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# ADULT ATTACHMENT AND RECOLLECTIONS OF CHILDHOOD PARENTING EXPERIENCES: EVALUATING AN ATTACHMENT CONCEPTUALIZATION OF PERSONALITY DISORDER TRAITS

by

Jennifer Sachek

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#### Abstract

ADULT ATTACHMENT AND RECOLLECTIONS OF CHILDHOOD PARENTING EXPERIENCES: EVALUATING AN ATTACHMENT CONCEPTUALIZATION OF PERSONALITY DISORDER TRAITS

by

#### Jennifer Sachek

Adult attachment and childhood experiences with caregivers have been demonstrated to be relevant in understanding the development of maladaptive personality patterns and personality disorders. This study utilized cluster analysis to group individuals based on their reports of maternal parenting behavior and their ratings of adult attachment. These groups were then compared with respect to their self-reported personality disorder traits. The group of individuals reporting higher levels of insecure attachment and maternal abuse also reported higher overall personality disorder symptomatology. These results were discussed in light of Lyddon and Sherry's attachment conceptualization of personality disorders, and the usefulness of looking at personality patterns dimensionally rather than categorically.

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#### Introduction

Attachment refers to stylistic ways that individuals relate to important others in order to maintain a sense of security and safety. An individual's attachment strategies begin to develop in infancy through interactions with caregivers, and the continuity of attachment patterns has been shown to at least a moderate degree throughout childhood and into adulthood. This continuity can be conceptualized in terms of developmental pathways, in which different experiences throughout development move an individual toward more or less optimal outcomes. Thus, early experiences, particularly early experiences with caregivers, are potential risk or protective factors for attachment security, and attachment is a potential risk factor or protective factor for later development.

Indeed, secure attachment has been shown to relate to a number of positive outcomes while insecure attachment has been shown to relate to a number of negative outcomes. For example, there are fairly robust findings that attachment insecurity is related to the development of more dysfunctional personality styles and actual personality disorders (PDs), in addition to a host of other difficulties. Furthermore, there is evidence that childhood experiences of parenting behavior are related to the development of PDs and PD traits.

Nonetheless, the research so far has been limited for a number of reasons. Few studies have examined all three domains (attachment, parenting, and personality) in the same sample. Most research has investigated links between two of these domains. As a result, much of the research conducted used procedures to find associations between variables, but has not looked at more complex relationships among multiple variables.

Related to this, there has been no overarching theory to provide a framework for understanding what variables should be associated and why. Furthermore, most research on parenting behavior and attachment has been conducted on infants in the Strange Situation, not on adults. Moreover, the scant research published looking at adult reports of parenting practices and attachment used the Parental Bonding Instrument (PBI), a measure with only 2 factors, care and control. Thus, a host of other parenting behaviors that are theoretically or anecdotally related to attachment or personality have not been examined. This study addressed these limitations by utilizing Lyddon and Sherry's (2001) attachment conceptualization of "developmental personality styles," or what will be referred to as PD traits, as a backdrop for understanding the interplay among attachment, parenting, and personality variables. In addition, the EMBU was selected as an alternative parenting measure to the PBI because of the larger scope of parenting practices it considers.

In addressing these limitations, this study was designed to accomplishing three main goals. The first was to explore the characteristics of individuals clustered into groups by attachment and parenting variables. The second was to examine how these groups differed with respect to PD traits. The third was to relate these findings back to the PD conceptualization proposed by Lyddon and Sherry (2001).

#### Foundations of Attachment

Attachment theory (Bowlby, 1973) focuses on the relationship between a child and his primary caregivers and the implications these early relationships have for the development of the child's self-concept, beliefs about relationships, abilities to self-regulate, and personality. The attachment system was considered by Bowlby to be a system of self preservation set up by evolution that encourages proximity to the attachment figure. In order to maintain proximity to an attachment figure, infants engage in attachment behaviors such as crying, smiling, or following the attachment figure. Attachment behaviors can be activated under certain environmental conditions. Some examples include separation from or rejection by the attachment figure, unfamiliar environments, or the infant's internal state. Attachment behavior generally decreases when the attachment figure is appropriately responsive to the attachment behavior. As a child matures, he develops an ability to explore his environment using his attachment figure as a secure base to whom he can turn when in need. <sup>1</sup>

Bowlby (1973) theorized that through a child's interaction with his primary caregiver, generally the mother, he constructs internal representations of this relationship, his mother, and himself. As the child develops, these internal representations become more complex and more stable structures, termed internal working models. Bowlby theorized that the child's working models of his mother are based on whether or not she is the kind of person who generally responds appropriately to calls for protection. His

<sup>&</sup>lt;sup>1</sup> To simplify the language in this paper, primary caregivers, those who take on traditional "mothering" responsibilities, will be regarded as female while children will be regarded as male. It must be noted that primary caregivers, like children, can be male or female. Although attachment theory and early attachment research generally concerned itself with the mother-child relationship there has been an increase in interest in the father-child relationship. This is beyond the scope of this paper, and unless otherwise noted (for example when considering gender differences in attachment) the use of gendered language in this paper is done only for simplicity purposes.

working model of himself is based on a judgment of whether or not he is the kind of person to whom others (his mother) respond appropriately. Although these working models develop within the context of the relationship with the mother, as the child develops they guide his behavior and expectations in future relationships. For example, an individual with a consistent and emotionally available mother will develop a positive view of self and others, which will translate to generally positive expectations of self and others in later relationships. An individual with an inconsistent or unavailable caregiver may develop a negative view of self and/or others, which will translate to negative expectations in later relationships.

Ainsworth and colleagues developed a method for observing and classifying attachment behavior known as the Strange Situation (Ainsworth, Blehar, Waters, & Wall, 1978). In the Strange Situation an infant is separated from his mother, spends a short amount of time alone, spends time with an unknown adult, and is then reunited with his mother. According to Ainsworth et al., a child is classified into one of three attachment categories based on his behavior during the Strange Situation. Securely attached infants are visibly distressed when separated from their mothers and upon their return seek comfort from them. They are also able to then comfortably explore their environment in her presence. Infants with an anxious/ambivalent attachment classification are intensely distressed by separation from their mothers and approach their mothers upon their return, but also express anger towards them and are not easily comforted by them. Infants classified as anxious/avoidant do not show significant separation distress and do not seek comfort from their mothers when reunited with them.

The literature concerning infant attachment has generally viewed attachment patterns from a categorical perspective. From this perspective, individual differences in attachment are attributed to membership in distinct categories (e.g. secure, anxious/avoidant, anxious ambivalent) with respect to attachment classification. Fraley and Spieker (2003) challenged this categorical approach to attachment. They posited that individual differences in attachment are more consistent with a continuous rather than a categorical model. Specifically, their taxometric analysis revealed that traditional attachment patterns are better viewed as resulting from variability in two domains: (1) proximity seeking and (2) anger and resistance. The authors also suggested that if individual differences in attachment organization are continuous, but are treated categorically, then reliability, and therefore statistical power, is compromised.

#### Attachment in Adulthood

Based on the premise that internal working models lay the foundation for expectations about relationship across the lifespan, attachment theory has been extended to adulthood. There are two broad lines of research investigating attachment in adulthood. The first, springing from developmental research tradition and the work of Main, Kaplan, & Cassidy (1985), concerns adult attachment to primary caregivers. The second line of research, which evolved from the social psychology, investigates attachment to adult romantic partners.

#### Adult Attachment to Primary Caregivers

Early attachment to primary caregivers can be assessed in adulthood though the use of semi-structured interviews. The Adult Attachment Interview (AAI; Main, Kaplan, & Cassidy, 1985) is a commonly used example. Individuals are interviewed about their

early relationships with caregivers, and these interviews are coded such that respondents are categorized into one of three major attachment classifications: secure, preoccupied, and dismissing. These categories correspond to the infant attachment classifications of autonomous, anxious/ambivalent, and avoidant, respectively. Attachment classification is made based on the style in which the respondent describes early relationships rather than the content of the responses. Thus, the AAI emphasizes discourse and coherence.

Research using the AAI has focused on the intergenerational transmission of attachment (e.g. Main & Hesse, 1990; van IJzendoorn, 1995), in addition to the relation between attachment and such clinical issues as borderline personality disorder (Barone, 2003), marital interactions (Bouthillier, Julien, Dube, Belanger, & Hamelin, 2002; Crowell, Treboux, & Waters, 2002), and eating disorders (Ramacciotti, Sorbello, Pazzagli, Vismara, & Mancone, 2001).

#### Adult Romantic Attachment

Adult romantic attachment instruments assess working models of adult relationships rather than early representations of primary caregivers. Self-report questionnaire measures are the most common means of evaluating adult romantic attachment, and traditionally these measures have produced attachment classifications analogous to infant attachment categories (secure, avoidant, and anxious/ambivalent). Some romantic attachment measures offer prototypical descriptions of the different attachment styles and require respondents to select the one that best describes them, yielding discrete attachment categories (e.g. Hazan & Shaver, 1987). Other measures conceptualize romantic attachment dimensionally. Such measures require that respondents rate their attitudes about themselves and others in relationships, which allows

individuals to fall at different points within each attachment category (e.g. Collins & Reed, 1990; Feeney, Noller, & Hanrahan, 1994). Romantic attachment has been investigated in relation to such diverse domains as child molestation (Bogaerts, Vervaeke, & Goethals, 2004), anxiety and depression (Williams and Risking, 2004), and the transition to parenthood (Simpson & Rholes, 2002).

#### Models of Attachment

Much of the research on adult attachment, whether the focus is on attachment to primary caregivers or romantic attachment, has assumed a 3 category model of classification, (e.g. Main and Hesse, 1990; Feeney & Noller, 1990). Although there are some differences among the different 3 category models of adult attachment, they are all roughly analogous to the 3 attachment classifications originally described by Ainsworth et al. (1978; secure, anxious/ambivalent, and anxious avoidant) and described above. In one notable exception to this, Bartholomew and Horowitz (1991) proposed a four category model of adult attachment styles. They suggested that the avoidant category in other models of adult attachment actually contains two distinct types of avoidant individuals – those who avoid close relationships because they minimize their need for attachment and those who avoid close relationships because they fear rejection from others. To address this, they developed a 4 category model founded on Bowlby's (1973) conceptualization that working models are based on an individual's self image and image of others. They therefore proposed that the two types of internal working models – a model of self and a model of others – can be classified dichotomously as positive or negative, and can be combined to yield four different attachment styles that roughly

correspond to infant attachment classifications<sup>2</sup> (See Figure 1, p. 62). Individuals with positive models of self and other are classified as secure. Individuals with a negative model of self but a positive model of others are classified as preoccupied. This corresponds to a classification of ambivalent, enmeshed, or preoccupied in other attachment classification systems. Individuals who have a positive model of the self but a negative model of others are classified as dismissing. Fearfully attached individuals have negative models of both self and others. Analogous categories are not present in other classification system, however, this category is most similar to disorganized or avoidant styles. Essentially, the difference between 3 and 4 category models of attachment is that the avoidant category is broken down into dismissing-avoidant and fearful-avoidant in the 4 category model (See Table 1, p. 54).<sup>3</sup>

#### Convergence and Divergence of Adult Attachment Perspectives

A number of studies have investigated the extent to which measures of attachment from the social psychology and developmental traditions converge, and the findings have been mixed. While some have found evidence of significant associations between self-report (social psychology) and interview narrative (developmental) attachment classifications (e.g. Shaver, Belsky, & Brennan, 2000), others have found negligible associations (e.g. Simpson, Rholes, Orina, & Grich, 2002; Riggs, Paulson, Tunnell, Sahl,

<sup>&</sup>lt;sup>2</sup> Adult attachment theory is often discussed categorically, and much of the research on attachment reports on individuals assigned to one attachment category. However, a dimensional approach, as discussed in relation to the child attachment literature (Fraley & Spieker, 2003), is arguably be more appropriate for the adult attachment literature as well. In such an approach, individuals have scores for each attachment style so that their attachment profile indicates the level to which they rely on each attachment strategy. Indeed, Bartholomew et al. (2001) point out that each attachment category represents a prototypical ideal, to which individuals approximate to varying degrees. Because most people have multiple attachment strategies, a dimensional approach allows the complex nature of attachment patterns to be represented.

<sup>&</sup>lt;sup>3</sup> To maintain consistency and avoid confusion, the terminology used in Bartholomew and Horowitz's (1991) 4 category model will be used when discussing analogous categories from other models (e.g. enmeshed will be called preoccupied). Terminology from other classification systems will be used for categories that do not overlap with the 4 category model (e.g. unresolved, avoidant).

Atkinson & Ross, 2007). A recent meta-analytic review of the literature found the convergence to be small at best (Roisman, Holland, Fortuna, Fraley, Clausell, & Clarke, 2007).

Adult attachment has been found to have different correlates when measured from social and developmental traditions as well. For example, Riggs and Colleagues (2007) found that self-report attachment was related to PD traits, with fearful attachment associated with the most maladaptive pattern of PD dysfunction. In contrast, AAI unresolved trauma was related to dissociation and PTSD. Unresolved trauma and unresolved loss were, in conjunction, related to schizotypal and borderline PDs. Roisman et al., in examining engaged couples' interactions and attachment, also found differences in correlates of the two attachment perspectives. They found that attachment security as measured by the AAI was related to higher levels of collaboration observed in interactions within the couple. Attachment avoidance as measured by self-report was related to the observation of a more negative emotional tone to the couples' interactions.

Thus, while there is some overlap between the two attachment traditions there is considerable difference. This suggests that the two perspectives, though springing from Bowlby's work, address different aspects of a person's functioning and relationships that are only somewhat related. It follows that both lines of research can provide unique and essential information to the understanding of how people relate to important others.

#### **Attachment Continuity**

While attachment patterns are assumed to continue into adulthood, attachment theory does not presume that adult attachment is determined by childhood experiences with primary caregivers. Rather, continuity is considered in terms of a developmental

trajectory or pathway (Bowlby, 1988). Early experiences with caregivers and the resulting childhood attachment patterns that develop put a child on a pathway of development that may lead to a variety of different outcomes, some more healthy than others. As the child develops, his interactions with the environment can cause a shift toward more or less healthy trajectories. Over time, a person is less likely to change course because their styles of functioning become increasingly more ingrained (Bartholomew, Kwong, & Hart, 2001). Therefore, early experiences with caregivers can be seen as a risk factor for insecure attachment, and attachment insecurity in childhood can be seen as a risk factor for later attachment insecurity, as well as other undesirable outcomes

A number of studies have investigated the continuity of attachment in childhood (e.g. Main, Kaplan, & Cassidy, 1985), and while continuity has been demonstrated it has been shown to be mediated by the stability of the caretaking environment (e.g. Thompson, Lamb, & Estes, 1982). A few studies have looked at continuity from infancy into adulthood, conceptualizing attachment from the developmental tradition, and have yielded mixed results. Attachment security as assessed by the Strange Situation in childhood has shown a high degree of continuity with adult AAI attachment security in two studies (Hamilton, 1994; Waters, Weinfield, & Hamilton, 2000), but no continuity in two others (Weinfield, Sroufe, & Egeland, 2000; Zimmermann, Fremmer-Bombik, Spangler, & Grossman, 1997). Even fewer studies have looked at adult attachment continuity, generally from a social psychology perspective, but the available data evidenced moderate to high continuity (Kirkpatrick & Hazan, 1994; Scharfe & Bartholomew, 1994). Similar to the childhood continuity studies, in a review of the

literature of the continuity of attachment from infancy to adulthood Fraley (2002) found that instability in the caretaking environment was related to lower levels of attachment continuity.

In summary, attachment theory posits that human beings are motivated to attach to others in order to maintain personal safety and feelings of security. Early interactions with caregivers, particularly in situations in which attachment behaviors are evoked, help shape the way an individual approaches relationships across the life span. An individual's attachment orientation places him on a developmental pathway that has implications for outcomes in a variety of domains in adulthood. Therefore, attachment is an important factor in understanding the development and maintenance of personality styles, both healthy and unhealthy.

#### Attachment and Parenting Behavior

One of the main premises of attachment theory is that experiences with caregivers shape a person's expectations about, and behavior in, close relationships. While attachment security develops from interactions with responsive, sensitive caregivers, attachment insecurity arises, in part, out of repeated distressing or inconsistent interactions with caregivers. A large body of literature in the area of childhood attachment indicates that different classifications of insecure attachment are related to distinct differences in caregiving. For example, caregivers of avoidantly attached infants have been shown to have more rejecting, unresponsive, and controlling interactions with their children (Ainsworth et al., 1978; Bretherton, Biringen, Ridgeway, & Maslin, 1989; Pastor, 1981). In contrast, caregivers of ambivalently attached infants tend to be more intrusive, coercive, and inconsistent with their children (Ainsworth et al. 1978;

Ainsworth, 1982). Generally, these studies have involved direct observation of parentchild interactions during the Strange Situation described above.

Surprisingly, given the emphasis on the continuity of attachment into adulthood, there is little extant research investigating the link between childhood experiences of parental behavior and adult attachment. The available studies of caregiving and adult attachment generally rely on respondents' retrospective accounts of their parents' behavior, and have also found differences in caregiving among attachment dimensions. For example, Gittleman, Klein, Smider, & Essex (1998) found that fearful individuals generally recalled lower levels of parental care than secure individuals. Moreover, fearful and preoccupied men recalled higher levels of maternal control than dismissive men.

Brennan and Shaver (1998) evaluated rejection and fostering independence as parenting qualities, as well as subjects' idealization of parents, and found that secure individuals recalled more accepting relationships with parents than all three insecure groups, while fearful individuals described their mothers as more rejecting than preoccupied and dismissing individuals. Compared to the other two groups, secure and dismissing individuals reported more idealistic childhood relationships with father, and more support for independence from both parents. Dismissing individuals reported the least idealized maternal relationships.

Muris, Meesters, Morren, & Lidwine (2004) looked at attachment and parental rearing styles as they relate to anger, hostility, and aggression. They found that insecurely attached individuals deviated from securely attached individuals. More specifically, avoidant adolescents reported less parental emotional warmth, higher parental rejection, and higher paternal inconsistency than secure adolescents. In addition, preoccupied

individuals reported more parental rejection and control than secure individuals. Overall, these studies suggest that insecurely attached individuals recall more negative parenting practices from childhood. Fearful individuals tended to recall more problematic parental behavior in childhood than other insecure groups, however since each study looked at different parenting variables with little overlap, it is difficult to draw further conclusions.

In summary, research on attachment in childhood demonstrates a link between parenting behaviors and attachment classifications. The literature regarding adults also suggests a link between attachment and recollections of parenting, however the research in this area is limited. This seems like a fruitful area of exploration, as it would be important to explore whether the same parenting behaviors that related to childhood attachment also relate to adult attachment patterns. Furthermore, the method of studying recollections of parenting behaviors allows for the investigation of a variety of behaviors that have not been studied in childhood because they are not easily observed or occur later in the child's development. Thus far, however, only a handful of parenting behaviors have been tested.

#### Personality disorders

Personality disorders (PDs) are pervasive, long-standing patterns of behavior and experience that deviate from cultural expectation, are fairly rigid, begin in adolescence/early adulthood, and lead to impaired functioning or distress (Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> Edition, Text Revision, (DSM-IV-TR; 2000). Individuals with personality disorders generally have dysfunctional interpersonal relationships as adults, and tend to report childhood neglect and abuse, particularly sexual abuse (e.g. Parker, Roy, Wilhelm, Mitchell, Austin, & Hadzi-Pavlovic, 1999).

The <u>DSM-IV-TR</u> recognizes 10 specific personality disorders, plus the general "Personality Disorder Not Otherwise Specified" category. The personality disorders are broken down into the odd/eccentric Cluster A disorders (paranoid, schizoid, and schizotypal), the dramatic/erratic Cluster B disorders (narcissistic, antisocial, borderline, and histrionic), and the anxious Cluster C disorders (avoidant, dependent, obsessive-compulsive). There are several criticisms of the current DSM personality disorder nosology. The symptom-based descriptive nature of the Axis II disorders has led to considerable overlap among the different diagnostic categories, while dichotomizing personality patterns based on arbitrary symptom counts has made the diagnostic process seem artificial. Moreover, the atheoretical stance taken in recent editions of the DSM has led to an exclusion of etiological (among other) considerations and as a result fails to capture the complexity of characterological disorders.

#### Theories of Personality Disorders

As the DSM is purported to be atheoretical, several theorists have developed conceptualizations of personality dysfunction that account for DSM disorders. For example, Millon (1995) developed a theory of personality based on DSM personality disorders. Westen (1998, 2005) developed a model of personality functioning that accounts for not only personality disorders but non-disordered personality functioning as well. Finally, Lyddon and Sherry (2001) developed an attachment conceptualization of personality disorder.

#### Millon's Model of Personality

Millon's (1995) personality model, grounded in evolutionary theory, views personality disorders in terms of strategies for survival that are imbalanced, inadequate,

or in conflict. Millon posited that 4 spheres exist in which evolutionary principles are enacted, and three of these (existence, adaptation, and replication) have implications for the development of PDs. According to Millon, different polarities manifest in these three spheres for humans. Existence is seen as a continuum from pleasure-seeking to pain-seeking. Adaptation is manifested in a continuum from activity to passivity. Finally, replication is manifested as a continuum between self and other orientation. Different PDs are thought to develop depending on the problem (imbalance, inadequacy, or conflict) and the sphere. For example, individuals with dependent PD are considered to have an imbalance in their orientation towards others versus the self, while individuals with borderline PD are thought to be conflicted in this domain. Further explication of this complex theory is beyond the scope of this paper.

#### Westen's Functional-Domain Model

Westen (1996) developed a model of conceptualizing personality that, while speaking to personality disorders, addresses more broadly the critical aspects of an individual's overall personality. Thus, it can account for a range of personality dynamics, from the healthy to the more disturbed. Westen's model places an emphasis on personality process and functions, including affect regulation and an individual's internal representations of self-and other, According to the model, a thorough formulation of an individual's personality style should address three domains: 1) wishes, fears, and values, 2) psychological resources, and 3) experience of the self and others, and the ability to sustain relationships. While not explicitly stated in the model, the emphasis on self and other representations, affect regulation, and the ability to maintain relationships, among

other things, suggests considerable overlap between Westen's functional-domain model and attachment theory.

#### Lyddon and Sherry's Attachment Conceptualization

Lyddon and Sherry (2001) developed an attachment based theory of DSM personality disorders, considered dimensionally, using the 4 category model of Bartholomew (1990) and Bartholomew and Horowitz (1991). They provided attachment conceptualizations of 10 major personality dimensions, which they termed developmental personality styles (see Table 2, p.55). They described each personality style from a developmental perspective using working models and attachment theory, and suggested typical childhood experiences with attachment figures associated with each style. Because they take a dimensional approach to the evaluation of attachment, some personality styles reflect two attachment dimensions. Their conceptualizations were based heavily on theory and clinical evidence rather than experimental research, although they did cite a few supporting studies. A brief review of their rationale for each personality style is described below.

Dependent personality style. Lyddon and Sherry (2001) suggested that a dependent personality style represents a preoccupied attachment dimension. Individuals with a dependent style often lack confidence and are typically clingy, submissive, and unassertive. They were often raised by overprotective caregivers who fostered dependency and discouraged autonomy. They have a negative view of themselves, and believe that they are incompetent to survive on their own. They also believe that they cannot survive without assistance, and generally have a positive view of others.

Obsessive-compulsive personality style. Lyddon and Sherry (2001) proposed that an obsessive-compulsive personality style represents a preoccupied attachment dimension. Individuals with an obsessive-compulsive personality style are generally reliable, yet stubborn, possessive, and irresolute. They tend to have a submissive approach to relating to those with authority, combined with an authoritarian approach to relating to peers and those over whom they have authority. Lyddon and Sherry theorized that as children, these individuals generally experienced their parents as controlling and over-involved, with perfectionistic expectations that were impossible to meet. As a result of their inability to meet parental expectations, they developed a negative view of themselves. However, they maintained a positive view of their perfectionistic parents and therefore developed a positive view of others.

Histrionic personality style. Histrionic personality style was also theorized to represent a preoccupied attachment dimension. According to Lyddon and Sherry (2001), histrionic individuals generally have interpersonal interactions that are organized around getting attention from others, and they tend to be superficial, unconventional, and emotionally labile, despite the potential for seeming charismatic and exciting at first. Their childhood experiences with caregivers can be categorized as enmeshed and inconsistent, and they were generally exposed to histrionic behaviors in one or both parents. Their need to resort to more extreme lengths in order to get attention from their parents contributed to their negative self-view, however, the attention they did get from extreme behavior contributed to a positive view of others.

Avoidant personality style. An avoidant personality style was theorized to represent both preoccupied and fearful attachment dimensions. According to Lyndon and

Sherry (2001), avoidant individuals tend to incorporate both preoccupied and fearful attachments because the have a model of self that is negative combined with a model of others that wavers between positive and negative. They tend to avoid people and relationships and have few friends, however this likely results from a fear of rejection and desire to be accepted by others. Nonetheless, they can become needy in relationships when they do develop. Their childhood experiences generally involved either an avoidant or an engulfing caregiver, and as a result they fear rejection or engulfment in subsequent intimate relationships.

Paranoid personality style. Paranoid personality style was theorized by Lyddon and Sherry (2001) to represent a fearful attachment dimension. Individuals with this style are generally distrustful and guarded. Their interpersonal relationships are suspicious, secretive, and criticizing. Childhood experiences generally involved perfectionistic caregivers who rejected and persecuted the child, and who were critical in their parenting methods. As a result, these individuals are overwhelmingly mistrustful of others and have negative models of self and others.

Antisocial personality style. Lyddon and Sherry (2001) theorized that an antisocial personality style represents both fearful and dismissing attachment dimensions. Individuals with an antisocial style are often calculating, antagonistic, sensation seeking, and reactively angry. They generally view more tender sentiments like warmth and intimacy as weak and have a tendency to exploit and manipulate others. Their childhood experiences with caregivers were often characterized by hostility and abuse, forcing them to be self-reliant. As a result, they have a model of self that vacillates between positive (from their self-reliance or as a defensive reaction) and negative (from the hostility and

abuse). They tend to have a negative model of others and see others as unwilling to care for them.

Narcissistic personality style. According to Lyddon and Sherry (2001), a narcissistic personality style represents fearful and dismissing attachment dimensions as well. Individuals with this style generally appear arrogant and pretentious.

Interpersonally, they are exploitive and tend to use others to boost themselves. Their childhood experiences generally included caregivers who overindulged and overvalued them, but whose approval was dependent on accomplishment. They developed a negative model of others through the notion that others are inferior relative to their grandiose view of themselves. Nevertheless, their model of self wavers between positive and negative. Generally, though they appear grossly overly self-assured, they often experience or defend off feelings of intense insecurity.

Schizotypal personality style. A schizotypal personality style was theorized to represent fearful and dismissing attachment dimensions. According to Lyddon and Sherry (2001), individuals with this style generally exhibit very peculiar behaviors. They tend to experience paranoid thinking and extreme anxiety in social situations, and detach themselves socially as a result. Their childhood experiences often included a cold, critical caregiver whose parenting style communicated that the individual was bizarre. As a result, the individual lacks a developed sense of self and becomes dependent on others, yet fears others have negative motivations or will criticize them. They develop a negative model of others while their model of self, undeveloped and confusing, wavers between positive and negative to defend against this confusion.

Schizoid personality style. According to Lyddon and Sherry (2001), a schizoid personality style represents a dismissing attachment dimension. Individuals with this style generally appear to have minimal interest in others and are unresponsive or aloof. Their childhood experiences often included caregivers who lacked social skills or were rigid and unresponsive. These experiences left them less interested in interaction with others, coupled with a belief that they are different from others. They have a negative model of others in that they generally don't view interactions with others as worth the effort. They are not distressed by their lack of relationships and are able to maintain a positive model of themselves as a result.

Borderline personality style. Lyddon and Sherry (2001) depart from Bartholomew and Horowitz's (1991) 4 category model of attachment to suggest that a borderline personality style represents a disorganized attachment dimension<sup>4</sup> because of the presence of an unstable personality configuration that shifts among the various forms of insecure attachment. Individuals with such a style often present as emotionally labile, reactive, impulsive, and empty. Their models of self and others frequently shift from positive to negative, and they shift between idealizing and devaluing the important people in their lives. As a result, interpersonally they vacillate between extreme closeness and extreme distance. These individuals tend to have had early experiences marked by chaos, inconsistency, and instability in parenting, coupled with no structure within which to regulate affect. Physical and/or sexual abuse is common in their histories. As a result of these early experiences they have no consistent sense of self or others. For the purposes of this study, and in order to remain consistent with the adult romantic attachment

<sup>&</sup>lt;sup>4</sup> Disorganized attachment refers to a lack of a consistent strategy in attachment relationships, such that a person switches among the organized attachment styles, and may be prone to dissociation when confronted with present or past trauma or loss.

literature, borderline personality traits are conceptualized to represent preoccupied and fearful attachment dimensions. Individuals with borderline personality traits are thought to have negative models of self along with models of others that vacillate between positive and negative.

#### Attachment and Personality Disorders

As mentioned above, attachment theory can be a useful way of understanding an individual's functioning throughout life in a variety of domains. For example, attachment theory can be considered a development model of personality construction (Bowlby, 1980). As such, it can be useful for understanding the development of and maintenance of personality disorders. There is a growing body of literature on the relation between attachment and personality disorders, but so far there is no overarching theory that guides this research. Moreover, while Lyddon and Sherry (2001) developed a theoretical exposition for the link between attachment and personality disorders, it has not been empirically evaluated in a systematic way.

#### Romantic Attachment and Personality Disorders

A growing body of research has demonstrated a link between attachment styles and dimensional PDs. For example, Bender, Farber, and Geller (2001) investigated the relation between adult attachment and PD traits. In comparing individuals with Cluster A, B, and C personality traits, they found that there were obvious differences in the attachment patterns present. In addition, they found that individuals with Cluster B traits had the most attachment difficulties. More specifically, histrionic, narcissistic, antisocial, and borderline personality pathology was related to higher levels of attachment insecurity. Because their insecure group was not differentiated with respect to attachment

style, no conclusions about stylistic differences in personality traits can be made from these data.

In contrast, Timmerman and Emmelkamp (2005) found that Clusters A and C were more strongly associated with attachment than Cluster B. More specifically, Cluster A personality traits were related to secure and fearful attachment styles, Cluster C personality traits were related to all attachment categories, but Cluster B personality traits were unrelated to fearful attachment. Antisocial personality traits were associated with dismissing attachment, and borderline personality traits were associated with preoccupied attachment style. This study looked at attachment and PDs in prisoners and forensic inpatients, along with controls, and this difference in population might explain the differing results of this study.

Nonetheless, other studies have similarly found differences in the links between personality clusters and attachment. Meyer, Ajchenbrenner, and Bowles (2005) found that Cluster B borderline personality features were more strongly related to insecure attachment than Cluster C avoidant personality features. Crawford and colleagues examined personality cluster symptoms as they relate to anxious and avoidant attachment dimensions (Crawford, Shaver, Cohen, Pilkonis, Gilath, & Kasen, 2006). They found that Cluster B and C features were associated with elevated anxious attachment (model of other) while Cluster A features were associated with avoidant attachment (model of self).

Brennan and Shaver (1998) investigated attachment styles and personality in a sample of over 1000 non-clinical adolescents and young adults. They found that adolescents with preoccupied attachment based on the Relationship Questionnaire had higher scores on the histrionic and dependent personality scales. Brennan and Shaver also

found that dismissing adolescents outscored fearful adolescents on the schizoid scale, while fearful adolescents outscored preoccupied adolescents on the paranoid scale.

Fossatti and colleagues (2003) conducted a study of personality disorders and adult attachment in a psychiatric sample. They administered an attachment and personality measure to a psychiatric sample of 487 individuals, all of whom were receiving inpatient or outpatient treatment. They used the Attachment Style Questionnaire (ASQ; Feeney et. al., 1994) which yields the following attachment scales: Confidence, Discomfort with Closeness, Relationships as Secondary, Need for Approval, and Preoccupation with Relationships. Their canonical correlation analysis demonstrated that Discomfort with Closeness and Confidence loaded onto the same variate, attachment avoidance. Similarly, Preoccupation with Relationships and Need for Approval loaded what they described an attachment anxiety variate. The avoidance variate was related to avoidant, paranoid, schizotypal, and depressive personality features while the anxiety variate was related to dependent, histrionic, and borderline personality features.

Meyer, Pilkonis, & Beevers (2004) investigated the relations among personality styles, attachment styles, and the appraisal of ambiguous social cues. They found that while borderline personality was associated with preoccupied attachment and schizoid personality was weakly associated with avoidant attachment, avoidant personality was associated with both preoccupied and avoidant attachment. Moreover, they found that borderline and avoidant personality characteristics indirectly influenced how unfriendly and rejecting an individual rated neutral faces through preoccupied attachment.

Westen and colleagues reported on three studies investigating clinician ratings of attachment and personality disorders in adolescents and adults (Westen, Nakash, Cannon,

& Bradley, 2006). In the adolescent group, they found the borderline PD was related to preoccupied and incoherent/disorganized attachment while dismissing attachment was related to avoidant and schizoid PDs, and that these relations held even when variance accounted for by other PD scores was partialed out. They found similar results in the adult sample, with the exception that schizoid personality alone (not avoidant) was related to dismissing attachment. The adult sample also revealed positive associations between narcissistic PD and dismissing attachment, and preoccupied attachment and histrionic and dependent PDs. Secure attachment was negatively correlated with borderline and avoidant PDs in the adult sample.

Links between attachment and personality pathology have also been made in various special populations. For example, Tweed and Dutton (1998), comparing 2 groups of batterers on measures of attachment and personality styles, found that while avoidant PD traits were related to preoccupied and fearful attachments, antisocial PD traits were not linked to fearful and dismissing attachment, as might be predicted. Instead, antisocial personality was associated with preoccupied attachment. Conversely, in examining the relation between attachment and personality in a sample of incest survivors, Alexander (1993) found that preoccupied attachment predicted the presence of dependent personality style and fearful attachment predicted the presence of avoidant personality style.

Bogaerts and colleagues have investigated attachment patterns and PDs in child molesters (Bogaerts, Vanheule, & Declercq, 2005; Bogaerts, Vanheule, & Desmet, 2006). They found that antisocial and schizoid PDs differentiated child molesters from controls, and that molesters were more likely to be insecurely attached (Bogaerts et al.,

2005). When comparing personality disordered and non-personality disordered subgroups of molesters, they found that avoidant and anxious-ambivalent attachments were more common in the PD subgroup (Bogaerts et al., 2005). Conversely, in examining PDs in securely and insecurely attached child molesters they found that schizoid PD differentiated the two groups (Bogaerts et al., 2006).

Dickenson and Pincus (2003) looked at subtypes (grandiose and vulnerable) of narcissistic character style, through an analysis of personality disorder criteria and attachment. Grandiose personality was related to the dramatic traits associated with narcissistic, antisocial, and histrionic personality disorders, and their self-reported attachment styles were generally secure or dismissive, indicating a positive model of self. Individuals reporting a vulnerable narcissistic personality, related to avoidant personality disorder, reported interpersonal distress and social avoidance. They tended to report fearful and preoccupied attachment styles, suggesting a negative model of self.

Overall, the data generally seem to support the attachment conceptualization of personality styles theory developed by Lyddon and Sherry (2001), with 2 notable exceptions. First, antisocial personality style was associated with different insecure attachment dimensions depending on the study. This could reflect differences in samples (e.g. adolescents vs. batterers), how antisocial personality was measured (e.g. questionnaire vs. interview; dimensional vs. categorical), how attachment was conceptualized (interview vs. questionnaire; 3 vs. 4 category model) or some other concern. Despite these conflicting findings, Lyddon and Sherry's dismissing attachment conceptualization of an antisocial personality style makes conceptual sense. One would expect traits like callousness, manipulativeness, and a lack of empathy to be associated

with a dismissing attachment orientation in which other people are viewed negatively and relationships are devalued.

Second, borderline personality style was associated with preoccupied and fearful attachment dimensions. While Lyddon and Sherry (2001) conceptualized the other personality styles using Bartholomew and Horowitz's (1991) 4-category model, they stepped out of this framework to describe borderline personality. However, the data linking borderline personality with fearful and preoccupied attachments indicate that it is reasonable to conceptualize borderline personality within the framework of the 4-category model.

Lyddon and Sherry's (2001) conceptualization is novel in that it is the only model found that applies attachment theory to an understanding of personality styles and includes predictions about which attachment dimension(s) relate to each personality style. Nevertheless, it has never been evaluated. As stated above, there is evidence from various sources supporting much of Lyddon and Sherry's (2001) conceptualization, however due to variability in methodology and measurement among these studies any conclusions drawn must be tentative until it is evaluated more carefully.

#### Parenting and Personality Disorder Traits

A number of studies have investigated the relation between parenting and PD traits, also using adults' retrospective accounts of childhood. In terms of overall personality dysfunction, Carter, Jouce, Mulder, and Luty (2001) found that high parental control and low parental care were associated with increasing PD symptomatology.

Similarly, Brennan & Shaver (1998) found that overall, traits of the 10 DSM-IV

(Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric

Association, 1994) PDs were associated with overprotective, rejecting parenting from both parents. Paris, Frank, Buonvino, & Bond (1991) tried to differentiate Axis II clusters based on level of care and control in a sample of depressed patients. In going from Cluster A to B to C to non-Axis II controls, they found decreasing deficiencies in parenting (i.e. increasing care and decreasing control scores). In contrast, in comparing Cluster A and Cluster B symptoms while statistically controlling for lifetime depression, Nordahl and Stiles (1997) found that while Cluster A was not associated with either control or care, Cluster B was associated with high levels of parental control. That Cluster B pathology has shown a stronger relation to parenting variables (e.g. Timmerman & Emmelkamp, 2005) could be accounted for by the association between borderline personality and parenting variables.

The majority of studies on parenting and personality styles have focused on borderline personality, which generally has been associated with high parental control and low parental care. (Goldberg, Mann, Wise, & Segall, 1985; Patrick et al., 1994; Timmerman & Emmelkamp, 2005). However, Nickell, Waudby, & Trull (2002) found that when controlling for gender, childhood adversity, Axis I disorder, and non-borderline Axis II symptoms, maternal care was uniquely related to borderline personality features. Conversely, in individuals with panic disorder with agoraphobia, parental control (but not care) was a strong predictor of borderline symptoms. Borderline personality has also been related to other parenting variables including maternal rejection and neglect and "grossly inappropriate parental behavior" (Ludolph et al., 1990), and indifference and abuse (Parker et al., 1999; Battle et al., 2004).

With respect to other Axis II pathology, antisocial personality has been related to different types of abuse, poor supervision, and cold or inconsistent parenting (e.g. Battle et al., 2004), as well as maternal control (Parker et al., 1999) and parental care (Norden, Klein, Donaldson, Pepper, & Klein, 1995). Histrionic personality style has been associated with maternal abuse (Parker et al., 1999). Cluster A pathology has been associated with low maternal care (Timmerman & Emmelkamp, 2005) and schizoid personality has also been associated with paternal control (Norden et al.). Paranoid personality has been associated with parental indifference and control, maternal abuse (Parker et al., 1999), and less parental care (Rankin, Bentall, Hill, & Kinderman, 2005). Timmerman and Emmelkamp found that cluster C measured dimensionally was related to parental care and control. Moreover, Nordahl and Stiles (1997) found that while dependent personality was not related to parenting variables, avoidant and obsessivecompulsive personalities were related to parental care and control. Avoidant personality has also been shown to relate to lower parental care as well as more rejecting, guiltengendering, and intolerant parenting styles (Stravynski, Elie, & Franche, 1989).

Overall, these data clearly demonstrate a relation between personality styles and retrospective accounts of parenting behavior. The nature of these relations, and differences in childhood experiences with parents among types of personality pathology, are less clear. This is in part due to differences in the samples used (e.g. depressed patients, forensic cases, normal adolescents), means of evaluating personality styles (questionnaire vs. interview; categorical vs. dimensional) specific personality style criteria (DSM-III-R vs. DSM-IV, APA, 1987, 1994), and measures of parenting practices. Indeed, the majority of the studies reported above used the Parental Bonding

Instrument (PBI; Parker, Tupling, & Brown, 1979) to assess perceptions of childhood relationships with parents. The PBI measures two dimensions of parenting attitudes and behaviors – care and control – for each parent. While this has allowed for a strong link to be demonstrated between these two components and different personality styles, it would be interesting to investigate other aspects of parenting that might theoretically be related to the development of personality pathology. For example, Lyddon and Sherry (2001) have linked a number of parental experiences to personality styles (see Table 3, p.56), but these links have yet to be empirically investigated.

## Attachment, Parenting, and Personality

As described above, there are a number of studies that demonstrate relations between attachment and parenting, attachment and personality, and parenting and personality. Only two studies were found that consider attachment, parenting and personality. Patrick et al. (1994) examined recollections of parenting behaviors and attachment in patients with borderline personality disorder. Borderline personality was associated with preoccupied and disorganized attachments on the AAI. In addition, comparisons with the Parental Bonding Instrument indicated lower levels of maternal care and higher levels of maternal overprotection in patients with borderline pathology. More complex relations among variables were not tested.

Brennan and Shaver (1998) investigated whether negative representations of early experiences with parents would be associated with attachment insecurity and personality disorders. Specific results are discussed in detail above, but briefly they found that insecure individuals described their relationships with parents more negatively than secures, with fearful individuals describing their maternal relationships as even more

rejecting than the other insecure groups. In addition, personality disorders were negatively associated with positive aspects of parenting. Again, more intricate analyses were not conducted. Clearly, more research is needed to examine complex interrelationships among all three domains. An understanding of such relationships would have implications for treatment as well as early interventions targeted at specific risk factors for personality pathology.

## Rationale for the Study

This is an important study for a number of reasons. First, it adds to the literature on the relation between attachment and parenting. As reviewed above, only a handful of studies have investigated the link between adult attachment and parenting behaviors, although attachment theory is predicated on the notion that negative early experiences with caregivers are risk factors for the development of attachment insecurity. Additional research has been needed to further evaluate if this assumption holds up, and to clarify which parenting behaviors are associated with which attachment dimension. To this end, this study included a more diverse array of parenting behaviors than prior studies. This study also adds to the literatures on attachment and personality, and parenting and personality. While both lines of research are supported by a number of studies, many of them focused on a limited number of personality styles (e.g. borderline, Cluster A). As a result, methodological differences and variations in the conceptualizations of attachment and personality make comparisons tricky. I utilized a frequently-used measure of attachment, a measure of personality disorder based on the most recent version of the DSM, a broader scope of parenting behaviors to address these limitations.

Finally, the proposed study will evaluate Lyddon & Sherry's (2001) attachment-based model of personality disorders. As noted above, Lyddon and Sherry developed a unique conceptualization of PD traits using attachment theory, which has yet to be explored. Although a number of studies seem to support this attachment conceptualization through separate comparisons between attachment and parenting, attachment and personality, and parenting and personality, no studies were found that examine the relations among attachment, parenting, and personality together.

## Hypotheses

The main goal of this study was to examine the way that adults' reports of their mothers' behavior and their self-reported attachment come together as they are used to sort individuals into groups, and how groups based on these dimensions differ with regard to self-reported personality pathology. Thus, while research has demonstrated links between attachment and PDs (e.g. Brennan & Saver, 1998; Alexander, 1993) and parenting and PDs (e.g. Carter et al., 2001; Timmerman & Emmelkamp, 2005), the present study investigated how attachment and parenting together relate to PDs. A secondary goal was to evaluate the results using Lyddon and Sherry's (2001) attachment conceptualization of PD traits. Because the results of the factor analyses and cluster analysis would ultimately determine which attachment and parenting variables would be examined, I did not make specific a priori predictions using Lyddon and Sherry's framework.

Clustering individuals into groups based on maternal parenting and attachment variables was generally an exploratory procedure. The attachment literature (e.g. Brennan et al., 1998; Feeney et al., 1994) suggests 2 underlying dimensions that cross to form 4

attachment categories. Thus, in deciding on the number of clusters, I expected either 2 or 4 clusters would be most appropriate. This is a fairly subjective process, and I intended to use the ease of interpretability of the item groupings as well as the number of significantly different clustering variables in selecting the best number of clusters. A few specific predictions about the cluster analysis results were made based on the attachment literature.

Hypothesis 1: Reports of secure attachment would cluster together with reports of positive, supportive maternal parenting behavior

Hypothesis 2: Reports of fearful attachment would cluster together with reports of abusive maternal parenting behavior

Because the nature of the clusters derived was not known prior to beginning the study, only a few general hypotheses were made about group differences in personality disorder variables:

Hypothesis 3: Groups with a higher degree fearful attachment would have greater reported PD traits than groups with a lower degree of fearful attachment.

Hypothesis 4: Groups with a higher degree of secure attachment would have lower reported PD traits than groups with a lower degree of secure attachment.

Hypothesis 5: Groups with a higher degree of maternal abuse would have greater reported personality disorder traits than groups with a lower degree of maternal abuse.

Hypothesis 6: Groups with a higher degree of reported positive maternal parenting behavior would have lower reported PD traits than groups with a lower degree of reported positive maternal parenting behavior.

Hypothesis 7: Groups with higher reported abuse and fearful attachment would have more reported PD traits than the other groups.

#### Methods

## **Participants**

Five hundred twenty one undergraduate students were recruited from the psychology subject pool to participate in this study, and received course credit for their participation. The demographic information for this original sample is displayed in Table 4 (p. 57). Also displayed are the demographics for the final sample and those subjects who were "dropped" from the study. As is evident in the table, a large proportion of the final sample appears to have been dropped, however this number is an over-estimate, as 42 individuals never completed the study. There were some technical difficulties reported, for example that the online study "timed out" while subjects were in the middle of completing it, and some subjects reported being disconnected from the internet (Those subjects were still given subject-pool credit for the study). Also, this was a fairly lengthy study, and a number of participants may have decided to quit. Due to the anonymity of the study, it is also unclear as to how many of the subjects with incomplete data went on to complete the study at a later time. In addition to unfinished experiments, a number of other individuals were dropped from the study for too much missing data overall (27). Other reasons subjects were dropped included seemingly random response patterns (13), invalid data suggested by the personality measures (19), inconsistent responding (8), and a report of no prior romantic relationships (31). In addition, because cluster analysis is so sensitive to outliers, 7 subjects were dropped from the study because their response pattern was so different from the rest of the sample. An examination of the demographic

information reveals that a greater proportion of participants from minority groups were dropped from the study. In addition, there were differences in the observed and expected representation of ethnicities across groups. There is no clear explanation for this; however this phenomenon is discussed in further detail in the discussion section below. Measures

Relationship Questionnaire (RQ). The Relationship Questionnaire, developed by Bartholomew and Horowitz (1991) as an adaptation of Hazan and Shaver's (1987) attachment measure, is an instrument requiring respondents to read 4 prototypical descriptions representing the four attachment categories and select which one best describes them. Respondents are then directed to rate the degree to which each category fits them on a 7-point Likert scale (See Appendix B, p. 56). The RQ therefore provides two ways of viewing attachment. Respondents are classified categorically based on their selection of the prototype that most resembles them and they are classified dimensionally based on their assessment of how similar each prototype is to them. The dimensional ratings of the 4 attachment categories were used for this study. Bartholomew and colleagues (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994; Bartholomew & Shaver, 1998) reported adequate reliability, discriminant validity, predictive validity, and convergent validity for the relationship questionnaire.

OMNI-IV Personality Disorder Inventory (OMNI-IV). The OMNI-IV, developed by Loranger (2001), is a 210-item self-report inventory of personality disorders, which was derived from the longer OMNI personality inventory. The OMNI-IV consists of 10 personality disorder scales in addition to 2 validity scales. Reliability for the personality disorder scales range from alphas of .62 to .84. Validity for the OMNI-IV was assessed

by correlating self-report with observer (spouse) ratings, and with other personality measures. The comparison between self-report and observer ratings yielded correlation coefficients ranging from .28 to .55, with a median of .47. Correlation coefficients in the comparison of OMNI-IV scales and a psychiatric interview ranged from .52 to .81, with a median of .66. Thus, reliability and validity of the instrument are adequate for the purposes of this study.

Egna Minnen Barndoms Uppfostran (EMBU; "one's memories of upbringing"). The EMBU was originally designed by Perris, Jacobsson, Lindstrom, von Knorring, & Perris (1980) as an 83-item measure of memories of parental childrearing behaviors in 14 different domains: Abusive, Depriving, Punitive, Shaming, Rejecting, Overprotective, Overinvolved, Tolerant, Affectionate, Performance-oriented, Guilt engendering, Stimulating, Favoring siblings, and Favoring patient. Developed in the Swedish language, it was translated in to English by Ross, Campbell, and Clayer (1982), and has been used in a number of English-language studies (e.g. Weinfield, Goldney, Tiggemann, & Weinfield, 1988; Huang, Someya, Takahashi, Reist, & Tang, 1996). Overall, an analysis of subscale reliability has demonstrated adequate internal consistency, with alphas generally ranging from .61 to .87 (Ross et al., 1982; Weinfield et al., 1988). The present study used the 71-item English version of the EMBU translated by Ross and colleagues with two modifications suggested by Weinfield et al. Some items were modified to be more appropriate for a contemporary American audience (see Appendix C, p. 58) and the directions were modified to instruct respondents to rate their memories of their childhood relationships with their parents (See Appendix D, p. 60). Although rating for both

parents were collected, the present study was concerned only with ratings of maternal behavior.

<u>Demographic questionnaire.</u> A short demographic questionnaire was administered to obtain demographic information including age, gender, and ethnicity (See Appendix E, p. 67). No specific a priori predictions were made regarding these variables.

Personality Diagnostic Questionnaire-4 (PDQ-4). The PDQ-4 (Hyler, 1994), consisting of 85 true/false items, is a self-report measure that assesses the 10 DSM-IV (APA, 1994) personality disorders. Each PDQ-IV item corresponds directly to one personality disorder criterion, and a response of "true" indicates that the criterion is present. In addition, there are two validity scales to identify random responding and a defensive response style. Although the PDQ-4 has been used quite extensively, there is limited research available regarding its psychometric properties. Nonetheless, the very similar prior version (PDQ-R) was widely used and had demonstrated validity (Hyler Skodol, Kellman, Oldham, & Rosnick, 1990; Hyler Skodol, Oldham, Kellman, & Doige, 1992). This measure was collected as a back-up personality measure in addition to the OMNI-IV.

## **Procedures**

All measures were completed online in one session lasting approximately 60 minutes. Participants complete the demographic questionnaire, followed by the Relationship Questionnaire, the OMNI-IV, the EMBU, and the PDQ-4.

## Data Analysis and Power

First, factor analysis was employed to determine the underlying factor structure of the EMBU. These factors were then clustered with the RQ using k-means cluster analysis

to examine the constellations of attachment and parenting experiences that grouped together. Analysis of Variance (ANOVA) was used to explore differences among the derived groups on the clustering variables as well as the personality variables. ANOVA was then used to examine group differences on the personality variables.

Cohen and Cohen (1983) recommend using the  $f^2$ -statistic as an effect size parameter in power analysis for ANOVA. If a medium effect size ( $f^2$  = .25) is presumed in the present study, power was .97 for the main One-Way ANOVAs comparing the 4 groups on the clustering variables and the personality variables. For the specific group comparisons with a medium effect size ( $\underline{d}$  = .5), power was .67 when comparing Group 1 vs. Group 2, .69 when comparing Group 1 vs. Group 3, .66 when comparing Group 1 vs. Group 4, .99 when comparing Group 2 vs. Group 3, .97 when comparing Group 2 vs. Group 4, and .99 when comparing Group 3 vs. Group 4. If a medium-large effect size is presumed ( $\underline{d}$  = .65), power increases to .85, .87, and .85 for Group 1 comparisons. This was deemed to be adequate power for the expected effect sizes for this study.

#### Results

Before running the cluster analysis, data reduction methods were employed to determine the factor structure of the EMBU. Principal component analysis with Varimax rotation was employed. It must be noted that items related to siblings were dropped from the analysis because of the large amount of missing data. The EMBU yielded 11 factors using eigenvalues > 1 as a cut-off point, However, analyzing scree plot, suggested by Costello and Osbourne (2005) to be a more appropriate way of determining factors, suggested a 4-factor rotated solution. The variance explained by each factor is presented in Table 5 (p. 57) and the results for the rotated solution are displayed in Table 6 (p. 58)

Items that loaded highly on to the 4 EMBU factors were examined. Items loading on the first factor described a positive, supportive experience with parents during childhood. Items loading on the second factor indicated emotional and physical abuse during childhood. Items loading on the third factor indicated parents who were anxious and overprotective. Finally, items loading on the fourth factor were related to parents who were performance-oriented. Items were aloud to load on multiple factors.

Factor scores were calculated using the regression method for each participant on each of the 4 factors, and entered into a k-means cluster analysis with the 4 RQ variables. In k-means clustering the number of clusters should be determined based on theory, and is set by the experimenter. The analysis was initially run to yield four clusters because each of the 4 attachment dimensions were theorized to belong to a different cluster. The cluster analysis was re-run with 2, 3, 5, and 6 clusters, but the 4 cluster data were most interpretable. A graph of the distance of each case from its cluster center is depicted in Figure 2 (p. 62).

Thus, 4 groups were derived from membership into one of the 4 clusters. Descriptive statistics (in the form of regression scores) for each factor based on group membership are presented in Table 7 (p. 60). A Multivariate Analysis of Variance was performed to evaluate group differences and gender. These data should be interpreted with caution, as the clustering process formed clusters by maximizing differences on these variables. Nonetheless, the data proved helpful in exploring the composition of each group. There were main effects for group ( $\underline{F} = 51.64$ ;  $\underline{p} < .01$ ) but not gender ( $\underline{F} = 1.18$ ;  $\underline{p} = .31$ ) and the group by gender interaction was not significant ( $\underline{F} = 1.36$ ;  $\underline{p} = .12$ ). Between-subjects analyses revealed significant effects for each attachment and parenting

factor at the p < .01 level, with the exception of maternal anxiety, which was not significant (p = .37).

Post-hoc Bonferroni corrected t-tests were run to examine group differences for each variable, and these group differences are represented in Table 7. Because the gender x group analysis did not reach significance, gender was not considered in this analysis. Group 1 reported relatively high levels of preoccupied, dismissing, and fearful attachment along with high levels of maternal abuse and low maternal orientation toward performance. This group will be referred to as the Insecure/Maternal Abuse group. Group number 2, the Preoccupied/Fearful group consisted of individuals reporting a tendency toward preoccupied and fearful attachment styles, suggesting a negative working model of the self. They tended to report higher levels of anxious maternal behavior (though not significantly so) compared to the other groups. Group 3 reported a relative tendency toward secure attachment and away from fearful and preoccupied attachments. They reported more supportive maternal behavior than other groups. Thus, they will be referred to as the Secure/Maternal Support group. Finally, Group 4, the Dismissing/Fearful group, reported a tendency toward dismissing and fearful attachment. They tended to report a higher degree of maternal performance orientation and lower levels of supportive, abusive, and anxious maternal behavior.

Descriptive statistics for each personality variable based on group membership are presented in Table 7 (p. 60). A Multivariate Analysis of Variance was performed to evaluate cluster group differences and gender on personality variables. There were main effects for group ( $\underline{F} = 4.95$ ;  $\underline{p} < .01$ ) and gender ( $\underline{F} = 3.00$ ;  $\underline{p} < .01$ ) but the group by gender interaction was not significant ( $\underline{F} = 1.16$ ;  $\underline{p} = .28$ ). Between-subjects analyses

revealed significant effects for each personality variable at the p < .01 level, with the exception of histrionic PD which was significant at p < .05. With regard to gender, males reported more antisocial personality ( $\underline{M} = 55.85$ ,  $\underline{SD} = 11.51$  versus  $\underline{M} = 51.02$ ,  $\underline{SD} = 10.19$ ; p < .01), and narcissistic personality ( $\underline{M} = 55.64$ ,  $\underline{SD} = 10.41$  versus  $\underline{M} = 50.48$ ,  $\underline{SD} = 10.69$ ; p < .01) than females. Because the group x gender interaction was not significant, gender was dropped from future analyses.

Post-hoc Bonferroni corrected t-tests were performed to uncover group differences on the personality variables, and the results are represented in Table 8 (p. 61). The Insecure/Maternal Abuse group reported significantly higher levels of paranoid, schizoid, schizotypal, antisocial, borderline, and dependent PD traits than the other three groups, and their was a trend in that direction for the other PD classifications. In contrast, the Secure/Maternal Support group reported lower levels of paranoid, schizoid, schizotypal, borderline, avoidant, and obsessive-compulsive PD traits and demonstrated a trend in that direction for the remaining PDs as well. The only significant finding outside of one of these two groups was that the Preoccupied/Fearful group reported more dependent PD traits than the Dismissing/Fearful group.

In sum, the Secure/Maternal Support reported lower levels of virtually all of the PD traits compared to the other groups. The Insecure/Maternal Abuse group reported higher levels of virtually all of these PD traits, in particular those relating to paranoid, schizoid, schizotypal, antisocial, borderline, and dependent personalities. The other two groups were not well differentiated based on PD traits.

#### Discussion

This study was designed to evaluate the attachment and maternal parenting variables that cluster together, and examine differences in PD traits based on this clustering. The results of the cluster analysis suggest that mothering and attachment variables come together in ways that make intuitive sense. As predicted (Hypothesis 1), individuals who report generally positive interactions with their mothers also report secure attachments. Also as predicted (Hypothesis 2), maternal abuse was associated with relatively high self-reported fearful attachment. However, maternal abuse was associated with relatively high levels of the other two insecure attachment dimensions as well, while fearful attachment was associated with preoccupied attachment. Overall, these findings suggest that maternal abuse toward a child is a risk factor for attachment insecurity in general and fearful attachment in particular.

Consistent with Hypotheses 3 and 5, individuals in the group reporting fearful attachment and maternal abuse also reported higher levels of PD traits across the board, including higher levels of borderline personality. This makes sense given the large bodies of literature connecting borderline PD with both abuse (e.g. Battle et al., 2004) and fearful attachment (e.g. Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004). Childhood abuse can lead to negative working models of self and other, and can stymie the development of appropriate affect regulation strategies, which may manifest in the hallmark features of BPD such as affective instability, impulsivity, feelings of emptiness, and engaging in self-destructive behavior.

As expected (Hypotheses 4 and 6) the Secure/Maternal Support group generally reported lower levels of PD traits relative to the other groups. In examining the other two groups reporting insecure attachment but no abuse, the only significant finding was that

the Preoccupied/Fearful group reported higher levels of dependent traits than the Dismissing/Fearful group. Thus, individuals with a negative model of self, regardless of the valence of the model of others, reported more dependent traits than individuals with a negative model of others, regardless of the valence of the model of self. This finding suggests that individuals who do not feel positively about themselves are more likely to rely on others for reassurance and taking responsibility in their lives, to fear losing the approval of others, and to have other dependent traits compared to individuals who don't feel positively about others.

## Examining an Attachment Conceptualization of PDs

These findings will now be reviewed in light of Lyddon and Sherry's (2001) attachment conceptualization of PD traits. Due to the limited number of parenting behaviors considered, an emphasis will be placed on the attachment and personality variables. Parenting will generally be addressed only when relevant findings are present.

Dependent personality style. Lyddon and Sherry (2001) suggested that a dependent personality style represents a preoccupied attachment dimension. In the present study, the Insecure/Maternal Abuse and Preoccupied/Fearful groups reported higher levels of preoccupied attachment than the other two groups. They also reported significantly more dependent PD traits than the other two groups, with the Insecure/Maternal Abuse group reporting the most dependent traits. This association between preoccupied attachment and dependent PD traits provides support for Lyddon and Sherry's assertion that individuals with dependent PD traits view themselves negatively, as incapable of surviving on their own, but view others as generally positively.

Obsessive-compulsive personality style. Lyddon and Sherry (2001) proposed that an obsessive-compulsive personality style represents a preoccupied attachment dimension. Individuals in the groups reporting higher levels of preoccupied attachment (Insecure/Maternal Abuse and Preoccupied/Fearful) reported more obsessive-compulsive traits than individuals in the Secure/Maternal Support group. Moreover, the Insecure/Maternal Abuse group reported significantly more obsessive-compulsive traits than the Dismissing/Fearful group, and the Preoccupied/Fearful group showed a trend in this direction. This suggests that individuals with obsessive-compulsive traits have a positive model of others combined with a negative view of themselves, which Lyddon and Sherry attribute to their positive view of their perfectionistic parents in conjunction with their negative self-appraisals resulting from never being able to live up to their parents' high expectations.

Histrionic personality style. Histrionic personality style was also theorized to represent a preoccupied attachment dimension. The Insecure/Maternal Abuse group reported more histrionic traits than the Secure/Maternal Support group, and a trend in this direction compared to the Dismissing/Fearful group. The Preoccupied/Fearful group reported somewhat greater histrionic traits than these two groups, but this difference was not significant. Overall, there is some evidence that individuals with histrionic traits have negative models of the self combined with positive models of others. Lyddon and Sherry (2001) suggested that this was due to interactions with caregivers that required them to resort to extreme measures to get attention. More specifically, individuals were thought to develop negative views of the self in the face not being able to consistently gain the attention of their sought-after caregivers.

Avoidant personality style. An avoidant personality style was theorized to represent both preoccupied and fearful attachment dimensions. The Insecure/Maternal Abuse and Preoccupied/Fearful groups reported relatively high levels of these attachment classifications, along with more avoidant traits than the Secure/Maternal Support group. Both groups also reported more avoidant traits than the Dismissing/Fearful group, although this difference did not reach significance for the Preoccupied/Fearful group. These findings are consistent with Lyddon and Sherry's assertion that individuals reporting avoidant traits have negative models of self coupled with models of others that waiver from good to bad (i.e. avoidance of relationships and but clinginess in relationships).

Paranoid personality style. A paranoid personality style was theorized by Lyddon and Sherry (2001) to represent a fearful attachment dimension. Fearful attachment was fairly consistent among the three groups reporting higher levels of insecure attachment. The three insecure groups also reported more paranoid PD traits than the Secure/Maternal Support group, with the Insecure/Maternal Abuse group reporting more paranoid PD traits than the other two insecure groups as well. This provides evidence that individuals with Paranoid PD traits have negative models of self and other, which Lyddon and Sherry attributed to childhood experiences with parents who were critical and rejecting.

Antisocial personality style. Lyddon and Sherry (2001) theorized that an antisocial personality style represents both fearful and dismissing attachment dimensions. The Fearful/Dismissing group did not report more antisocial traits than the Secure/Maternal Support group, although there was a trend in this direction. The Insecure/Maternal Abuse group, who also reported moderate to high fearful and

dismissing attachments, reported more antisocial PD traits than the other three groups. Individuals in this group also reported more maternal abuse than the other two groups, which is consistent with Lyddon and Sherry's attachment conceptualization of antisocial PD. Thus, it appears that while having a negative model of others couple with a model of self that vacillates between positive and negative may be related to antisocial PD traits, childhood abuse is an important factor.

Narcissistic personality style. According to Lyddon and Sherry (2001), a narcissistic personality style also represents fearful and dismissing attachment dimension. While the two groups with the highest reported fearful and dismissing attachment dimensions reported more narcissistic personality traits than the Secure/Maternal Support group, the insecure groups were not differentiated based on narcissistic traits. Lyddon and Sherry suggested that individuals with narcissistic personality styles have a view of self that wavers from positive to negative, which is reflected in their grandiosity as a defense against feelings of inferiority. Their model of others according to Lyddon and Sherry is negative.

Schizotypal personality style. A schizotypal personality style was theorized to represent fearful and dismissing attachment dimensions. The three groups reporting insecure attachments reported more schizotypal traits than the Secure/Maternal Support group. In addition, the Insecure/Maternal abuse group reported more schizotypal traits than the other three groups. According to Lyddon and Sherry (2001) schizotypal individuals have a model of self that is confused and undeveloped, and therefore wavers between positive and negative. They have a model of others that is generally negative. The present study did not provide evidence to support this, in that the Dismissing/Fearful

group reported similar levels or lower levels of schizotypal traits relative to the other two groups reporting insecure attachment.

Schizoid personality style. According to Lyddon and Sherry (2001), a schizoid personality style represents a dismissing attachment dimension. All three groups reporting insecure attachments reported higher levels of schizoid traits than the Secure/Maternal Support group. Moreover, the Insecure/Maternal Abuse group reported more schizoid traits than the other three groups. Lyddon and Sherry theorized that individuals with schizoid traits maintain a positive view of themselves as they are not distressed by their lack of relationships. They have a negative view of others in that they don't see relating to others as a worthwhile endeavor. In the present study, the group reporting the highest levels of dismissing attachment did not report more schizoid traits than the other two groups reporting insecure attachment, so there was no clear evidence in support of Lyddon and Sherry's conceptualization of schizoid PD.

Borderline personality style. Lyddon and Sherry (2001) departed from Bartholomew and Horowitz's (1991) 4 category model of attachment to suggest that a borderline personality style represents a disorganized attachment dimension because of the presence of an unstable personality configuration that shifts among the various forms of insecure attachment. For the purposes of this study however, borderline personality traits were considered to be related to fearful and preoccupied attachment. The two groups reporting higher levels of both of these attachment dimensions reported more borderline features than the Secure/Maternal Support group. The insecure/Maternal Abuse group also reported more borderline traits than the other three groups. Thus, there is some evidence that individuals with borderline PD traits have a negative view of the

self combined with a view of others that vacillates from positive to negative. However, findings for Borderline PD may support Lyddon and Sherry's original conceptualization. The Insecure-Maternal Abuse group, while reporting higher levels of fearful and preoccupied attachments, also reported high levels of dismissing attachment and may represent a group of individuals with disorganized attachment, who do not rely on one organized, even if insecure, attachment strategy. The results concerning borderline PD traits also confirm Lyddon and Sherry's model, and the PD literature, associating childhood abuse with borderline PD.

The present study provided evidence in support of Lyddon and Sherry's attachment conceptualization of PDs in many cases. However, a possible alternate explanation of the findings is that insecure attachment in was generally related to greater levels of dysfunctional personality traits. Individuals with the most difficult childhoods (abuse) and the most insecure (or disorganized) attachments, reported the most PD traits. Those who reported the most supportive relationships with their mothers and a secure attachment style reported the fewest PD traits. Individuals with moderately problematic insecure attachments and less traumatic recollections of their mother's behavior during childhood reported PD traits somewhere in between. Additional research, particularly with non-college student clinical samples, would likely shed more light on these and other possibilities. Nevertheless, Lyddon and Sherry's main argument, that attachment theory in general and working models of self and other in particular provide a meaningful context for understanding PD traits, was generally supported.

#### Ethnicity

As mentioned above, a greater proportion of minority participants, were dropped from (or dropped out of) the study (See Table 4 p. 57). Unfortunately, I did not track why each subject was dropped so it is unclear why this is the case. It could be that there were cultural concerns, for example in reporting on the maternal parenting behavior, which caused minority participants to discontinue. Perhaps some participants who learned English as a second language may have had difficulty with the wording of the questions. Related to this, there were also differences in the observed and expected representation of ethnicities across groups. As can be seen in Table 4 there were more African Americans and Latino(a)s in the Insecure-Maternal Abuse group than was expected. In addition, there were more Asians in the Dismissing/Fearful group than expected and more Caucasians in the Secure/Maternal Support group then expected. Finally, there were fewer African Americans and Asians in the Secure/Maternal Support group than expected. While further analysis of these data was beyond the scope of this study, it brings up an interesting question about the role of cultural norms (for example around spanking, achievement, collectivism, and individualism) in the complex relations among parenting, attachment, and the development of PD traits.

### Limitations

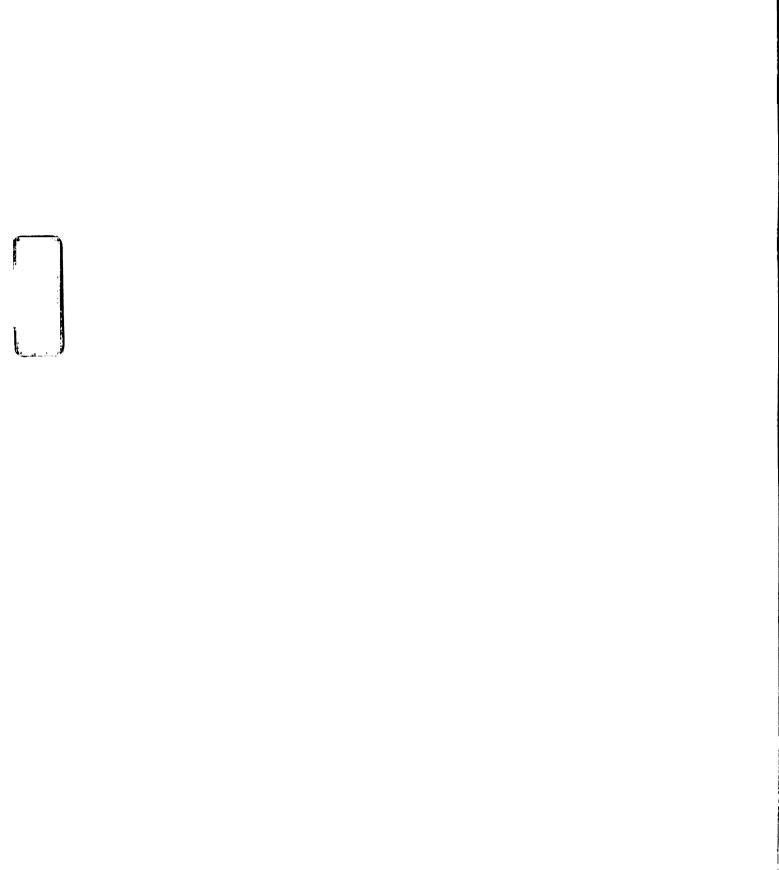
This study has four main limitations. The first is the use of a non-clinical college sample. While reliance on university students for research has many benefits, including the ability to gather data from a large sample in a short amount of time, there are a number of inherent drawbacks as well. College samples limit the ability to generalize results to other populations that have more variability in age and educational background. More importantly for this study, which was an exploration of potentially pathological

personality traits, the use of a college sample rather than a clinical sample may have prevented relationships among key variables from being uncovered. Indeed, in reviewing the data from the perspective of Lyddon and Sherry's attachment conceptualization of PD traits, there were several "trends" in the data supporting the attachment conceptualization that did not reach significance. Moreover, in the present study the Preoccupied/Fearful and Fearful/Dismissing groups were distinct from the Secure/Maternal Support and Insecure/Maternal abuse groups, but were not well differentiated from each other, at times making it difficult to draw conclusions about Lyddon and Sherry's assertions. It seems likely that a clinical sample, with a broader scope of Axis I and II concerns, would have less of a restricted range of PD traits and provide for a more in-depth examination of Lyddon and Sherry's theory.

The second key limitation is that only maternal parenting behavior was considered. This was done to keep the necessary sample size reasonable, but excluding reports on paternal behavior resulted in losing a critical aspect of the participants' childhood experiences of parenting. Abuse or anxiety and overprotection from either parent can be a risk factor for later development, just as support from either parent can be protective factor. Related to this, there were far fewer male participants in the study. In future research I would hope to look at the effects of the combination of maternal and paternal parenting.

A third important limitation was the utilization of strictly self-report measures.

This design was chosen to enable data collection from such a large sample size in a short amount of time, but with the realization that there are a number of disadvantages to this methodology. Many of the items were transparent in their meaning, and participants may



have answered in a socially desirable way. However, the anonymity afforded in this study makes socially desirable responding somewhat less likely. Self-report measures are also limited in that they require a person to be aware of their thoughts, feelings, and motivations. Thus, while they may capture a person's world view and conscious experiences they do not necessarily speak to unconscious dynamics, or representations of self and other, that are crucial in understanding both attachment and character pathology.

There is some evidence that self-report measures of personality are more accurate for certain PD diagnoses. In a recent study examining the relation between self-reported and clinician reported (dimensional) borderline and antisocial PD ratings, small to medium correlations were found (Bradley, Hilsenroth, Guarnaccia, & Westen, 2007). However, the authors selected these particular PDs because the self-report data have been shown to be most valid, based on convergence with other informants or measures. Other PD diagnoses (e.g. narcissistic) have shown little to no convergence between self-report and informant report (Thomas, Turkheimer, & Oltmanns, 2003), and the validity for self-report diagnosis for these disorders has been called into question.

The fourth main limitation relates to the measurement of PD traits. I am coming from the framework that personality function and dysfunction lie on a continuum from simply exhibiting traits associated with a PD, as everyone does, to having such significant impairment that it rises to the level of a characterological disorder. This dimensional approach to personality, consistent with the PDM conceptualization of personality patterns (PDM Task Force, 2006), has also been shown to have better construct validity than data derived from a categorical approach in PD research (e.g. Widiger 2003). The measure I used (OMNI-IV) was not designed to make this

differentiation. Indeed, I found no self-report measure<sup>5</sup> available during the planning or write-up phase of the project that evaluated personality disorders dimensionally. In addition, with the exception of some of the Fearful-Maternal Abuse group scores, all PD ratings were within one standard deviation from the mean. This is not unexpected given the nature of the sample (college students), but it does limit the interpretability of the data.

## **Implications**

This study has implications for the way personality traits and personality disorders are defined. The current framework for diagnosing personality disorders provided in the DSM-IV-TR is essentially a symptom checklist with considerable overlap among disorders and no consideration of etiology or course. Other factors such as the meaning and function a particular set of symptoms has for an individual, which might seem clinically important in differentiating among different diagnostic possibilities, are not accounted for. This can be a source of frustration for practitioners trying to tease apart overlapping symptoms to make accurate and meaningful diagnoses in clinical settings. In the present study, where PD traits were based on DSM-IV diagnostic categories, individuals in the Insecure/Maternal Abuse group were elevated relative to at least one other group on all of the PD traits, suggesting substantial overlap in this sample. This is consistent with the large body of research linking the development of PD traits to childhood experiences and ways of maintaining relationships with others, and suggests that these are important aspects of personality to consider even if the extensive overlap among PDs and PD traits makes the results difficult to interpret. Thus, it follows

<sup>&</sup>lt;sup>5</sup> Non-questionnaire measures such as the Shedler-Westen Assessment Procedure (SWAP 200; Westen & Shedler, 1999), a clinician-rated q-sort procedure for assessing personality disorder characteristics dimensionally, have been developed.

considerations beyond behavioral symptoms as defined in the <u>DSM</u> are needed when defining diagnostic dimensions or categories, to a yield more meaningful classification system with greater specificity.

In part in responding to shortcomings in DSM personality disorder classification, the PDM Task Force (2006) recently published the <u>Psychodynamic Diagnostic Manual</u>. This alternate, or complementary, classification system provides prototypical descriptions of each personality disorder including possible etiological and conceptual information, therapeutic considerations, and characteristic affects, beliefs, and defenses. Similar to DSM, the PDM is also a multi-axial classification system and the first axis, the P Axis, is where personality patterns and disorders are addressed. Classification on this axis is predicated on the notion that personality patterns fall on a continuum from healthy to disordered. According to the PDM, what differentiates disordered from non-disordered include "deficits in sense of identity, relations with others, reality testing, adaptation to stress, moral functioning, or affective range, recognition, expression, and regulation (p. 18). Thus a person can have a depressive personality, for example, without having a depressive personality disorder depending on his or her functioning in these domains.

The results of this study support the use of the PDM, a non-categorical approach to personality diagnostics. This study also provided further evidence of the importance of interrelations among parenting, attachment, and PD traits. Prior research findings were replicated, but this study was unique in that it used cluster analysis to combine parenting and attachment variables to evaluate differences in personality traits. Also, this study evaluated a conceptualization of PD traits based on working models of attachment, and provided support for the use of working models in understanding PDs and PD traits.

Additional research with different parenting behaviors (e.g. physical versus verbal versus sexual abusiveness) utilizing a clinical sample would be a potential next step in understanding the unique combination of parenting and attachment that contribute to personality development.

# Appendix A

## Tables and Figures

Table 1: Equivalent attachment styles to those in the four category model of attachment (Bartholomew, 1990).

Four Category Model	Other Models	Description
Secure	Secure, Autonomous	Comfortable in relationships with autonomy and intimacy
Preoccupied	Ambivalent, Anxious-Ambivalent, Enmeshed	Overly dependent in relationships
Dismissing	N/A; Dismissing and Fearful categories are considered Avoidant (sometimes secure) in other models	Emphasize self-reliance over relationships, dismiss attachment
Fearful	Avoidant, Anxious-avoidant	Avoid relationships, fear attachment

<u>Table 2: Attachment dimension and associated personality styles, as postulated by Lyddon and Sherry (2001).</u>

Attachment Dimensions	Personality Style
	Dependent
Preoccupied	Obsessive Compulsive
	Histrionic
Preoccupied/ Fearful	Avoidant
Fearful	Paranoid
	Antisocial
Fearful/ Dismissing	Narcissistic
	Schizotypal
Dismissing	Schizoid
Disorganized	Borderline

<u>Table 3: Adaptation of attachment dimension, personality styles, and associated parenting behaviors as described by Lyddon and Sherry (2001).</u>

Attachment Dimensions	Personality Style	Parenting Behaviors
Preoccupied	Dependent	Overprotective, Unstimulating
	Obsessive Compulsive	Performance Oriented, Overinvolved
	Histrionic	Rejecting, Overinvolved
Preoccupied/	Borderline	Overprotective, Abusive, Unaffectionate
Fearful	Avoidant	Overinvolved, Rejecting, Unaffectionate
Fearful	Paranoid	Rejecting, Intolerant, Shaming
	Antisocial	Abusive, Unaffectionate, Punitive
Fearful/ Dismissing	Narcissistic	Performance Oriented, Overinvolved
	Schizotypal	Shaming, Unaffectionate, Intolerant
Dismissing	Schizoid	Rejecting, Unaffectionate

Note: In keeping in line with the adult romantic attachment literature, Lyddon and Sherry's model was adapted so that borderline personality disorder is associated with preoccupied and fearful attachment dimensions, rather than a disorganized attachment dimension.

<u>Table 4: Demographic Information for Original Sample, Final Sample by Group, and Dropped Subjects.</u>

	Total	Group 1	Group 2	Group 3	Group 4	Whole Sample	Subjects Dropped
N	374	19	88	179	88	521	147
Mean Age	19.7	19.2	19.2	19.7	19.8	19.7	19.8
( <u>SD</u> )	(2.2)	(1.4)	(1.5)	(2.6)	(1.9)	(2.1)	(1.8)
% Male	25.2	36.8	22.7	26.8	21.8	25.9	29.2
Race							
% Af Amer	6.6	25 <sup>a</sup>	7.2	4.2 <sup>b</sup>	7.1	8.1	12.9
% Asian	5.7	6.3	6.0	$2.4g^{b}$	11.9 <sup>a</sup>	8.3	15.6
% Cauc	83.8	43.8	81.9	91.1ª	78.6	73.3	59.9
% Latino(a)	1.4	18.8ª	1.2	.6	0	1.7	2.7
% Other	1.7	0	3.6	1.2	1.2	2.5	2.7

Note: Group 1 = Insecure/Maternal Abuse; Group 2 = Preoccupied/Fearful; Group 3 = Secure/Maternal Support; Group 4 = Dismissing/Fearful. <sup>a</sup> = higher representation than expected; <sup>b</sup> = lower representation than expected.

Table 5: Variance explained by EMBU factors.

Factor		Rotation Sums of Squared	Loadings
racioi	Total	% of Variance	Cumulative %
Positive/Supportive	10.6	17.1	17.1
Abusive	8.2	13.2	30.3
Anxious	4.5	7.3	37.6
Performance	2.5	4.1	41.7
Oriented			

Table 6: Varimax-Rotated UMBU Factor Pattern

lable 6: Varimax-Rotated UMBU Factor Pattern				
		Factor L	_	
EMBU Question	Pos	Abuse	Anx	P-O
Could you seek comfort from your parents if you were sad?	.74	18	10	14
If things went badly for you, did you then feel that your parents tried to comfort and encourage you?	.73	12	.12	21
If you had a difficult task in front of you, did you then feel support from your parents?	.73	26	.04	.02
Would your parents demonstrate they were fond of you?	.73	13	.02	.08
Did your parents usually try to praise you?	.71	18	02	.18
Do you think your parents respected your opinion?	.67	14	16	10
Did your parents show with words and gestures that they liked you?	.65	22	.01	.01
Did your parents accept you as you were?	.65	38	11	10
Did you feel it was difficult to approach your parents?	64	.25	.13	.28
Did your parents usually hug you?	.63	14	.00	03
Did your parents respect the fact that you had other opinions than they had?	.62	16	26	06
Did your parents usually engage themselves in your interests and hobbies	.62	05	06	.10
Did you feel that your parents were proud when you succeeded in something you had undertaken?	.60	38	.00	.09
Did you feel that you parents liked you?	.60	30	14	.08
Did you feel that your parents wanted to be together with you?	.59	22	13	.14
Do you think that your parents tried to make your adolescence stimulating, interesting, and instructive (for instance by giving you good books, arranging for you to go to camp, encouraging you to join clubs)?	.58	19	02	.18
If you had done something foolish, could you then go to your parents and make everything right by asking their forgiveness?	.58	10	24	03
Did your parents wish you were like someone else?	51	.43	.23	.20
Did your parents usually take an interest in what kinds of friends you spent time with?	.49	05	.17	.10
Do you think that either of your parents wished you had been different in any way?	48	.44	.18	.21
Did you think that your parents punished you fairly?	.43	24	28	.01
Did you usually get beaten by your parents?	22	.71	04	18
Did your parents beat you for no reason?	16	.68	09	17
Did your parents give you more physical punishment then you deserved?	22	.65	.12	.21
Were you punished by your parents without having done anything?	27	.64	.20	06
Would your parents punish you hard, even for trivial	36	.63	.21	04

things?				
Did you feel that your parents thought it was your fault	.40	.59	.00	.10
when they were unhappy?				
Did your parents usually criticize you and tell you how	24	.59	.12	.13
lazy and useless you were in front of others?				
Do you think that your parents were mean and grudging	.44	.56	.15	.04
toward you?	2.		10	2.5
Would your parents use expressions like "Is this the	31	.55	.10	.25
thanks we get for having done so much for you, and for				
having sacrificed so much for your sake?"  Do you think that either of your parents was severe	27	.55	.22	01
towards you?	21	.33	.22	01
Did your parents often say they did not approve of your	22	.54	.12	.22
behavior at home?	22	.54	.12	.22
Did your parents treat you in such a way that you felt	41	.51	.22	01
ashamed?	•	•==		
Did your parents usually show that they were interested	.24	47	.15	.43
in your getting good grades?				
Would your parents not let you have the things you	10	.46	.17	12
needed, based on the principle that you shouldn't become				
spoiled?				
Did your parents use expressions like "If you do that, you	.15	.45	.15	.15
will make me sad?"				
Did your parents tell you your behavior was	35	.44	.23	.18
inappropriate for someone of your age, gender, etc?	0.4	4.5	••	2.7
Would your parents look sad or in any other way show	.04	.42	.20	.27
you that you had behaved badly so that you go real				
feelings of guilt?  Did your poents purish you over for small offenses?	24	40	.37	10
Did your parents punish you, even for small offenses? As a child, were you beaten or scolded in the presence of	2 <del>4</del> 27	.40 .40	.18	10 10
others?	21	.40	.10	10
Did your parents tell stories about something you had	35	.40	.04	.28
said or done in front of others so that you felt ashamed?		•••		.20
Did your parents usually criticize the friends you liked to	22	.40	.30	.18
spend time with?				
Were your parents usually abrupt towards you?	37	.39	.09	.07
Did you feel that your parents' anxiety interfered with	23	.38	.20	.26
everything you did?				
Were you treated as the "black sheep" or "scapegoat" of	32	.35	.24	.26
the family?				
Were you usually allowed to go where you liked without	.19	.02	78	18
your parents worrying too much?				
Did either of your parents forbid you to do things other	17	.11	.66	.06
children were allowed to do because they were afraid				
something might happen to you?	24	0.4	12	07
Did your parents allow you to do the same things as your	.24	.04	63	.07

.43	13	61	.06
04	.20	.58	.25
.07	.16	.57	.12
13	.26	.50	.25
.13	.18	.47	.08
.10	.14	.44	.10
.02	.01	.14	.63
.15	07	.15	.55
06	.09	.09	.42
	04 .07 13 .13 .10 .02	04 .20 .07 .16 13 .26 .13 .18 .10 .14 .02 .01	04 .20 .58 .07 .16 .57 13 .26 .50 .13 .18 .47 .10 .14 .44 .02 .01 .14 .1507 .15

Note: Factor loadings with an absolute value ≥ .35 are bolded.

Table 7: Means and Standard Deviations for RQ Attachment Ratings and EMBU Factor

(Regression) Scores by Group.

Factor	Group 1 <u>N</u> 19	Group 2 <u>N</u> =88	Group 3 <u>N</u> =179	Group 4 <u>N</u> =88
Preoccupied	3.6 (1.7) <sup>ed</sup>	4.3 (1.5) <sup>cd</sup>	2.5 (3.8) <sup>ad</sup>	2.4 (1.2) <sup>ab</sup>
Attachment Dismissing				
Attachment	3.8 (1.6) <sup>bd</sup>	2.6 (1.1) <sup>ad</sup>	3.1 (1.5) <sup>d</sup>	5.4 (1.0) <sup>abc</sup>
Fearful Attachment	5.3 (1.1) <sup>c</sup>	5.4 (1.2) <sup>e</sup>	2.4 (1.1) <sup>abd</sup>	5.0 (1.4) <sup>c</sup>
Secure	3.6 (1.4) <sup>c</sup>	3.4 (1.3) <sup>c</sup>	5.8 (0.9) <sup>abd</sup>	3.5 (1.4) <sup>c</sup>
Attachment Supportive	3.0 (1.4)	3.4 (1.5)		
Parenting	44 (1.17)°	23 (.96) <sup>c</sup>	.35 (.71) <sup>abd</sup>	17 (.99) <sup>c</sup>
Abusive	3.30(1.11) <sup>bcd</sup>	18 (.61) <sup>a</sup>	$22(.59)^a$	18 (.62) <sup>a</sup>
Parenting Anxious				
Parenting	26 (1.15)	.16 (.99)	02 (.87)	04 (1.00)
Performance Oriented	69 (1.19) <sup>bcd</sup>	.11 (.85) <sup>a</sup>	05 (.89) <sup>a</sup>	10 (1.01)
Parenting	07 (1.17)	.11 (.03)	03 (.89)	.10 (1.01) <sup>a</sup>

Note: Superscripted letters indicated group differences at p < .05. Group 1 (Insecure/Maternal Abuse) = a Group 2 (Preoccupied/Fearful) = b, Group 3 Secure/Maternal Support) = c, and Group 4 (Dismissing/Fearful) = d.

Table 8: Means, Standard Deviations, Maximums, and Minimums for OMNI-IV.

Factor	is, Standard	Group 1	Group 2	Group 3	Group 4
Paranoid	M/SD	N=19 62.5 (8.9) <sup>bcd</sup>	$N=88$ $55.0 (8.7)^{ac}$	$N=179$ $46.0 (8.4)^{abd}$	<u>N</u> =88 53.6 (9.1) <sup>ac</sup>
1 aranoid	<u>141/5D</u>	02.3 (0.5)	33.0 (0.7)	40.0 (0.1)	33.0 (3.1)
	Min/Max	48/87	36/81	22/73	38/79
Schizoid	M/SD	58.5 (10.3) <sup>bcd</sup>	48.3 (10.4) <sup>ac</sup>	41.3 (7.9) <sup>abd</sup>	50.2 (10.6) <sup>ac</sup>
	Min/Max	41/81	33/81	26/85	26/87
Schizotypal	M/SD	62.0 (10.5) <sup>bcd</sup>	54.3 (10.8) <sup>ac</sup>	45.2 (9.3) <sup>abd</sup>	52.1 (9.9) <sup>ac</sup>
	Min/Max	37/74	33/91	23/74	27/76
Antisocial	M/SD	64.6 (14.1) <sup>bcd</sup>	52.5 (9.9) <sup>ac</sup>	49.9 (9.8) <sup>ab</sup>	52.8 (10.5) <sup>a</sup>
	Min/Max	33/87	38/85	33/82	35/82
Borderline	M/SD	67.2 (9.3) <sup>bcd</sup>	59.1 (10.3) <sup>ac</sup>	49.6 (9.7) <sup>abd</sup>	55.9 (10.6) <sup>ac</sup>
	Min/Max	45/79	35/84	30/81	38/94
Histrionic	M/SD	58.0 (7.1) <sup>c</sup>	54.8 (7.4)	52.0 (9.0) <sup>a</sup>	53.0 (9.7)
	Min/Max	47/75	38/73	27/78	33/73
Narcissistic	M/SD	59.6 (5.5) <sup>c</sup>	53.0 (9.8)	49.4 (10.6) <sup>ad</sup>	53.8 (11.9) <sup>c</sup>
	Min/Max	48/71	29/75	21/77	25/86
Avoidant	<u>M/SD</u>	62.3 (11.0) <sup>cd</sup>	57.2 (10.8) <sup>c</sup>	46.0 (8.8) <sup>abd</sup>	53.6 (11.5) <sup>ac</sup>
	Min/Max	45/84	37/86	29/68	32/84
Dependent	M/SD	63.6 (11.6) <sup>bcd</sup>	56.2 (11.3) <sup>acd</sup>	48.4 (9.0) <sup>ab</sup>	50.6 (10.8) <sup>ab</sup>
	Min/Max	40/77	33/87	33/77	31/87
Obsess/ Comp	M/SD	62.9 (8.4) <sup>cd</sup>	57.4 (8.8) <sup>c</sup>	49.9 (8.8) <sup>abd</sup>	56.6 (9.2) <sup>ac</sup>
Comp	Min/Max	46/76	35/80	30/78	355/76

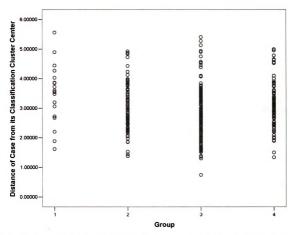
Note: Group 1 = Insecure/Maternal Abuse; Group 2 = Preoccupied/Fearful; Group 3 = Secure/Maternal Support; Group 4 = Dismissing/Fearful. Minimum possible T-score for OMNI-IV=0; Maximum possible T-score for OMNI-IV = 100. Clinical Cutoff is  $T \ge 65$ .

Figure 1: Four category model of attachment (Bartholomew & Horowitz, 1991).

#### Model of Self

		Positive	Negative
Model of other	Positive	Secure	Preoccupied
Model of other	Negative	Dismissing	Fearful

Figure 2: Cluster analysis distance of case from cluster center.



Note: Group 1 = Insecure/Maternal Abuse; Group 2 = Preoccupied/Fearful; Group 3 = Secure/Maternal Support; Group 4 = Dismissing/Fearful.

# Appendix B Relationship Questionnaire

Part 1: Pleas Read through all of the following four statements concerning how you feel about close relationships with other people; then choose the statement that best expresses how you feel.

- 1. It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me.
- 2. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become to close to others.
- 3. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but worry that others don't value me as much as I value them.
- 4. I am comfortable without close emotional relationships. It is very important for me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

Part 2: Now, indicate how much each statement is like you, or is not like you, by marking the appropriate number below each statement. A. It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me. 7 2 3 5 6 1 Not at all Somewhat Very much like me like me like me B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become to close to others. 2 5 1 3 4 7 Not at all Somewhat Very much like me like me like me C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but worry that others don't value me as much as I value them. 1 2 3 4 5 6 7 Not at all Somewhat Very much like me like me like me D. I am comfortable without close emotional relationships. It is very important for me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me. 1 2 3 4 5 6 7

Somewhat

like me

Very much like me

Not at all

like me

# Appendix C EMBU item modification

Old EMBU Items	Modified EMBU Items
Were you spoilt by your parents in comparison with your sister(s) and or brother(s)?	Were you spoilt by your parents in comparison with your sister(s) and or brother(s)?
Did it happen that your parents punished you, even for small offences?	Did your parents punish you, even for small offenses?
Did your parents try to influence you to become something "posh"?	Did your parents try to influence you to become elite or superior?
Did it happen that you were disappointed with your parents because you didn't get something you wanted?	Were you disappointed with your parents because you didn't get something you wanted?
Did you think that your parents punished you justly?	Did you think that your parents punished you fairly?
Did it happen that either of your parents forbade you to do things other children were allowed to do because they were afraid something might happen to you?	Did either of your parents forbid you to do things other children were allowed to do because they were afraid something might happen to you?
Did it happen that as a child you were beaten or scolded in the presence of others?	As a child, were you beaten or scolded in the presence of others?
Did it happen that your parents gave you more corporal punishment then you deserved?	Did your parents give you more physical punishment then you deserved?
Did it happen that your parents narrated something you have said or done in front of others so that you felt ashamed?	Did your parents tell stories about something you had said or done in front o others so that you felt ashamed?
Did your parents usually show that they were interested in your getting good marks?	Did your parents usually show that they were interested in your getting good grades?
Did it happen that your parents wish you were like someone else?	Did your parents wish you were like someone else?

Did your parents say: you who are so big, or you who are a boy/girl shouldn't act like that should you?	
Did your parents usually criticize the friends you liked to frequent?	Did your parents usually criticize the friends you liked to spend time with?
Do you think that your parents tried to make your adolescence stimulating, interesting, and instructive (for instance by giving you good books, arranging for you to go on camps, taking you to clubs)?	Do you think that your parents tried to make your adolescence stimulating, interesting, and instructive (for instance by giving you good books, arranging for you to go to camp, encouraging you to join clubs)?
Did it happen that your parents wouldn't let you have the things you needed, based on the principle that you shouldn't become spoilt?	Would your parents deny you the things you needed, based on the principle that you shouldn't become spoiled?
Did it happen that you got a bad conscience towards your parents because you behaved in a way they did not desire"	Did you feel remorseful towards your parents because you behaved in a way they did not desire?
Do you think that your parents put high demands on when it came to schoolmarks, sport performances, or similar things?	Do you think that your parents put high demands on when it came to school grades, sport performances, or similar things?
Did it happen that you were punished by your parents without having done anything?	Were you punished by your parents without having done anything?
Did your parents usually take an interest in what kinds of friends you frequented?	Did your parents usually take an interest in what kinds of friends you spent time with?
Would your parents punish you hard, even for trifles?	Would your parents punish you hard, ever for trivial things?
Did it happen that your parents beat you for no reason?	Did your parents beat you for no reason?
Did it happen that you wished your parents would worry less about what you were doing?	Did you wish that your parents would worry less about what you were doing?

### Appendix D EMBU

Instructions: Below are some questions about your parents' childrearing practices. Read each question carefully and mark the response that indicates how often you had that experience with each of your parents. When choosing your responses think about your childhood and adolescence only; if you are over the age of 18 try not to let your adult relationships with your parents influence your answers. Also, you are to answer the questions about the person who was most like a mother and the person most like a father to you, even if it was a stepparent or foster parent. For questions that do not apply to you, for example if don't have siblings or you don't have a mother or father figure who raised you, please mark "Not applicable."

		Never	Rarely	Often	Always	
1. Did you feel that your parents' anxiety interfered with everything you did?	Mother Father	1	2 2	3	4 4	N/A N/A
2. Did your parents show with words and gestures that they liked you?	Mother Father	1	2 2	3	4 4	N/A N/A
3. Were you spoilt by your parents in comparison with your sister(s) and or brother(s)?	Mother Father	1	2 2	3	4 4	N/A N/A
4. Did you feel that you parents liked you?	Mother Father	1	2 2	3	4 4	N/A N/A
5. Did your parents punish you, even for small offenses?	Mother Father	1	2 2	3 3	4 4	N/A N/A
6. Did your parents try to influence you to become elite or superior?	Mother Father	1 1	2 2	3 3	4 4	N/A N/A
7. Were you disappointed with your parents because you didn't get something you wanted?	Mother Father	1 1	2 2	3 3	4 4	N/A N/A
8. Do you think that either of your parents wished you had been different in any way?	Mother Father	1	2 2	3 3	4 4	N/A N/A

		Never	Rarely	Often	Always	
9. Did your parents let you have	Mother	1	2	3	4	N/A
things your brother(s) and/or sister(s) were not allowed to have?	Father	1	2	3	4	N/A
sister (b) were not une were to nure.						
10. Did you think that your parent:	Mother	1	2	3	4	N/A
punished you fairly?	Father	1	2	3	4	N/A
11. Do you think that either of your parents was severe towards	Mother	1	2	3	4	N/A
you?	Father	1	2	3	4	N/A
12. If you had done something						
foolish, could you then go to your		1	2	3	4	N/A
parents and make everything right by asking their forgiveness?	Father	1	2	3	4	N/A
13. Did your feel that your parents						
liked your brother(s) and/or	Mother Father	1	2 2	3	4 4	N/A N/A
sister(s) more than they liked you?	rather	1	2	3	7	11/74
14. Did your parents treat you	34.4	1	2	2	4	<b>N</b> T/A
unjustly (badly) compared with how they treated your sister(s)	Mother Father	1 1	2 2	3	4 4	N/A N/A
and/or brother(s)?	2 400.00	-	_		·	
15. Did either of your parents						
forbid you to do things other	Mother	1	2	3	4	N/A
children were allowed to do	Father	1	2	3	4	N/A
because they were afraid something might happen to you?						
something might happen to you.						
16. As a child, were you beaten or		1	2 2	3	4	N/A
scolded in the presence of others?	Father	1	2	3	4	N/A
17. If things went badly for you,						
did you then feel that your parents	Mother Father	1 1	2 2	3	4 4	N/A N/A
tried to comfort and encourage you?	ramei	1	2	3	4	IN/A
18. Did your parents usually worry	Mother	1	2	3	4	N/A
about your health unnecessarily?	Father	1	2	3	4	N/A
19. Did your parents give you						
more physical punishment then	Mother	1	2	3	4	N/A
you deserved?	Father	1	2	3	4	N/A

		Never	Rarely	Often	Always	
20. Would your parents become angry if you didn't help at home with what you were asked to do?	Mother Father	1	2 2	3 3	4 4	N/A N/A
21. Would your parents look sad or in any other way show you that you had behaved badly so that you go real feelings of guilt?		1	2 2	3 3	4 4	N/A N/A
22. Did your parents let you have things which your friends got, to the extent they could afford them?	Mother Father	1	2 2	3 3	4 4	N/A N/A
23. Did you feel it was difficult to approach your parents?	Mother Father	1 1	2 2	3	4 4	N/A N/A
24. Did your parents tell stories about something you had said or done in front of others so that you felt ashamed?	Mother Father	1	2 2	3 3	4 4	N/A N/A
25. Did you feel that your parents liked you more than they liked your brother(s) and/or sister(s)?	Mother Father	1	2 2	3	4 4	N/A N/A
26. Did your parents begrudge you the things you needed?	Mother Father	1 1	2 2	3	4 4	N/A N/A
27. Did your parents usually show that they were interested in your getting good grades?	Mother Father	1	2 2	3	4 4	N/A N/A
28. If you had a difficult task in front of you, did you then feel support from your parents?	Mother Father	1	2 2	3	4 4	N/A N/A
29. Were you treated as the "black sheep" or "scapegoat" of the family?	Mother Father	1	2 2	3 3	4 4	N/A N/A
30. Did your parents wish you were like someone else?	Mother Father	1	2 2	3	4 4	N/A N/A

		Never	Rarely	Often	Always	
31. Did your parents tell you your behavior was inappropriate for someone of your age, gender, etc?	Mother Father	1	2 2	3	4 4	N/A N/A
32. Did your parents usually criticize the friends you liked to spend time with?	Mother Father	1 1	2 2	3	4 4	N/A N/A
33. Did you feel that your parents thought it was your fault when they were unhappy?	Mother Father	1	2 2	3	4 4	N/A N/A
34. Did your parents try to spur you on to become the best?	Mother Father	1	2 2	3 3	4 4	N/A N/A
35. Would your parents demonstrate they were fond of you?	Mother Father	1	2 2	3	4 4	N/A N/A
36. Did you feel that your parents trusted you so that you were allowed to do things on your own?	Mother Father	1	2 2	3	4 4	N/A N/A
37. Do you think your parents respected your opinion?	Mother Father	1	2 2	3 3	4 4	N/A N/A
38. Did you feel that your parents wanted to be together with you?	Mother Father	1	2 2	3	4 4	N/A N/A
39. Do you think that your parents were mean and grudging toward you?	Mother Father	1	2 2	3 3	4 4	N/A N/A
40. Did your parents use expressions like "If you do that, you will make me sad?"	Mother Father	1 1	2 2	3	4 4	N/A N/A
41. When you came home, did you always have to account for what you had been doing to your parents?	Mother Father	1	2 2	3	4 4	N/A N/A

		Never	Rarely	Often	Always	
42. Do you think that your parents tried to make your adolescence	Mother	1	2	3	4	N/A
stimulating, interesting, and	Father	1	2 2	3	4	N/A
instructive (for instance by giving you good books, arranging for you to go to camp, encouraging you to join clubs)?	rather	1	2	3	7	N/A
43. Did your parents usually try to	Mother	1	2	3	4	N/A
praise you?	Father	1	2	3	4	N/A
44. Would your parents use	-					
expressions like "Is this the thanks	Mother	1	2	3	4	N/A
we get for having done so much	Father	1	2	3	4	N/A
for you, and for having sacrificed so much for your sake?"						
45. Would your parents not let you have the things you needed, based		1	2	3	4	N/A
on the principle that you shouldn't		1	2	3	4	N/A
become spoiled?  46. Did you feel remorseful	1 diller	•	2	3	7	14/71
towards your parents because you	Mother	1	2	3	4	N/A
behaved in a way they did not desire?	Father	1	2	3	4	N/A
47. Do you think that your parents	Mother	1	2	2	1	N/A
put high demands on when it came to school grades, sport	Father	1 1	2 2	3	4 4	N/A N/A
performances, or similar things?	1 ather	1	Z	3	7	IVA
48. Could you seek comfort from	Mother	1	2	3	4	N/A
your parents if you were sad?	Father	1	2	3	4	N/A
49. Were you punished by your	Mother	1	2	3	4	N/A
parents without having done	Father	1	2	3	4	N/A
anything?	T dillor	•	2	3	•	14/21
50. Did your parents allow you to	Mother	1	2	2	4	N/A
do the same things as your friends	Father	1	2	3	4	N/A
did?		1	2	,	7	14/7
51. Did your parents often say they		_	_	_	_	
did not approve of your behavior	Mother	1	2	3	4	N/A
at home?	Father	1	2	3	4	N/A

		Never	Rarely	Often	Always	
52. Did your parents usually criticize you and tell you how lazy and useless you were in front of others?	Mother Father	1	2 2	3 3	4 4	N/A N/A
53. Did your parents usually take an interest in what kinds of friends you spent time with?	Mother Father	1	2 2	3	4 4	N/A N/A
54. Were you the one of your sister(s) and/or brother(s) whom your parents blamed if anything happened?	Mother Father	1	2 2	3	4 4	N/A N/A
55. Did your parents accept you as you were?	Mother Father	1	2 2	3	4 4	N/A N/A
56. Were your parents usually abrupt towards you?	Mother Father	1	2 2	3	4 4	N/A N/A
57. Would your parents punish you hard, even for trivial things?	Mother Father	1	2 2	3	4 4	N/A N/A
58. Did your parents beat you for no reason?	Mother Father	1	2 2	3	4 4	N/A N/A
59. Did you wish that your parents would worry less about what you were doing?	Mother Father	1	2 2	3 3	4 4	N/A N/A
60. Did your parents usually engage themselves in your interests and hobbies	Mother Father	1	2 2	3	4 4	N/A N/A
61. Did you usually get beaten by your parents?	Mother Father	1	2 2	3 3	4 4	N/A N/A
62. Were you usually allowed to go where you liked without your parents worrying too much?	Mother Father	1 1	2 2	3 3	4 4	N/A N/A

		Never	Rarely	Often	Always	
63. Did your parents put decisive limits on what you were and were	Mother	1	2	3	4	N/A
not allowed to do to which they adhered vigorously?	Father	1	2	3	4	N/A
64. Did your parents treat you in	Mother	1	2	3	4	N/A
such a way that you felt ashamed?	Father	1	2	3	4	N/A
65. Did your parents let your						
sister(s) and/or brother(s) have	Mother	1	2	3	4	N/A
things which you were not allowed to get?	Father	1	2	3	4	N/A
66. Do you think that your parent's	Mother	1	2	3	4	N/A
anxiety that something might happen to you was exaggerated?	Father	1	2	3	4	N/A
67. Did your parents respect the	Madhan	1	2	2	4	N/A
fact that you had other opinions	Mother Father	1 1	2 2	3	4 4	N/A N/A
than they had?	1 action	•	2	3	•	14/21
68. Did you feel that your parents	Mother	l	2	3	4	N/A
were proud when you succeeded in something you had undertaken?	Father	1	2	3	4	N/A
69. Did your parents usually favor		_				
you in relation to your sister(s)	Mother	1	2 2	3	4	N/A N/A
and/or brother(s)?	Father	1	2	3	4	IN/A
70. Did your parents take your par				•		<b>3.</b> 77.4
against your sister(s) and/or	Mother Father	1 1	2 2	3	4 4	N/A N/A
brother(s), even if you were the guilty one?	ramei	í	2	3	4	IN/A
71. Did your parents usually hug	Mother	1	2	3	4	N/A
you?	Father	1	2	3	4	N/A

<sup>80.</sup> The "mother" you rated is your:

A. Biological mother B. Adoptive mother C. Stepmother D. Foster mother E. Other

A. Biological father B. Adoptive father C. Stepfather D. Foster father E. Other

<sup>81.</sup> The "father" you rated is your:

## Appendix E Demographic Information

1. Gender: A. Male B. Female
2. Date of Birth (mo/day/yr):
3. Race/Ethnicity (if you are more than one, you can choose more than one):
A. African American B. Asian
C. Caucasian D. Letino(a)
D. Latino(a) E. Native American
F. Other
Current year in school:
A. Freshman
B. Sophomore
C. Junior
D. Senior
Cumulative college GPA:
A. below 2.0
B. 2.0 – 2.49
C. 2.5 – 2.99
D. 3.0 - 3.49
E. $3.5 - 4.0$
What is your marital status?
A. Never married
B. Married
C. Separated
D. Divorced
E. Widowed
What is your current relationship status (if you are not currently married)?
A. Never dated
B. Not currently dating anyone
C. Dating more than one person
D. In a committed relationship
If applicable, how long have you been married or in a relationship (in months)?

•	sional?	have you ever been, in co	unseling or therapy with a mental health		
	A. No B. Yes,	For how long (total, in m	onths)?		
If yes,	how helpful do A. Very helpf B. Somewhat C. Not very h	helpful			
Are yo	ion?	have you ever, taken med	ication for a psychological or psychiatric		
	A. No				
	B. Yes	For how long (total, in m	ionths)?		
If yes,	how helpful do A. Very helpf B. Somewhat C. Not very h	helpful			
What	is the nature of	your parents' relationship	(Select all that apply)?		
***************************************		ried; don't live together	Your age at break-up		
		ried; live together			
	C. Married	,			
	D. Separated		Your age at separation		
	E. Divorced		Your age at divorce		
	E. Mother ded		Your age at time of death		
	F. Father dece		Your age at time of death		
	F. Both paren	ts are deceased			
Growi	ng up, who did A. Biological	you live with most?			
	B. Adoptive r				
	C. Stepmothe				
	D. Foster mot				
	E. Another w	oman who acted like a mo	ther to me		
	F. There was	not a mother figure in my	home		
Casul					
Glowi	ng up, who did A. Biological	you live with most?			
	B. Adoptive f				
	C. Stepfather	utiloi			
	D. Foster fath	er			
		an who acted like a father	to me		
	F. There was not a father figure in my home				

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