36.0%
Trade School	8.0%
Some College / 2-year Degree	15.3%
4-Year Degree	6.0%
Some Graduate School	0.7%
Graduate Degree	3.3%
Unknown	4.0%

### Measures and Procedure

A questionnaire comprised of the following measures was compiled and distributed to participants.

#### Maternal Mental Health

Two measures were used to assess maternal mental health: the Brief-Symptom Inventory (Derogatis, 2001) and a measure of use of legal/illegal substances created for this study.

The Brief-Symptom Inventory-18 (BSI-18) was designed to screen for depression (e.g., feeling lonely, unworthy), anxiety (e.g., feeling restless, tense), and somatization (e.g., feeling weak, nausea) symptoms (Derogatis, 2001) (Appendix A). Mothers were instructed to rate how often they had experienced each item of psychological distress over the last seven days on a 5-point Likert-type scale (1 = not at all; 5 = extremely). The BSI-18 has good internal consistency ( $\alpha = .89$ ). Greater scores indicate higher levels of psychiatric symptoms.

To assess mothers' use of legal/illegal substances, items were created for use in the current study which assessed drug and alcohol use during pregnancy, after the birth of her child, and within the last thirty days (Appendix B). Item ratings were collapsed and totaled for participants with greater scores indicating higher usage of legal/illegal substances.

#### Maternal Attachment History

To assess participants' attachment history, two scales were used. The first scale was the Maternal Attachment Scale from the 25-item Inventory of Parent-Peer Attachment (IPPA) (Appendix C). The theoretical framework for the development of this scale is Bowlby's (1969) theory of attachment security. The IPPA assesses

participant's relationship to her own mother while she was growing up (Armsden & Greenberg, 1987). Items are rated on a 5-point Likert-type scale (1 = almost never or never true; 5 = almost always or always true). The IPPA has good internal consistency ( $\alpha = .91$ ), with higher scores indicating greater attachment security.

The second attachment assessment scale used was the Relationships Attitudes Scale (RA) (Simpson, Rholes, & Nelligan, 1992) (Appendix D). The 13 items in this scale are based on the three major styles of attachment (secure, anxious/avoidant, and anxious/ambivalent) and the notion that continuity of relationship style is due in part to mental models (Bowlby's "internal working model") of self and social life. Participants responded to each item on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree). The RA alpha coefficients range from .61 to .81. The RA alpha coefficients range from .61 to .81. Only the secure scale was used in the current study with higher scores indicating secure attachment style.

#### Maternal Educational History

To assess participants' knowledge of child development, the survey instrument "Knowledge of the What Grown-Ups Understand About Child Development" (ZERO TO THREE, 2000) was used (Appendix E). This survey measures



the level of accurate knowledge parents have about child development issues (newborn to age six) pertaining to expectations, spoiling, discipline, and general developmental knowledge. Higher scores indicate greater knowledge of child development.

In addition, the Background Information form (Appendix I) was used to assess mother's educational level and number of child development courses completed. Higher scores indicate highest level of education attained and amount of formal knowledge of child development.

#### Maternal Parenting Behavior

To assess parenting style, the Parental Authority Questionnaire-Revised (PAQ-R) was used (Appendix F). This 30-item scale is based on Baumrind's descriptions of the three parenting styles prototypes (Reitman, Rhode, Hupp, & Altobello, 2002). This scale includes three 10-item subscales representing the authoritative (warm, sensitive, and nurturing), authoritarian (aggressive and harsh), and permissive (warm yet overindulgent) parenting styles. Items are rated on a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree). The internal consistency of the PAQ-R alpha ranges from .72 to .76, with higher scores indicating greater levels of parental prototypes.

### Quality of Mother-Child Relationship

To assess the *quality* of mother-child relationship<sup>3</sup>, two scales were used.

The first scale was the Index of Parental Attitudes (IPA). This 25-item scale is designed to measure the degree or magnitude of parent-child relationship difficulties reported by a mother (i.e. trust, discipline) (Hudson, 1992) (Appendix G). Items are rated on a 5-point Likert-type scale (1 = rarely or none of the time; 5 = most or all of the time). Reliability is .90 and validity is .60 and greater. Higher scores indicate a higher level of perceived difficulties in the mother-child relationship.

In addition to the above, the Parent-Child Relationship Scale (PCRS) was used (Appendix H). This 30-item scale assesses the parent's feelings and beliefs about his/her relationship with her child (e.g., how warmly parents view their relationship with their child) (Pianta, 1994). The PCRS asks parents to rate items on a 5-point, Likert-type scale (1 = definitely does not apply; 5 = definitely applies). Alpha coefficients range from .81

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<sup>3</sup> *There are currently no pencil-paper scales that assess the quality of mother- (preschool-aged) child attachment. In place of this, we are using two scales that measure the degree of problems in the parent-child relationship plus warmth towards the child.*

to .87 (Pianta, 1994). Higher scores indicate a more positive parent-child relationship.

#### Background Information

Finally, participants were also asked to report basic background information including age, sex, marital status, amount of completed child development courses, and highest level of education completed (Appendix I).

## CHAPTER THREE

### ANALYSES AND RESULTS

The means and standard deviations were computed for the maternal mental health, maternal attachment history, maternal education/knowledge of child development, and quality of parenting behavior/parent-child relationship variables (Table 2).

Table 2. Scales, Definitions, Means, and Standard Deviations

Scale	Definition	Score Guide	Mean	Standard Deviation
<u>Maternal Mental Health:</u>				
a) Brief Symptom Inventory (BSI)	General measure of psychological distress including depression, somatization, and anxiety	Greater scores indicate higher levels of psychiatric symptoms	27.1	11.0
b) Use of Legal and Illegal Substances (a)	Assesses mother's use of legal and illegal substances (during pregnancy, after birth of child, and in last 30 days)	Greater scores indicate higher usage of legal and/or illegal substances	19.4	4.4
<u>Maternal Attachment History:</u>				
a) Maternal Scale of Inventory of Parent Peer Attachment (IPPA)	Measures quality of early attachment security of participant to her mother	Higher scores indicate higher levels of attachment security	88.9	21.3
b) Relationship Attitude (RA): Secure Attachment (b)	Measures extent of mother's current secure attachment style (based on early attachment history)	Higher scores indicate secure attachment style	30.2	6.1

Scale	Definition	Score Guide	Standard	
			Mean	Deviation
Anxious Attachment	Measures extent of mother's current anxious attachment style (based on early attachment history)	Higher scores indicate anxious attachment style	22.8	4.7
<u>Maternal Educational History:</u>				
a) Mother's Knowledge of Child Development	General measure of mother's knowledge about child development	Higher scores indicate greater knowledge of child development	32.4	9.1
b) Number of Child Development Courses Completed	Number of child development courses completed by mother	Higher scores indicate greater number of courses completed	3.0	1.6
c) Socio-Economic Status (SES) Mother	Level of completed education	Higher scores indicate higher level of education achieved	3.0	1.6
Mother's mother			2.6	1.6
Mother's father			2.7	1.8
<u>Parenting Behavior:</u>				
a) Parental Authority Questionnaire-Revised (PAQ-R)	Assesses three parenting styles of mother toward her own child	Higher scores indicate greater levels of each parental prototype		
Authoritarian Parenting Style (harsh, restricting)			32.7	5.5
Authoritative Parenting Style (responsive, sensitive)			38.2	4.7
Permissive Parenting Style (accepting, inattentive)			25.4	5.3
<u>Quality of Mother-Child Relationship:</u>				
a) Index of Parental Attitudes (IPA)	Measures the degree or magnitude of difficulties a mother has with her child (i.e., trust, discipline, feelings)	Higher scores indicate higher levels of perceived difficulties in the mother-child relationship	37.8	9.0
b) Parent-Child Relationship Scale (PCRS)	Assesses mother's perceptions of her relationship towards her child	Higher scores indicate a more positive parent-child relationship	57.9	9.1
(a) The use of this measure was exploratory as only 50 of the of the 150 participants in this study completed the scale.				
(b) Since the avoidant subscale score was inverse of the secure score, it was not included in Tables 2 and 3.				

It was anticipated that the quality of mothers' attachment history would be influenced by the quality of parenting behavior/parent-child relationships, both

Table 3. Correlations between Mothers Characteristics and Mother Caregiving Quality

	Authoritarian Parenting (PAQH)	Authoritative Parenting (PAQA)	Permissive Parenting (PAQP)	Difficulties With Mother's Relationship With Child (PARATT)	Positive Perception by Mother of Relationship With Child (PCRSTOT)
Mother Characteristics:					
1) Maternal Mental Health					
Mother's level of psychiatric symptoms (BSI)	.02	-.31***	.01	.41***	-.43***
Mother's use of legal and illegal substances (a) (SUBABUSE)	-.12	.02	-.05	.08	.05
2) Maternal Attachment History					
Mother's (global) attachment security with her own mother (IPPA)	.20*	.30***	-.19*	-.20*	.24**
Mother's current attachment style: secure (SEC)	-.05	.11	-.11	-.25**	.27***
Mother's current attachment style: anxious (ANX)	.08	-.22**	.14	.31***	-.30***
3) Maternal Educational History					
Mother's level of child development knowledge (CDTOTAL)	-.20*	.34***	-.13	-.42***	.43***
Mother's completion of child development courses (CDCLASS)	-.08	.16*	-.05	-.24**	.23**
Socio-Economic Status (SES) (based on highest level of education attained)					
Mother (EDUC)	-.22**	.05	-.11	-.26**	.21**
Mother's mother	-.01	-.05	-.19*	-.11	.13
Mother's father	.04	-.02	-.21*	-.11	.05
(a) Out of 150 participants, only 49 completed these items within this section making the investigation of this factor exploratory at best.					
* $p \leq .05$					
** $p \leq .01$					
*** $p \leq .001$					

directly as well as indirectly, while maternal mental health and maternal education would act as mediating

variables. A Pearson correlation was computed to compare the mothers' characteristics with the quality of parenting behavior/parent-child relationship variables. In general, results showed that many of the mothers' characteristics were significantly related to the quality of parenting behavior/parent-child relationship in the expected direction (Table 3).

Higher levels of maternal psychiatric symptoms (*Maternal Mental Health*) were positively related to having more difficulties within the mother-child relationship, and negatively correlated with both authoritative parenting and having a positive perception of the mother-child relationship. Mother's previous and current attachment security was positively related to having a positive perception of her relationship with her child and inversely related to both permissive parenting and having difficulties in her relationship with her child. Mother's anxious attachment style was positively related to difficulties in the mother-child relationship, and inversely correlated with authoritative parenting and having a positive perception of her relationship with her child. There was no significant relationship between mothers' use of legal/illegal substances and any of the parenting variables; most likely this was due to very low

percentage (35%) of participants who completed these items.

Mother's level of education and number of child development courses completed were both positively and significantly related to both authoritative parenting and having a positive perception of the relationship with her child (and, conversely, negatively correlated with authoritarian parenting and having difficulties with the mother-child relationship). In addition, socio-economic status (based on highest level of education attained by the mother) was significantly correlated with a positive relationship with her child, but was negatively correlated with both authoritarian parenting and having a negative relationship with her child (i.e., the higher mother's SES, the fewer the difficulties she had in her relationship with her child).

Using EQS, a hypothetic model (Figure 2) was tested to determine whether maternal attachment history impacts maternal parenting behavior both directly and also indirectly (by first impacting maternal mental health and maternal education/knowledge of child development). Within this model, circles represent latent variables and rectangles represent measured variables. The study examined the relationships between Quality of Mothers'



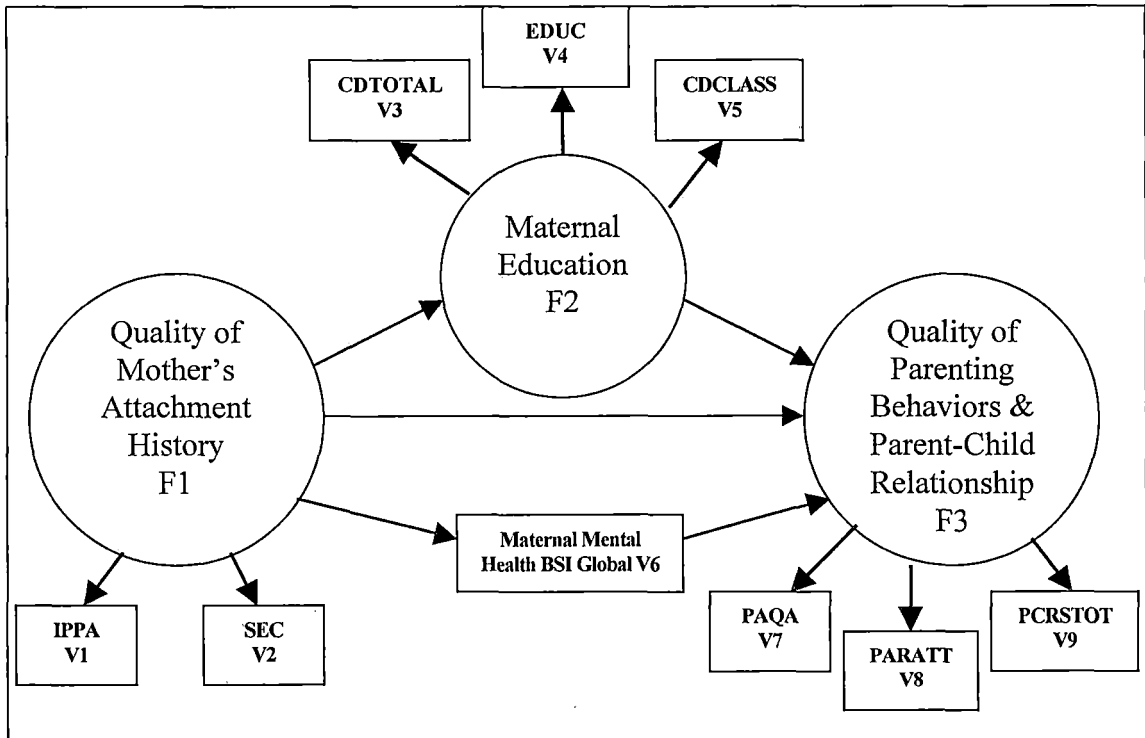


Figure 2. Hypothesized Model

Attachment History (F1), a latent variable with two indicators (Inventory of Parent-Peer Attachment and the Relationships Attitudes), Maternal Education (F2), a latent variable with three indicators (Child Development Knowledge, Educational Level, and Child Development Courses Completed), Maternal Mental Health (the Brief-Symptom Inventory a measured variable), and Quality of Parenting Behavior and Parent-Child Relationship (F3), a latent variable with three indicators (Parental Authority Questionnaire-Revised, Index of Parental Attitude, and Parent Child Relationship).

### Model Estimation

The independence model, which tests the hypothesis that the variables are uncorrelated with one another, was rejected  $\chi^2$  (36, N = 150)  $p \leq 05$ . The hypothesized model was tested next. Support was found for the hypothesized model in terms of the Satorra-Bentler scaled  $\chi^2$  test statistic as well as the comparative fit index (CFI) and root mean square error of approximation (RMSEA),  $\chi^2$  (23, N = 150) = 35.94,  $p \leq .05$ , CFI = .95, RMSEA = .07. A chi square difference test indicated a significant improvement in fit between the independence model and the hypothesized model (Table 4).

Table 4. Comparison of Models

Model	Scaled $\chi^2$	df	CFI	RMSEA	$\chi^2$ Difference Test
Independence Model No Correlation among variables.	301.96	36			
Model 1 Hypothesized Model	35.94	23	.95	.07	IM - M1 = 266.02

\*\*\*  $p \leq .001$

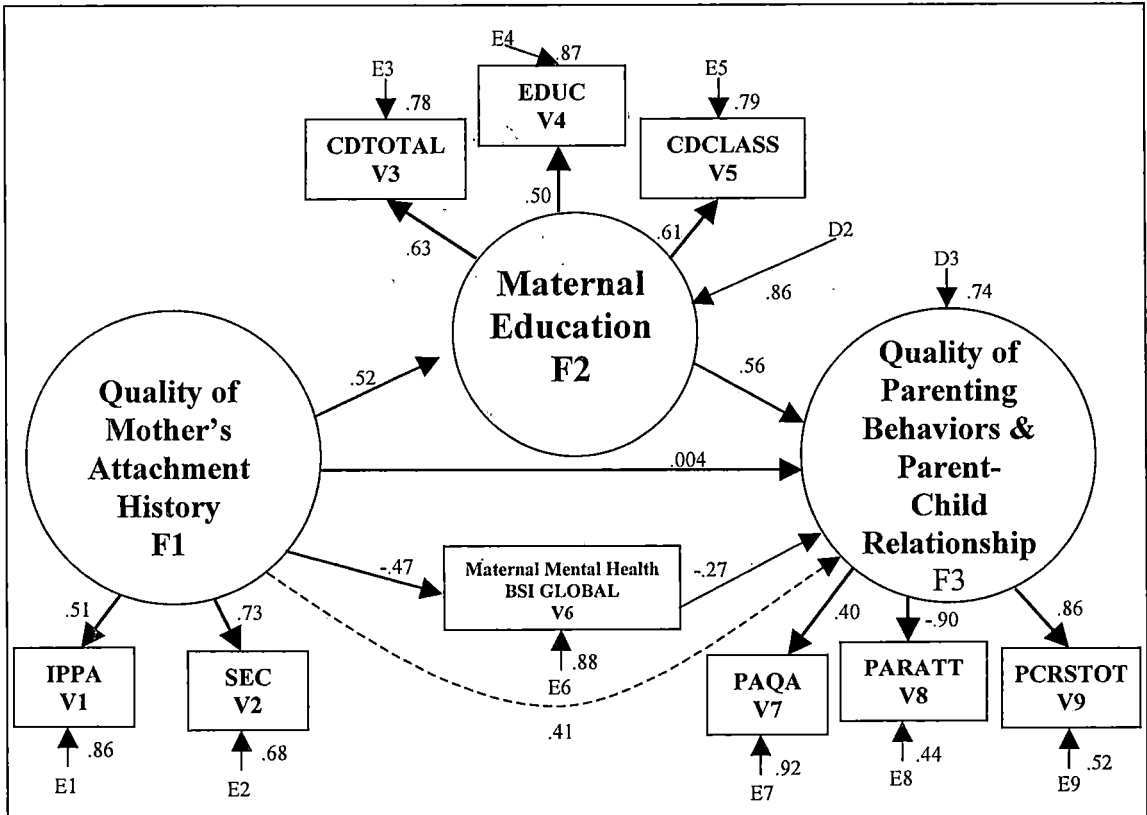


Figure 3. Final Model

#### Direct Effects

Figure 3, Final Model displays effects found. Quality of mother's attachment history was strongly predictive of maternal education/knowledge of child development (standardized coefficient = .52). Quality of mother's attachment history was also predictive of maternal mental health (standardized coefficient = -.47). That is, as the quality of mother's attachment increased, maternal mental health improved.

Maternal education/knowledge of child development was strongly predictive of quality of parenting behavior/parent-child relationship (standardized coefficient = .56). Also, maternal mental health (i.e., BSI Global) was moderately predictive of quality of parenting behavior/parent-child relationship: as maternal mental health improved, so did the quality of parenting behavior/parent-child relationship.

Contrary to expectation, hypothesized relationship between mother's attachment history and the quality of parenting behavior/parent-child relationship was not supported (standardized coefficient = .004). Instead, the impact of maternal attachment history on the quality of parenting behavior/parent-child relationship as measured in this study appears to be mediated by maternal education/knowledge of child development, and maternal mental health.

#### Indirect Effects

The relationship between quality of parenting behavior/parent-child relationship and mothers' attachment history was mediated by maternal education/knowledge of child development and maternal mental health (standardized coefficient for indirect effect = .41,  $p \leq .05$ ). That is,

the relationship between mother's attachment and the quality of parenting behavior/parent child relationship is mediated by (i.e., goes through) maternal education/knowledge of child development and maternal mental health.

## CHAPTER FOUR

### DISCUSSION

#### Direct Effects

The primary goal of this study was to develop and test a model examining the relative impact maternal mental health, maternal attachment history, and maternal education/knowledge of child development on quality of parenting behavior/parent-child relationships. Overall findings suggest that maternal attachment history impacts parent-child relationships through the mediating factors of maternal mental health and maternal education/knowledge of child development.

First, results showed a strong relationship between mothers' attachment history and educational level/knowledge of child development. This finding is consistent with previous literature that suggests a secure attachment history, which includes parental support, nurturance, guidance and involvement (especially regarding academics and social activities) is strongly related to children's educational outcomes (Brooks-Gunn & Duncan, 1997; Learner & Alberts, 2004). In addition, a secure attachment in childhood would contribute to emotional adjustment and therefore a significantly greater chance of

school success due to an ability to emotionally and behaviorally adjust to daily school challenges (i.e., problem solving, peer pressure, self-control) (e.g., Raver, 2002; Sroufe, 1983). In contrast, mothers who experienced an insecure attachment in childhood would be more likely to have emotional difficulty and therefore behaviorally experience more challenges in adjusting to such daily school challenges as getting along with peers, problem solving, and self-control (Raver, 2002). In addition, they may be less capable of controlling their fear, anger, and distress which could impact their ability to complete a higher education (Raver, 2002; Stroufe; 1983).

Second, results showed a strong relationship between maternal attachment history and mental health. That is, as the quality of mothers' attachment decreased, maternal mental health declined, while positive attachment was associated with improved mental health. This finding is consistent with previous literature indicating that mothers who obtain a strong, stable attachment early in life are more likely to have positive mental well-being (Gurian, 2003; Sicher, 1998). Secure attachment facilitates adjustment to stressful life events, buffering individuals from experiencing mental health symptoms

(Simpson, Rholes, Campbell, Tran, & Wilson, 2003). On the other hand, insecure attachments put one at higher risk of developing mental health problems (behavioral, emotional, and psychological) due to early rejecting and/or unpredictable caregivers (Civic & Holt, 2000; Conners, Bradley, Mansell, Liu, Roberts, Burgdorf, & Herrell, 2003). These consistently rejected bids for affection, support, and encouragement from caregivers can result in depression, confusion, loneliness, and anxiety, thus leading to mental health disorders (Simpson, Rholes, Campbell, Tran, & Wilson, 2003).

Third, results suggest a strong relationship between mothers' educational level/knowledge of child development and the quality of parenting behavior/parent-child relationships. This finding is consistent with previous research showing that mothers with higher education are more familiar with their child's developmental needs and are more likely to support their children's overall development (Benasich & Brooks-Gunn, 1996). Having higher education means these mothers have access to valuable and appropriate resources for parenting information, which aids in their ability to provide a nurturing environment (Lerner & Alberts, 2004; Vukelich & Kliman, 1985). They are more likely (compared to mothers with less education)



to show warmth, engage their child, and provide structure and routine for their children (Adam, Gunnar, & Tanaka, 2004). Together, these components optimize their parenting behaviors and lead to better parent-child relationships (Siegel, 2003). In comparison, mothers with lower educational levels are less likely to have the knowledge needed to provide a developmentally- appropriate environment and are more likely to inflict harsher punishments due to the fact that they don't have the knowledge necessary to engage in suitable parenting behaviors (Vukelich & Kliman, 1985). These negative parenting behaviors in turn lead to poorer-quality parent-child relationships (Benasich & Brooks-Gunn, 1996; Demast, Tamus-LeMonda, & Bornstein 1996; Stevens, 1984).

Fourth, there was a moderately strong relationship between maternal mental health and quality of parenting/parent-child relationship. This finding is consistent with previous literature showing that mothers with poor mental health (i.e., emotional, behavioral, psychological) demonstrate poor parenting skills due to their greater likelihood of being preoccupied, irritable, uninterested and uninvolved, self-focused, and anxious, all which prevent them from meeting the needs of their children (Field, 1995; Riggs & Jacobvitz, 2002). Their

inability to be aware, sensitive, and nurturing to their child's developmental needs renders their childrearing ineffective (Gelfand & Teti, 1990; Field, 1995; Gurian, 2003). By contrast, mothers with good mental health are more likely to be able to meet their children's needs because they are more accessible, responsive, and supportive, thereby enhancing the parent-child relationship (Sicher, 1998).

#### Indirect Effects

There was a substantial indirect effect between mothers' early attachment history and the quality of parenting behaviors/parent-child relationship; this connection is explained by mediator variables. The results of this model demonstrate that the mother's early attachment history impacts subsequent parenting by first impacting maternal education/knowledge of child development and mental health. In general, the model suggests that mothers who are more securely attached in life are *less* likely to develop a mental illness, and *more* likely to attain higher levels of education (i.e., exceeding high school). These attributes in turn lead to an increase in the quality of parenting behaviors provided for their children.

### Limitations of Study

There were several limitations to this study. First, the assessment of mental health was limited as it only measured depression, somatization, and anxiety. Therefore, it likely did not capture a broader conceptualization of mental health nor, in particular, personality disorders.

Second, we received many incomplete responses through the scale we created; participants failed to provide pertinent information regarding their usage of legal/illegal substances. This lack of information limited our ability to assess substance abuse as a variable of this study. Use of a more standardized format may have prevented this from happening.

Third, there is no practical assessment tool for measuring early childhood attachment, which may have impacted the outcome of this study. The lack of a scale in this area hampered our understanding of the impact of the maternal variables on the quality of parenting behavior/parent-child relationship.

Finally, our sample was predominantly lower-middle class. Without a broader socioeconomic sample, it is unclear whether our results are generalizable to all socioeconomic levels.

## Direction for Future Research

There are several directions for future research proposed by this study, all of which focus on methodological issues. First, conducting more in-depth interviews utilizing methods such as the Adult Attachment Interview (AAI) would be a better way to obtain more accurate information from the participants regarding their attachment status. As well, utilizing a child attachment scale might provide better means by which to examine the link between maternal attachment history and subsequent parent-child relationship qualities. Second, a larger sample size would help to further substantiate the validity of this model. Third, the use of a more inclusive mental health scale (which includes personality disorders and substance abuse) is needed to examine maternal mental health in a deeper, more comprehensive manner. Fourth, tracking the various maternal attachment statuses across the other variables (i.e., maternal mental health, maternal education/knowledge of child development, and parenting behavior/parent-child relationship) would provide more specific and detailed data on these factors. Lastly, future studies could more extensively examine the complex relationship between SES, maternal attachment history, and mental health.

## Implications and Conclusion

In conclusion, results from this study offer unique insights to the interrelationship of factors influencing mother-child relationships. While previous studies have only looked at maternal parenting behavior from a simplistic, single variable perspective, this study is the first to identify the relative impact of multiple variables influencing the quality of mothers' parenting behaviors. This knowledge will help us begin to understand how early attachment experiences impact future parenting behavior by providing a more comprehensive understanding of the interrelationships of these multiple influences. Using this knowledge, policy makers should develop a coherent strategy to promote treatment programs aimed at educating parents in appropriate parenting skills, therefore improving overall parent behavior and parent-child relationships. The programs should be based on developing interventions specifically designed to meet the needs and circumstances of mothers. As well, interventions should be linked with parent education and support efforts as part of a comprehensive effort to improve parent-child relationships. By incorporating Seigel's work in parenting classes, such as including expanded mental health information in the basic topics

regarding knowledge of child development, we can help parents gain "earned security". This approach can also be incorporated into venues other than parenting classes (i.e., high school classes, health clinics, etc.).

In light of the results of this study showing the impact of SES on parenting behavior/parent-child relationships, an additional area that programs need to address is assistance in getting parents out of poverty. Interventions could be created to assist lower SES-level mothers in acquiring new or additional job skills, and learning about community resources and available financial benefits.

Overall, the knowledge gained in this study contributes to our parenting behaviors, and provides insight into what measures may be necessary in breaking the intergenerational cycle of poor parenting.

APPENDIX A  
BRIEF-SYMP TOM INVENTORY-18

## Brief-Symptom Inventory-18 (BSI-18)

INSTRUCTIONS: Below is a list of problems people sometimes have. Read each one carefully and write down the number that best describes your answer. Your answer should address how much that problem had distressed or bothered you during the past 7 days including today. Do not skip any items. If you have any questions, please ask them now.

Not At All	A Little Bit	Moderately	Quite a Bit	Extremely
1	2	3	4	5

- \_\_\_\_\_ 1. Faintness or dizziness
- \_\_\_\_\_ 2. Feeling no interest in things
- \_\_\_\_\_ 3. Nervousness or shakiness inside
- \_\_\_\_\_ 4. Pains in heart or chest
- \_\_\_\_\_ 5. Feeling lonely
- \_\_\_\_\_ 6. Feeling tense or keyed up
- \_\_\_\_\_ 7. Nausea or upset stomach
- \_\_\_\_\_ 8. Feeling blue
- \_\_\_\_\_ 9. Suddenly scared for no reason
- \_\_\_\_\_ 10. Trouble getting your breath
- \_\_\_\_\_ 11. Feelings of worthlessness
- \_\_\_\_\_ 12. Spells of terror or panic
- \_\_\_\_\_ 13. Numbness or tingling in parts of your body
- \_\_\_\_\_ 14. Feeling hopeless about the future
- \_\_\_\_\_ 15. Feeling so restless you couldn't sit still
- \_\_\_\_\_ 16. Feeling weak in parts of your body
- \_\_\_\_\_ 17. Thoughts of ending your life
- \_\_\_\_\_ 18. Feeling fearful



APPENDIX B  
SUBSTANCE ABUSE

## Substance Abuse

INSTRUCTIONS: Please read the following questions carefully and write down the number that best describes your answer. Mark only one response for each statement. It is important to try to respond to every statement; do not skip any items. If you have any questions, please ask them now.

Never	Not Very Often	Sometimes	Often	Almost Always
1	2	3	4	5

15. During your pregnancy with your (oldest/only) child, how often did you:

- \_\_\_\_\_ a. Take pain medication? (e.g., Tylenol, Motrin, Ibuprofen, etc.)
- \_\_\_\_\_ b. Take medication for anxiety? (e.g., Xanax, Prozac, valium, etc.)
- \_\_\_\_\_ c. Take illegal substances? (e.g., marijuana, speed, ecstasy, etc.)
- \_\_\_\_\_ d. Consume alcoholic beverages? (e.g., beer, wine, hard liquor, etc.)

16. From the birth of your (oldest/only) child, how often did you:

- \_\_\_\_\_ a. Take pain medication? (e.g., Tylenol, Motrin, Ibuprofen, etc.)
- \_\_\_\_\_ b. Take medication for anxiety? (e.g., Xanax, Prozac, Valium, etc.)
- \_\_\_\_\_ c. Take illegal substances? (e.g., marijuana, speed, ecstasy, etc.)
- \_\_\_\_\_ d. Consume alcoholic beverages? (e.g., beer, wine, hard liquor, etc.)

17. In the 30 days, how often did you:

- \_\_\_\_\_ a. Take pain medication? (e.g., Tylenol, Motrin, Ibuprofen, etc.)
- \_\_\_\_\_ b. Take medication for anxiety? (e.g., Xanax, Prozac, Valium, etc.)
- \_\_\_\_\_ c. Take illegal substances? (e.g., marijuana, speed, ecstasy, etc.)
- \_\_\_\_\_ d. Consume alcoholic beverages? (e.g., beer, wine, hard liquor, etc.)

APPENDIX C  
INVENTORY OF PARENT-PEER ATTACHMENT

## Inventory of Parent-Peer Attachment (IPPA)

INSTRUCTIONS: Each of the statements below asks questions that pertain to your feelings about **your mother** (e.g., primary female caregiver). Read each statement carefully. Then, using the scale shown below, decide which response most accurately reflects how true the statement was for you **when you were a child** (from birth to 15 years of age). There are no correct or incorrect answers. Mark only one response for each statement. It is important to try to respond to every statement. Do not skip any items. If you have any questions, please ask them now.

Almost Never or Never True 1	Not Very Often True 2	Sometimes True 3	Often True 4	Almost Always or Always True 5
------------------------------------	-----------------------------	------------------------	--------------------	--------------------------------------

- \_\_\_\_\_ 1. My mother respected my feelings
- \_\_\_\_\_ 2. I felt my mother did a good job as my mother
- \_\_\_\_\_ 3. I wish I had a different mother
- \_\_\_\_\_ 4. My mother accepted me as I was
- \_\_\_\_\_ 5. I liked to get my mother's point of view on things I was concerned about
- \_\_\_\_\_ 6. I felt it was no use letting my feelings show around my mother
- \_\_\_\_\_ 7. My mother was able to tell when I was upset about something
- \_\_\_\_\_ 8. Talking over my problems with my mother made me feel ashamed or foolish
- \_\_\_\_\_ 9. My mother expected too much from me
- \_\_\_\_\_ 10. I got upset easily around my mother
- \_\_\_\_\_ 11. I got upset a lot more than my mother knew about
- \_\_\_\_\_ 12. When we discussed things, my mother cared about my point of view
- \_\_\_\_\_ 13. My mother trusted my judgment
- \_\_\_\_\_ 14. My mother had her own problems, so I didn't bother her with mine
- \_\_\_\_\_ 15. My mother helped me to understand myself better
- \_\_\_\_\_ 16. I told my mother about my problems and troubles
- \_\_\_\_\_ 17. I felt angry with my mother

Almost Never or Never True	Not Very Often True	Sometimes True	Often True	Almost Always or Always True
1	2	3	4	5

- \_\_\_\_\_ 18. I didn't get much attention from my mother
- \_\_\_\_\_ 19. My mother helped me to talk about my difficulties
- \_\_\_\_\_ 20. My mother understood me
- \_\_\_\_\_ 21. When I got angry about something, my mother tried to understand
- \_\_\_\_\_ 22. I trusted my mother
- \_\_\_\_\_ 23. My mother didn't understand what I was going through
- \_\_\_\_\_ 24. I could count on my mother when I needed to get something off my chest
- \_\_\_\_\_ 25. If my mother knew something was bothering me, she asked me about it

APPENDIX D  
RELATIONSHIP ATTITUDES

## Relationship Attitudes (RA)

INSTRUCTIONS: Below is a list of feelings people sometimes have toward their romantic partners. Read each one carefully and write down the number that best describes your answer. Your answer should address how you typically feel toward your romantic partner(s) in general. Do not skip any items. If you have any questions, please ask them now.

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

- \_\_\_\_\_ 1. I find it relatively easy to get close to others
- \_\_\_\_\_ 2. I'm not very comfortable having to depend on other people
- \_\_\_\_\_ 3. I'm comfortable having others depend on me
- \_\_\_\_\_ 4. I rarely worry about being abandoned by others
- \_\_\_\_\_ 5. I don't like people getting too close to me
- \_\_\_\_\_ 6. I'm somewhat uncomfortable being too close to others
- \_\_\_\_\_ 7. I find it difficult to trust others completely
- \_\_\_\_\_ 8. I'm nervous whenever anyone gets too close to me
- \_\_\_\_\_ 9. Others often want me to be more intimate than I feel comfortable being
- \_\_\_\_\_ 10. Others often are reluctant to get as close as I would like
- \_\_\_\_\_ 11. I often worry that my partner(s) don't really love me
- \_\_\_\_\_ 12. I rarely worry about my partner(s) leaving me
- \_\_\_\_\_ 13. I often want to merge completely with others, and this desire sometimes scares them away

APPENDIX E  
WHAT GROWN-UPS UNDERSTAND ABOUT CHILD  
DEVELOPMENT



## What Grown-Ups Understand About Child Development

- A. INSTRUCTIONS: Following are some questions about children and their development. Please put an "X" by the answer you believe to be true.
- When do you think a parent can begin to significantly impact a child's brain development; for example, impact the child's ability to learn?

<input type="checkbox"/> Prenatal (meaning when the child is still in the womb)	<input type="checkbox"/> Six months
<input type="checkbox"/> Right from birth	<input type="checkbox"/> Seven months
<input type="checkbox"/> Two to three weeks	<input type="checkbox"/> Eight months
<input type="checkbox"/> One month	<input type="checkbox"/> Nine months
<input type="checkbox"/> Two months	<input type="checkbox"/> Ten months
<input type="checkbox"/> Three months	<input type="checkbox"/> Eleven months
<input type="checkbox"/> Four months	<input type="checkbox"/> One year or more
<input type="checkbox"/> Five months	<input type="checkbox"/> Not sure
  - At what age do you think most children begin to develop their sense of self-esteem?

<input type="checkbox"/> Newborn through six months	<input type="checkbox"/> Age six
<input type="checkbox"/> Seven through eleven months	<input type="checkbox"/> Age seven
<input type="checkbox"/> Age one	<input type="checkbox"/> Age eight
<input type="checkbox"/> Age two	<input type="checkbox"/> Age nine
<input type="checkbox"/> Age three	<input type="checkbox"/> Age ten or later
<input type="checkbox"/> Age four	<input type="checkbox"/> Not sure
<input type="checkbox"/> Age five	
  - At what age do you think an infant recognizes his mother's voice? (IF NEEDED: by recognize, I mean the infant will know the difference between his mother's voice and a stranger's voice)

<input type="checkbox"/> Around birth	<input type="checkbox"/> Four months
<input type="checkbox"/> About one week	<input type="checkbox"/> Five months
<input type="checkbox"/> Two to three weeks	<input type="checkbox"/> Six months
<input type="checkbox"/> About one month	<input type="checkbox"/> Seven to eleven months
<input type="checkbox"/> Two months	<input type="checkbox"/> At about one year or more
<input type="checkbox"/> Three months	<input type="checkbox"/> Not sure
  - At what age do you think an infant or young child begins to really take in and react to the world around them? (IF NEEDED: meaning takes in the sights, sounds and smells of their surroundings and reacts to them)

<input type="checkbox"/> Right from birth	<input type="checkbox"/> Four months
<input type="checkbox"/> About one week	<input type="checkbox"/> Five months
<input type="checkbox"/> Two to three weeks	<input type="checkbox"/> Six months
<input type="checkbox"/> About one month	<input type="checkbox"/> Seven to eleven months
<input type="checkbox"/> Two months	<input type="checkbox"/> About one year or more
<input type="checkbox"/> Three months	<input type="checkbox"/> Not sure

5. Some people say that a child's experiences in the first year of life have a major impact on their performance in school many years later. Others say that babies 12 months and younger are too young for their experiences to really help or hurt their ability to learn in school later in life. Which do you agree with more?
- First year has a major impact on school performance  
 First year has a little impact on school performance  
 Not sure
6. At what age do you think a baby or young child can begin to sense whether or not his parent is depressed or angry, and can be affected by his parent's mood?
- |                                       |   |
|---------------------------------------|---|
| <input type="checkbox"/> Around birth | <input type="checkbox"/> Seven months             |
| <input type="checkbox"/> Two weeks    | <input type="checkbox"/> Eight months             |
| <input type="checkbox"/> One month    | <input type="checkbox"/> Nine months              |
| <input type="checkbox"/> Two months   | <input type="checkbox"/> Ten months               |
| <input type="checkbox"/> Three months | <input type="checkbox"/> Eleven months            |
| <input type="checkbox"/> Four months  | <input type="checkbox"/> One to under two years   |
| <input type="checkbox"/> Five months  | <input type="checkbox"/> Two to under three years |
| <input type="checkbox"/> Six months   | <input type="checkbox"/> Three or more years      |

B. INSTRUCTIONS: Following are a few "true/false" statements about children. Please write in the number that correlates to the answer that you believe to be true:

Definitely True	Probably True	Not Sure	Probably False	Definitely False
1	2	3	4	5

7. Children's capacity for learning is pretty much set from birth and cannot be greatly increased or decreased by how the parents interact with them.
8. In terms of learning about language, children get an equal benefit from hearing someone talk on TV versus hearing a person in the same room talking to them.
9. Parents' *emotional* closeness with their baby can strongly influence that child's *intellectual* development.
10. A child aged six months or younger who witnesses violence, such as seeing his father often hit his mother, will *not* suffer any long-term effects from the experiences, because children that age have no long-term memory.

C. INSTRUCTIONS: Following are some different tables relating to children's development. Please follow the instructions specified at the beginning of each table.

11. In the table below, rate how important you think it is for children of different ages to spend time playing, with regards to how important playing is to healthy development. A 1 means playing is not at all important to the child's development, and a 10 means playing is crucial to the child's development:

Age	Rating (1-10)	Not Sure
Five year-old		
Three year-old		
Ten month-old		

12. In the table below, rate each of the following play activities on a scale of one to ten. A 1 means the activity is not at all effective in helping a child become a better learner, and a 10 means the activity is extremely effective in helping a child become a better learner:

Activity	Rating (1-10)	Not Sure
A six month-old exploring and banging blocks		
A twelve month-old rolling a ball back and forth with her parent		
A two year-old playing a compute activity		
A two year-old having a pretend tea party with her mom		
A four year-old making artwork using a computer program		
A four year-old memorizing flash cards		
A four year-old collecting and sorting leaves in the yard		
A four year-old making an art project with art supplies		
A six year-old and his friends playing pretend firemen		
A six year-old playing cards with his dad		

13. Suppose a 12 month-old walks up to the TV and begins to turn the TV on and off repeatedly while her parents are trying to watch it. It's impossible to know exactly why the child is doing this; however, for each of the following reasons, please mark an "X" by how likely you believe that explanation is:

Reason	Very Likely	Somewhat Likely	Not Likely At All	Not Sure
The child wants to get her parents' attention				
The child enjoys learning about what happens when buttons are pressed				
The child is angry at her parents for some reason, so she is trying to get back at them				

- 13a. Regarding the situation in the table above (a child turning the TV on and off), would you say that the child is misbehaving or not?

Misbehaving  
 Not misbehaving  
 Not sure

14. Suppose the cries of a three month-old are frequently not responded to by her parents and caregivers. In this case, how likely is it that the following is happening? Please mark an "X" by the answer you believe to be true:

Outcome	Very Likely	Somewhat Likely	Not Likely At All	Not Sure
The baby's self-esteem will be negatively affected				
The baby will learn to be independent				
The baby's brain development will be negatively affected				
The baby will learn good coping skills				

- D. INSTRUCTIONS: Following are questions about what people should and should not expect of children at different ages. Please put an "X" by the answer you believe to be true.

15. Should a fifteen month-old baby be expected to share her toys with other children, or is this too young of an age to expect a baby to share?

Yes, a fifteen month-old can be expected to share  
 No, a fifteen month-old is too young to share  
 Not sure

16. Should a three year-old child be expected to sit quietly for an hour or so, be it in church or in a restaurant, or is three years old too young to expect a child to sit quietly for an hour?

- Three year-old should be expected to sit quietly for an hour  
 Three year-old should not be expected to sit quietly for an hour  
 Not sure

17. Suppose a six year-old points a gun at a classmate and shoots him. Do you think it is possible that this six year-old could have fully understood the results of his actions, meaning could understand that the classmate might die and never come back, or do you think that a six year-old simply cannot understand these consequences?

- Six year-old capable of fully understanding  
 Six year-old not capable of fully understanding  
 Not sure

E. INSTRUCTIONS: Following are questions about what may or may not spoil children. Please put an "X" by the answer you believe to be true.

18. Some people say that a six month-old, because he is so young, cannot be spoiled no matter how much attention his parents give him. Others say that a six month-old can be spoiled. Which do you agree with more?

- Six month-old too young to spoil  
 Six month-old not too young to spoil  
 Not sure

F. INSTRUCTIONS: Following a list of behaviors that are sometimes displayed by parents or caregivers. In your opinion, mark the following behavior as either appropriate or as something that will likely spoil the child if done too often. Please put an "X" by the answer you believe to be true.

Behavior	Appropriate	Will likely spoil the child	Not sure
Picking up a three month-old every time she cries			
Rocking a one year-old to sleep every night because she will protest if this is not done			
Letting a two year-old get down from the dinner table to play before the rest of the family has finished their meal			
Letting a six year-old choose what to wear to school every day			

G. INSTRUCTIONS: Following are questions about disciplining children. Please put an "X" by the answer you believe to be true.

19. At what age is it appropriate to spank a child as a regular form of punishment? Or do you think it is never appropriate to spank a child?

- |  |   |
|--|---|
| <input type="checkbox"/> One year or younger | <input type="checkbox"/> Seven                              |
| <input type="checkbox"/> Two                 | <input type="checkbox"/> Eight                              |
| <input type="checkbox"/> Three               | <input type="checkbox"/> Nine                               |
| <input type="checkbox"/> Four                | <input type="checkbox"/> Ten or older                       |
| <input type="checkbox"/> Five                | <input type="checkbox"/> Never appropriate to spank a child |
| <input type="checkbox"/> Six                 | <input type="checkbox"/> Not sure                           |

20. Spanking children as a regular form of punishment helps children develop a better sense of self-control.

- |  |   |
|--|---|
| <input type="checkbox"/> Definitely true | <input type="checkbox"/> Definitely false |
| <input type="checkbox"/> Probably true   | <input type="checkbox"/> Not sure         |
| <input type="checkbox"/> Probably false  |   |

21. Children who are spanked as a regular form of punishment are more likely to deal with their own anger by being physically aggressive.

- |  |   |
|--|---|
| <input type="checkbox"/> Definitely true | <input type="checkbox"/> Definitely false |
| <input type="checkbox"/> Probably true   | <input type="checkbox"/> Not sure         |
| <input type="checkbox"/> Probably false  |   |

22. Here's a situation: A baby enjoys crawling to a set of stairs. Suppose the parent consistently says "no" calmly but clearly every time the baby wants to crawl up the stairs, and then moves the infant away from the stairs. At what age should this infant be expected to know NOT to climb the stairs and be able to stop herself from doing so without being reminded by her parents?

- |  |  |
|--|--|
| <input type="checkbox"/> Seven months or earlier | <input type="checkbox"/> Fifteen months              |
| <input type="checkbox"/> Eight months            | <input type="checkbox"/> Sixteen months              |
| <input type="checkbox"/> Nine months             | <input type="checkbox"/> Seventeen months            |
| <input type="checkbox"/> Ten months              | <input type="checkbox"/> Eighteen months to one year |
| <input type="checkbox"/> Eleven months           | <input type="checkbox"/> Two years                   |
| <input type="checkbox"/> Twelve months           | <input type="checkbox"/> Three years                 |
| <input type="checkbox"/> Thirteen months         | <input type="checkbox"/> Four years or older         |
| <input type="checkbox"/> Fourteen months         | <input type="checkbox"/> Not sure                    |

H. INSTRUCTIONS: Following are a few more questions about child development. Please put an "X" by the answer you believe to be true.

23. At what age do you think a child can experience real depression?

- |   |  |
|---|--|
| <input type="checkbox"/> Birth through two months   | <input type="checkbox"/> One year            |
| <input type="checkbox"/> Three through four months  | <input type="checkbox"/> Two years           |
| <input type="checkbox"/> Five through six months    | <input type="checkbox"/> Three years         |
| <input type="checkbox"/> Seven through eight months | <input type="checkbox"/> Four years or older |
| <input type="checkbox"/> Nine through eleven months | <input type="checkbox"/> Not sure            |

I. INSTRUCTIONS: Following are some different tables relating to children's development. Please follow the instructions specified at the beginning of each table.

24. In the table below, there are different ideas regarding what can help a two year-old child develop intellectually and become a better learner. Rate the following activities on a 1 to 10 scale. A 1 means the activity is not at all effective in helping a child become a better learner, and a 10 means the activity is extremely effective in helping a child become a better learner:

Activity	Rating (1-10)	Not sure
Playing Mozart as background music during play time		
Playing any type of music that the child enjoys during playtime		
Educational flashcards		
A healthy diet		
Watching educational shows on television		
Having the child play educational games on the computer by himself		
Climbing on playground equipment while being supervised		
A sense of safety and security		
Reading with the child		
Talking with the child		
Quality day care for children of working parents		

25. In the table below, mark with an "X" the age range you believe most infants and children do the following:

Outcome	4 to 6 Weeks	7 to 10 Months	9 to 15 Months	18 to 24 Months	2 to 3 Years
Smile					
Say their first words					
Communicate by pointing to objects					
Being pretend and fantasy play					
Feel shame or embarrassment for his/her actions					

26. In the table below, rate on a scale of 1 to 10 the impact playing has on a child's development. A 1 means the activity is not at all important to development and a 10 means the activity is crucial to a child's development:

Activity	Rating (1-10)	Not sure
Impact on a child's social development, meaning her ability to interact with others		
Impact on a child's intellectual development, such as her ability to learn		
Impact on a child's language skills		



APPENDIX F  
PARENTAL AUTHORITY QUESTIONNAIRE - REVISED

## Parental Authority Questionnaire – Revised (PAQ-R)

INSTRUCTIONS: For each statement below circle the number that best describes your beliefs about parenting your child. There are no right or wrong answers. We are looking for your overall impression regarding each statement. Read each one carefully and write down the answer that best describes your answer. Do not skip any items. If you have any questions, please ask them now.

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1	2	3	4	5

- \_\_\_\_\_ 1. In a well-run home children should have their way as often as parents do
- \_\_\_\_\_ 2. It is for my children's own good to require them to do what I think is right, even if they don't agree
- \_\_\_\_\_ 3. When I ask my children to do something, I expect it to be done immediately without questions
- \_\_\_\_\_ 4. Once family rules have been made, I discuss the reasons for the rules with my children
- \_\_\_\_\_ 5. I always encourage discussion when my children feel family rules and restrictions are unfair
- \_\_\_\_\_ 6. Children need to be free to make their own decisions about activities, even if this disagrees with that a parent might want to do
- \_\_\_\_\_ 7. I do not allow my children to question the decisions that I make
- \_\_\_\_\_ 8. I direct the activities and decisions of my children by talking with them and using rewards and punishments
- \_\_\_\_\_ 9. Other parents should use more force to get their children to behave
- \_\_\_\_\_ 10. My children do not need to obey rules simply because people in authority have told them to

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1	2	3	4	5

- \_\_\_\_\_ 11. My children know what I expect from them, but feel free to talk with me if they feel my expectations are unfair
- \_\_\_\_\_ 12. Smart parents should teach their children early exactly who is the boss in the family
- \_\_\_\_\_ 13. I usually don't set firm guidelines for my children's behavior
- \_\_\_\_\_ 14. Most of the time I do what my children want when making family decisions
- \_\_\_\_\_ 15. I tell my children what they should do, but I explain why I want them to do it
- \_\_\_\_\_ 16. I get very upset if my children try to disagree with me
- \_\_\_\_\_ 17. Most problems in society would be solved if parents would let their children choose their activities, make their own decisions, and follow their own desires when growing up
- \_\_\_\_\_ 18. I let my children know what behavior is expected and if they don't follow the rules they get punished
- \_\_\_\_\_ 19. I allow my children to decide most things for themselves without a lot of help from me
- \_\_\_\_\_ 20. I listen to my children to decide most things for themselves without a lot of help from me
- \_\_\_\_\_ 21. I do not think of myself as responsible for telling my children what to do
- \_\_\_\_\_ 22. I have clear standards of behavior for my children, but I am willing to change these standards to meet the needs of the child
- \_\_\_\_\_ 23. I expect my children to follow my directions, but I am always willing to listen to their concerns and discuss the rules with them
- \_\_\_\_\_ 24. I expect my children to form their own opinions about family matters and let them make their own decisions about those matters

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1	2	3	4	5

\_\_\_\_\_ 25. Most problems in society could be solved if parents were stricter when their children disobey

\_\_\_\_\_ 26. I often tell my children exactly what I want them to do and how I expect them to do it

\_\_\_\_\_ 27. I set firm guidelines for my children but I am understanding when they disagree with me

\_\_\_\_\_ 28. I do not direct the behaviors, activities or desires of my children

\_\_\_\_\_ 29. My children know what I expect of them and do what is asked simply out of respect for my authority

\_\_\_\_\_ 30. If I make a decision that hurts my children, I am willing to admit that I made a mistake

APPENDIX G  
INDEX OF PARENTAL ATTITUDES

## Appendix G: Index of Parental Attitudes (IPA)

INSTRUCTIONS: This questionnaire is designed to measure the degree of contentment you have in your relationship with your child. It is not a test, so there are no right or wrong answers. Answer each item as carefully and accurately as you can by writing in the number beside each question. Do not skip any items. If you have any questions, please ask them now.

Rarely or None of the Time 1	A Little of the Time 2	Sometime 3	Good Part of the Time 4	Most or all of the Time 5
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- \_\_\_\_\_ 1. My child gets on my nerves
- \_\_\_\_\_ 2. I get along well with my child
- \_\_\_\_\_ 3. I feel that I can really trust my child
- \_\_\_\_\_ 4. I dislike my child
- \_\_\_\_\_ 5. My child is well behaved
- \_\_\_\_\_ 6. My child is too demanding
- \_\_\_\_\_ 7. I wish I did not have this child
- \_\_\_\_\_ 8. I really enjoy my child
- \_\_\_\_\_ 9. I have a hard time controlling my child
- \_\_\_\_\_ 10. My child interferes with my activities
- \_\_\_\_\_ 11. I resent my child
- \_\_\_\_\_ 12. I think my child is terrific
- \_\_\_\_\_ 13. I hate my child
- \_\_\_\_\_ 14. I am very patient with my child
- \_\_\_\_\_ 15. I really like my child
- \_\_\_\_\_ 16. I like being with my child
- \_\_\_\_\_ 17. I feel like I do not love my child
- \_\_\_\_\_ 18. My child is irritating

Rarely or None of the Time	A Little of the Time	Sometime	Good Part of the Time	Most or all of the Time
1	2	3	4	5

\_\_\_\_\_ 19. I feel very angry toward my child

\_\_\_\_\_ 20. I feel violent toward my child

\_\_\_\_\_ 21. I feel very proud of my child

\_\_\_\_\_ 22. I wish my child was more like others I know

\_\_\_\_\_ 23. I just do not understand my child

\_\_\_\_\_ 24. My child is a real joy to me

\_\_\_\_\_ 25. I feel ashamed of my child

APPENDIX H  
PARENT-CHILD RELATIONSHIP SCALE



## Parent-Child Relationship Scale (PCRS)

INSTRUCTIONS: Every parent and child get along together in their own, unique way. Using the scale below, write in the number that best describes your child's relationship with you. Do not skip any items. If you have any questions, please ask them now.

Definitely Does Not Apply	Not Really	Neutral, Not Sure	Applies Somewhat	Definitely Applies
1	2	3	4	5

- \_\_\_\_\_ 1. I share an affectionate, warm relationship with my child
- \_\_\_\_\_ 2. My child and I always seem to be struggling with each other
- \_\_\_\_\_ 3. If upset, my child will seek comfort from me
- \_\_\_\_\_ 4. My child is uncomfortable with physical affection or contact from me
- \_\_\_\_\_ 5. My child values his/her relationship with me
- \_\_\_\_\_ 6. My child appears hurt or embarrassed when I correct him/her
- \_\_\_\_\_ 7. My child does not want to accept help when he/she needs it
- \_\_\_\_\_ 8. When I praise my child, he/she beams with pride
- \_\_\_\_\_ 9. My child reacts strongly to separation from me
- \_\_\_\_\_ 10. My child spontaneously shares information about him/herself
- \_\_\_\_\_ 11. My child is overly dependent on me
- \_\_\_\_\_ 12. My child easily becomes angry at me
- \_\_\_\_\_ 13. My child tries to please me
- \_\_\_\_\_ 14. My child feels that I treat him/her unfairly
- \_\_\_\_\_ 15. My child asks for my help when he/she does not really need it
- \_\_\_\_\_ 16. It is easy to be in tune with what my child is feeling
- \_\_\_\_\_ 17. My child sees me as a source of punishment and criticism
- \_\_\_\_\_ 18. My child expresses hurt or jealousy when I spend time with other children
- \_\_\_\_\_ 19. My child remains angry or resistant after being disciplined

Definitely Does Not Apply	Not Really	Neutral, Not Sure	Applies Somewhat	Definitely Applies
1	2	3	4	5

- \_\_\_\_\_ 20. When my child is misbehaving, he/she responds well to a look or my tone of voice
- \_\_\_\_\_ 21. Dealing with my child drains my energy
- \_\_\_\_\_ 22. I've noticed my child copying my behavior or ways of doing things
- \_\_\_\_\_ 23. When my child wakes up in a bad mood, I know we are in for long and difficult day
- \_\_\_\_\_ 24. My child's feelings toward me can be unpredictable or can change suddenly
- \_\_\_\_\_ 25. Despite my best efforts, I am uncomfortable with how my child and I have gotten along
- \_\_\_\_\_ 26. I often think about my child when we are not together
- \_\_\_\_\_ 27. My child whines or cries when he/she wants something from me
- \_\_\_\_\_ 28. My child is sneaky or manipulative with me
- \_\_\_\_\_ 29. My child openly shares his/her feelings and experiences with me
- \_\_\_\_\_ 30. Our interactions make me feel effective and confident

APPENDIX I  
BACKGROUND INFORMATION

## Background Information

Please answer the following questions. This information is anonymous and confidential. Do not skip any items. If you have any questions, please ask them now.

1. Your age: \_\_\_\_\_
2. Your sex (check one): \_\_\_\_\_ Female \_\_\_\_\_ Male
3. How old is your oldest (or only) child? \_\_\_\_\_ Years
4. Your current marital status (check one):  
\_\_\_\_\_ Single  
\_\_\_\_\_ Married  
\_\_\_\_\_ Separated/divorced  
\_\_\_\_\_ Widowed  
\_\_\_\_\_ Other ( \_\_\_\_\_ )
5. What is your ethnic background? (check one):  
\_\_\_\_\_ Asian  
\_\_\_\_\_ Black  
\_\_\_\_\_ Caucasian  
\_\_\_\_\_ Hispanic  
\_\_\_\_\_ Other ( \_\_\_\_\_ )
6. What is the highest level of education you have completed? (check one):  
\_\_\_\_\_ Have not finished high school  
\_\_\_\_\_ Graduated from high school  
\_\_\_\_\_ Trade school  
\_\_\_\_\_ Some college (includes A.A. degree)  
\_\_\_\_\_ Graduated from college (B.A. or B.S. degree)  
\_\_\_\_\_ Some post-graduate work  
\_\_\_\_\_ Graduate or professional degree (specify: \_\_\_\_\_ )
7. How many college-level child development classes have you completed? (check one):  
\_\_\_\_\_ 0  
\_\_\_\_\_ 1  
\_\_\_\_\_ 2  
\_\_\_\_\_ 3  
\_\_\_\_\_ 4 or more
8. What is (or has been) your primary occupation? \_\_\_\_\_

9. What is your current approximate annual household income? (check one):
- Less than \$10,000  
 \$10,000 – 25,000  
 \$25,000 – 35,000  
 \$35,000 – 50,000  
 \$50,000 – 75,000  
 \$75,000 or more
10. If your biological parents are separated/divorced or widowed, how old were you when this occurred?
- \_\_\_\_\_ years
11. Your parents' current marital status (check one for each parent):
- Mother:  married  separated/divorced  widowed  other ( \_\_\_\_\_ )
- Father:  married  separated/divorced  widowed  other ( \_\_\_\_\_ )
12. While you were growing up, who was your primary caregiver (i.e., the main person who raised you)? \_\_\_\_\_
13. When you were growing up, what was your mother's (or maternal primary caregiver's) occupation? \_\_\_\_\_
14. When you were growing up, what was your father's (or paternal primary caregiver's) occupation? \_\_\_\_\_
15. What was the highest grade in school (or level of education) your mother (or maternal primary caregiver) completed? \_\_\_\_\_
16. What was the highest grade in school (or level of education) your father (or paternal primary caregiver) completed? \_\_\_\_\_

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