RELATIONSHIPS BETWEEN ATTACHMENT,
FAMILY-OF-ORIGIN CHARACTERISTICS AND PERSONALITY VARIABLES

by

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(Under the direction of Georgia B. Calhoun)

ABSTRACT

Relationships between mother and father attachment, family functioning variables and personality patterns/clinical syndromes were examined in a non-clinical sample of 275 undergraduate college students. Participants completed the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987), the Family Background Questionnaire (FBQ; Melchert, 1998), and the Millon Clinical Multiaxial Inventory–III (MCMI-III; Millon, 1997).

The study focused on the following parental/familial variables: Attachment, Responsiveness, Acceptance, Physical Abuse, Neglect, Educational Involvement, Decision Making Style, Expression of Affect, and Substance Abuse, and the following clinical variables: Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety, Alcohol and Drug Dependence, and Depression.

Preliminary multivariate analyses of variance found significant effects for gender on the FBQ and MCMI-III scales, significant effects for ethnicity and

family religiosity on the IPPA, FBQ and MCMI-III scales, and significant effects for parental divorce status on the IPPA and FBQ scales ($p \leq .01$, two-tailed).

Pearson product-moment correlations found significant relationships among the study variables ($p \leq .01$, two-tailed). In general, higher scores on family background scales and more secure parental attachment were associated with lower Avoidant, Dependent, Antisocial, Borderline, Paranoid, Anxiety, Depression, and Alcohol and Drug Dependence scores. Unexpectedly, higher scores on family background scales and more secure parental attachment were associated with higher Compulsive and Histrionic scores. There were not significant correlations found between family background or parental attachment and Narcissistic traits. Furthermore, more secure parental attachment was associated with higher scores on family background variables.

Data obtained through hierarchical multiple regression analysis also suggested that family functioning did not significantly add to the explanation of variance in the personality pattern/clinical syndrome variables beyond that which could be explained by parental attachment ($p \leq .001$, two-tailed). Also, interaction between mother and father attachment and family functioning did not significantly predict variance in the personality patterns/clinical syndrome variables beyond that which could be explained by mother and father attachment and family functioning alone. Findings suggest the importance of parental attachment security as a predictor of personality traits and clinical syndromes in college students ($p \leq .001$, two-tailed). Implications for therapeutic interventions are discussed.

INDEX WORDS: Attachment, Family Background, Personality, College Student

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CHAPTER 1

INTRODUCTION

Human beings seem to possess a fundamental drive to establish and maintain significant interpersonal relationships (Baumeister & Leary, 1995). In fact, the lack of these attachments can have notably harmful effects on psychological, social and physical well being (Baumeister & Tice, 1990; Leary, 1990; Lynch, 1979; Spanier & Casto, 1979).

Several prominent personality theorists, especially Sullivan (1953), assert these interpersonal interactions play a crucial role in personality development. Sullivan proposed that people progress through six identifiable stages enroute to the development of essential skills for maintaining relationships. The late adolescent phase of life (approximately 18 to 22 years) in Sullivan's model is characterized by the ability to form stable, intimate connections with others. The importance of this task for college students at this stage is supported by research (Heppner, Kivlighan, Good, Roehke, Hills, & Ashby, 1994). Heppner and his colleagues assessed the presenting problems of over 600 students seeking mental health services in a university counseling center, and found that interpersonal concerns constituted the largest percentage of complaints. Other clusters of variables included generalized distress, situational adjustment and physical, mood, somatic and chemical concerns. "Interpersonal problems often reflect a conflict between a person's desire to express a particular behavior and the person's feared

consequences of expressing that behavior. Such conflicts arise out of the person's interpersonal learning history, which manifests itself in part in the person's attachment history and [subsequent] attachment style" (Horowitz, Rosenberg, & Bartholomew, 1993, p. 553).

Bowlby (1973), the founder of attachment theory, maintained that children form an internal working model based on their early experiences with primary caregivers. This model represents a child's self-concept and how (s)he expects others will respond to his/her needs in future interactions. Children whose needs are routinely and consistently met see themselves as worthy and competent, learn to trust others, and later are able to form more cooperative interpersonal relationships. These children are considered to be securely attached. Inconsistent, indifferent or abusive care are among factors that contribute to insecure attachment. Insecurely attached children may become easily frustrated, lack coping strategies in stressful situations, display controlling, avoidant or aggressive behaviors and/or have difficulty forming subsequent meaningful ties with others (Sroufe, 2000).

Insecure attachment is present in a large segment of the American population. Several studies suggest that approximately 30% of middle-class children in the U.S. are insecurely attached; the proportion is higher in children from impoverished environments (Karen, 1994). In a representative sample of over 8,000 participants in 34 states, approximately 37% of respondents in the adolescent through early adulthood group were deemed to be insecurely attached (Mickelson, Kessler & Shaver, 1997). The same study revealed that more Black

respondents (44%) were insecurely attached than White (35%) or Hispanic participants (36%); more males (38%) were insecurely attached than females (34%), and that overall religiosity was significantly related to being more secure, whereas Christian fundamentalism was significantly related to an anxious insecure attachment style (Mickelson et al., 1997).

Four longitudinal studies found that between 70 to 80% of adult participants' attachment organizations were predictable from infancy (Main, 1996). This may be due in part to the significant influence early caregiving experiences have on the maturation of critical structures of the brain (Schore, 1997). More than 80% of the brain develops after birth (Dobbing & Sands, 1973). The interactions an infant has with his/her primary caregiver, especially within the first 24 months of life directly impacts the growth of neural connections in the right orbitofrontal cortex/limbic system and neurochemicals related to memory, learning and cognitive processing, and emotion and stress regulation throughout the lifespan (Schore, 2001a). When an infant's needs are consistently not met by his/her caregiver, these systems are chronically 'bathed' in stress hormones which cause the excessive death of neurons in these areas of the brain (Siegel, 1999). This may have serious lifelong consequences as the neocortex and limbic system are "involved in critical human functions, such as social adjustment and the control of mood, drive and responsibility, traits that are crucial in defining the 'personality' of an individual" (Cavada & Schultz, 2000, p.205).

As the child's working model tends to remain stable throughout the lifespan, inadequate early caregiving experiences may have far reaching negative

effects on a person's strategies for coping with environmental stressors and ability to form healthy relationships (Bowlby, 1973). "The fact that a broad spectrum of psychiatric disorders show disturbances of the right hemisphere, the hemisphere that is centrally influenced by attachment experiences, accounts for the principal that all early forming psychopathology constitutes disorders of attachment and manifests itself as failures of interactional and/or self-regulation" (Schore, 1997, p. 624). Numerous studies have found associations between insecure attachment and mood disorders, risk behaviors and maladaptive interpersonal functioning including depression (Levy, 2000; Martin, 2002; Reinecke & Rogers, 2001), anxiety (Haddad, 2001; Muris & Meesters, 2002); alcohol and drug use (Allen, 2001; Armogida, 2001; Voss, 2001) and personality disorders (Apsel, 1999; Brennan & Shaver, 1998; Rosenstein & Horowitz, 1996; Sibcy, 2001).

The many social and environmental adjustments college students face may make them particularly vulnerable to the aforementioned problems. Among college students, 10 to 40% experience some form of "psychological impairment" (Bertocci, Hirsh, Sommer & Williams, 1992). Other researchers contend that the number of students with significant mental health needs is increasing (Arnstein, 1985; O'Malley, Wheeler, Murphey, O'Connell & Waldo, 1990). In a recent study using a non-clinical university population, 13% of students reported high levels of depression and 7 % reported high levels of anxiety (Rosenthal & Schreiner, 2000). Of more than 58,000 students surveyed across the nation regarding their use of drugs and alcohol, 30% reported using substances to such an excess that they experienced blackouts (Presley & Meilman, 1994).

It is notable that the presence of one or more personality disorders was found in 35% of a non-clinical college student sample (Dolan, Evans & Norton, 1995). Other researchers reported finding higher percentages of personality disorders in similar populations (Brennan & Shaver, 1998; Johnson, Bornstein & Sherman, 1996). Although these numbers are higher than averages of 9 to 20% found in older, non-patient community samples (Samuels, Eaton, Bienvenu, Brown, Costa, & Nestadt, 2002; Zimmerman & Coryell, 1989), it's possible this discrepancy may be explained in part by findings that more adolescent and young adults are insecurely attached than older adults (Mickelson et al., 1997). As we are adaptive beings, later, more secure relationships may mediate the harmful effects of early negative attachment experiences (Wallerstein, 1995).

Personality disorders can be conceptualized in a less taxonomic manner (Perris, 1999). Perris redefines personality disorders as "personality-related disorders of interpersonal behavior" (PDIB)…traceable to [three insecure] attachment patterns" (p.252): those PDIB characterized by withdrawal from or control of others (avoidant attachment); those PDIB characterized by dependence on others (preoccupied attachment); and those PDIB characterized by chaotic approach/avoidance behavior (disorganized attachment). Within this framework it is not surprising that "personality disorders" are assessed in larger than anticipated segments of normal university and community populations (Brennan & Shaver, 1998; Choca & Shanley, 1992).

Attachment is only one of many psychosocial influences that may affect the development of later problems. Children learn to adapt within a family system, as

well as to their primary caregiver (Minuchin, 1974). “Early experience often plays a critical role in the developmental dynamic that yields pathology, but this role is dependent on a surrounding context of sustaining environmental supports” (Sroufe, Carlson, Levy & Egeland, 1999, p. 2). Such factors as parental discipline and management methods, as well as levels of parental involvement, have been associated with increased risk for both internalizing and externalizing problems in children (Allen, Hauser, & Borman-Spurell, 1996); Patterson, DeBaryshe & Ramsey, 1989).

Specific parenting styles involving varying levels of parental demandingness (control) and responsiveness (acceptance) have been examined to investigate their effect on adolescents’ interest in risk behaviors (Petersmeyer,1999). An authoritative style of parenting (Baumrind, 1991) characterized by high demandingness and high responsiveness produced the lowest interest in these risk behaviors. Another study with college students from intact families indicated that the greater the level of interpersonal conflict in the family, the more symptoms the students reported (Hoffman & Weiss,1987). Among students seeking assistance from a university counseling center, Zucker (2000) found associations between presenting symptoms and familial abuse. In a review of the literature pertaining to adult pathology, Dozier, Stovall and Albus (1999) found that mood and anxiety disorders were commonly related with parental rejection combined with loss; antisocial personality disorder was frequently associated with rejection and overprotection from the mother in combination with neglect by the father, and that borderline personality disorder was regularly related

with neglect by both parents. These findings all suggest the significant impact the family environment may have on later adjustment.

Statement of the Problem

The literature indicates that both the quality of attachment formed in infancy and later family experiences may play a role in the development of future interpersonal, psychological and emotional problems. The role attachment plays in the development of psychopathology is complicated. Family systems considerations will need to be addressed, as well, in order to better understand this process (Radke-Yarrow, McCann, DeMulder, Belmont, Martinez, & Richardson, 1995). We have yet to fully explain the relationships between these variables and how they may interact to create future maladaptive functioning (Rutter, 1997). Further research looking at both these variables together is needed to understand the associations between attachment and family factors, and how they contribute to later mental health concerns. The present study examined the following problems: How are these variables related?; Does attachment or family functioning play a more significant role in explaining variance in later maladaption?

Purpose of the Study

The purpose of this study is to determine how attachment, family-of-origin characteristics and psychopathology are related, and how their interaction may contribute to the development of personality disorders and clinical syndromes in college students. Greenberg (1999) concluded that "insecure attachment is not itself a measure of psychopathology, but may set a trajectory that, along with other risk factors, increases risk for either externalizing or internalizing

psychopathology" (p. 482). These risk factors: poverty, substance abuse, low education, child temperament, as well as family functioning characteristics such as parental socialization/management strategies, family stress, parental psychopathology, marital discord, and parental discipline practices (Greenburg, Speltz & DeKlyen, 1993). The present investigation will examine the risk factors involving family functioning in relation to attachment.

Significance of the Study

The present study should help researchers clarify the process in which attachment and family contextual factors contribute to mental health issues. It will also help therapists understand the role clients' attachment histories and family-of-origin characteristics play in their presenting problems. This understanding is important in order for therapists to identify the clients' particular maladaptive coping patterns and to target appropriate reparative experience within the therapeutic relationship.

Early attachment and family problems lay the foundation for disturbances in future interactions with others which can in combination lead to psychopathology. "Understanding the processes wherein what begins as a relationship disturbance [in childhood] can in time lead to individual disorder [in adulthood] is one of the central tasks for the field of developmental psychopathology" (Sroufe, Carlson, Levy & Egeland, 1999, pg. 10). This is especially true for college students as the difficulties that arise from attachment and family functioning problems particularly interfere with successfully accomplishing the challenging developmental tasks of this period including

establishing one's own identity and initiating meaningful intimate relationships (Erickson, 1968).

The present study also provides information related to the mission of the field of Counseling Psychology. Counseling psychology "focuses on personal and interpersonal functioning across the lifespan and on emotional, social…[and] developmental …concerns. [It] centers on typical or normal developmental issues as well as atypical or disordered development as it applies to human experience from individual, family…perspectives…The problems addressed by the specialty of Counseling Psychology…are addressed from developmental (lifespan), environmental, and cultural perspectives. They include…personal/social adjustment, personality dysfunction, and mental disorders" (American Psychological Association, 2002, pp. 12-14). In accordance with these goals, the present investigation examines mental health concerns within a developmental framework and compares the contribution of early experiences with caregivers (attachment) and later family experiences to maladaptive functioning in college students.

Research Questions

The present study investigated the following questions:

Research Question 1: What are the relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression and the family functioning variables including Mother and Father Responsiveness, Mother and

Father Acceptance, Mother and Father Physical Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and Father Substance Abuse?

Research Question 2: What are the relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, and the attachment variables including Mother and Father Attachment?

Research Question 3: What are the relationships between the family functioning variables including Mother and Father Responsiveness, Mother and Father Acceptance, Mother and Father Physical Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and Father Substance Abuse and the attachment variables including Mother and Father Attachment?

Research Question 4: Does family functioning predict variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, above and beyond that which can explained by mother and father attachment?

Research Question 5: Is there a significant interaction between mother and father attachment and family functioning that predicts variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, and Paranoid traits, and Anxiety

Disorder, Alcohol Dependence, Drug Dependence and Major Depression above and beyond that which can be explained by mother and father attachment and family functioning alone?

Hypotheses

The correlations that were analyzed in the study included the following initial hypotheses derived from the research questions:

Hypothesis 1: There will be statistically significant negative relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression and the family functioning variables including Mother and Father Responsiveness, Mother and Father Acceptance, Mother and Father Physical Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and Father Substance Abuse.

Hypothesis 2: There will be statistically significant negative relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, and the attachment variables including Mother and Father Attachment.

Hypothesis 3: There will be statistically significant positive relationships between the family functioning variables including Mother and Father Responsiveness, Mother and Father Acceptance, Mother and Father Physical

Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and Father Substance Abuse and the and the attachment variables including Mother and Father Attachment.

Hypothesis 4: Family functioning will not predict statistically significant variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, above and beyond that which can explained by mother and father attachment.

Hypothesis 5: The interaction between mother and father attachment and family functioning will not predict statistically significant variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, and Paranoid traits, and Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression above and beyond that which can be explained by mother and father attachment and family functioning alone.

Definitions

Attachment – an emotional bond characterized by the inclination to seek and maintain proximity to a specific person in order to feel secure (Bowlby, 1988).

Secure base – use of a caregiver as a base from which to explore the environment and to which to return when emotional support is needed (Bowlby, 1988).

Internal working model – Concept of self (worthiness and competence) and of others (expectations about responsiveness of others and world) based on experiences with early caregivers (Bowlby, 1988).

Secure attachment - Individual is assured that his/her caregiver (or significant others later in life) will be accessible, responsive and helpful when comfort is sought and therefore feels confident exploring the world around him/her. This sense of security is promoted by sensitive, loving and consistent experiences with early primary parental figures. (Bowlby, 1988).

Insecure attachment – Individual is uncertain or is convinced that his/her caregiver (or significant others later in life) will not be available or will be rejecting when help is sought, and therefore, interactions with others are characterized by clingy (preoccupied), withdrawing (fearful avoidant) or controlling (dismissing) behaviors in an attempt to get their needs met. This sense of insecurity is promoted by inconsistent, neglectful or abusive experiences with early primary parental figures. (Bowlby, 1988).

Authoritative parenting – A reasonable, flexible style of parenting in which parents communicate clear expectations and ensure children adhere to set limits while taking consideration of and respecting their child's point of view (Baumrind, 1991).

Authoritarian parenting – A controlling style of parenting in which parents expect strict adherence to rules they set and use dominating strategies for enforcing these rules. The child's perspective is not taken into consideration in decision-making processes (Baumrind, 1991).

Permissive parenting – An indifferent style of parenting in which parents set few limits for their child's behavior and have little involvement in their activities (Baumrind, 1991).

Delimitations

The present investigation was delimited to college students who grew up with a mother or mother figure and a father or father figure for the purpose of exploring the relationships between mother and father attachment, family functioning characteristics and personality patterns/clinical syndromes in this population. The personality patterns/clinical syndromes studied were delimited to those found in non-clinical populations in previous research. The present study included only those students registered in the Psychology Research Pool to assist with scheduling appointment times, data collection and assigning credit for participating in the study.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Early relationships form a framework within which human development progresses. Disturbances in these initial human interactions may form one of the pathways in which disorders are established and perpetuated. (Sroufe, Duggal, Weinfield & Carlson, 2000). “A central task of developmental psychopathology is to describe the origins, nature and course of disordered behavior” (Carlson & Sroufe, 1995, p. 581).

The comprehensive, targeted review of the literature below provides perspective on how early family relationships may contribute to maladaptive personality development and clinical syndromes. The sections of the review include: Attachment Formation and Styles, Attachment and Psychopathology, Family Influences, Parenting and Attachment, and Family Functioning and Psychopathology. These sections will present the following pertinent information: 1) the construct of attachment and the ways different types of attachment bonds are formed; 2) the influence various styles of attachment have on our beliefs about ourselves and others, our emotional states and behaviors; 3) the prevalence of these attachment styles in the general population; 4) relationships between attachment organizations and various mental health problems; 5) the role families play in the socialization of children; 6) the effect later parenting styles have on a child’s self-concept and behavior; 7) the ways attachment organizations may be

related to parenting styles experienced after infancy; and finally, 8) how family characteristics may contribute to later psychopathology.

Attachment Formation and Styles

Bowlby argued that human beings are born with a basic need to establish intimate emotional connections with others and that real experiences with early caregivers play a key role in a child's development (Karen, 1994). Bowlby (1973) described this affectional attachment bond as a reciprocal relationship between a parent and a child which regulates their proximity to one another. Infants pass through four attachment phases in establishing connections with caregivers (Schaffer & Emerson,1964). The *asocial phase*, which generally lasts from birth through 6 weeks, is characterized by reactions to both social and nonsocial stimuli. The second *indiscriminate phase* lasting from 6 weeks to approximately 28 weeks is characterized by a preference for human interactions.

The third *specific attachment phase* which begins somewhere between 7 and 9 months is characterized by an attachment to one particular caregiver and distress when separated from this caregiver. This is considered a critical phase as the infant uses his/her attachment figure as a secure base from which to explore his/her environment and to which (s)he can return to relieve anxiety and reestablish a sense of safety (Bowlby, 1988). During the last *multiple attachments phase*, which usually begins by 18 months of age, the infant forms close attachments with other caregivers although (s)he still shows a preference for his/her primary caregiver. Evidence suggests that loss of or long separations from the attachment figure during these final two phases of development has

lasting detrimental effects on the emotional wellbeing of the child (Robertson & Robertson, 1989).

An internal working model, a concept of self and others, is formed through these early interactions with caregivers. When a toddler's needs are sensitively and consistently met, (s)he learns that (s)he is deserving of love and care and that (s)he can expect others to provide comfort when desired. Through this process the infant forms a secure attachment organization. However, when a toddler is not allowed to investigate his surroundings and/or cannot rely on his/her caregiver to provide solace when needed, (s)he may learn to define his/herself as inadequate or unworthy and expect that attempts to seek support from others will be met with indifference or rejection. This type of experience promotes an insecure attachment organization (Bowlby, 1973).

Ainsworth originally defined two types of insecure attachment in her work with infants: *avoidant* (related to neglectful care) and *ambivalent* (related to inconsistent care) (Ainsworth, Blehar, Waters & Wall, 1978). Avoidant children tend to display aggressive and defiant behaviors, and teachers tend to respond to them in an angry, controlling manner (Karen, 1994). Their interactions with parents are marked by indifferent responses and lack of physical contact. Adolescence is generally characterized by isolation and/or combative relationships with peers. As adults they tend to minimize the importance of love and affection, display poor self-reflection and raise avoidantly attached children.

Bartholomew (1990) further distinguished two types of avoidant attachment: fearful avoidance and dismissing avoidance. Although both types

defend against rejection, the fearful person withdraws because (s)he has low self-esteem and is afraid of the consequences of relating to others. These individuals generally are reticent, lonely, and self-consciousness in social situations. The dismissing person is also leery of others' intentions, but maintains a sense of his/her own self-worth. These individuals tend to be autonomous, sardonic, fault-finding, and place more value in their accomplishments than their personal relationships (Bartholomew & Horowitz, 1991).

In contrast, ambivalent children tend to display immature, petulant behavior, be overly dependent on their teachers and may be victimized by peers. They fluctuate between being charming and displaying animosity toward parents and may express concern about their mother when they are apart. In adolescence they often have difficulty operating in large peer groups. As adults, they are frequently still embittered with hurt and resentment toward their parents, fear abandonment in significant relationships with others and tend to raise ambivalently attached children (Karen, 1994).

Main and Solomon (1990) delineated a third insecure attachment category, *disorganized*, related to abusive care. Disorganized attachment is created "when parental behavior is frightening in itself, [and, therefore,] the attached infant inevitably suffers a collapse of behavioral strategy, because it can neither approach [the caregiver] (the secure and ambivalent "strategies"), shift its attention (the avoidant "strategy") or flee" (Main, 1996, p. 239). Disorganized infants tend to display "freezing," fearful or helpless behaviors and may take either a punishing or caretaking stance toward their parent (Main & Solomon,

1990). As they grow older, their behavior becomes more controlling and coercive, and they are more likely to develop aggressive behavior disorders in adolescence (Lyons-Ruth, 1996).

A meta-analysis of the attachment literature revealed that approximately 55% of the samples were securely attached, 23% were avoidantly attached, 8% were ambivalently attached and 15% had a disorganized attachment style (Van Ijzendoorn, 1995). However, 15% is representative of disorganized infants in two-parent, middle class families; this percentage increases to 82% in families with other risk factors including maternal substance abuse, depression or adolescent parenthood (Lyons-Ruth, Repacholi, McLeod, & Silva, 1991). Van Ijzendoorn's figures are comparable to a study investigating a nationally representative sample between the ages of 15 and 54 which found 59% of the participants to be securely attached, 25.2% to be avoidantly attached and 11.3% to be anxiously (ambivalently) attached (Mickelson, Kessler & Shaver, 1997). It should be noted that this study did not categorize subjects with disorganized attachment styles and found 4.5% of the population to be unclassifiable. Upon development of the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985), the avoidant, ambivalent and disorganized attachment styles were respectively referred to as *dismissing*, *preoccupied* and *unresolved*.

Attachment and Psychopathology

Bowlby (1973) explained that defensive mechanisms help to filter distressing information and control responsive behavior and emotional states. Thus, while secure individuals are able to acknowledge vulnerability in times of

stress and seek comfort from others, dismissing individuals tend to minimize their feelings, reinforce their image of self-sufficiency and externalize their hostility on to others. This position sustains their notion that others are untrustworthy as well as increasing their sense of detachment. Preoccupied individuals in contrast tend to be hyperaware of their own uneasy feelings and therefore, cling to attachment figures who are ultimately unable to subdue their continual fear of abandonment. This hinders the preoccupied person's sense of self-competence and obstructs his/her ability to form lasting relationships (Kobak & Sceery, 1988). Thus, "people with insecure mental representations of attachment…may be at greater risk for emotional problems because of distortions and biases in their thinking and an inability to regulate their emotions, thereby limiting their ability to respond flexibly in unfavorable situations. When significant life stressors are present, a person's defenses may escalate, resulting in maladaptive behavior and a vulnerability to cognitive distortion and emotional disorders" (Riggs & Jacobvitz, 2002, p. 195).

There is much research to support the assertion that insecure attachment styles are associated with a higher risk of developing mental health disorders (Belsky & Nezworski, 1988; Rutter & Sroufe, 2000). An investigation of the relationships between social anxiety disorder and attachment found that insecurely attached participants experienced more severe anxiety, depression, fear of rejection and social avoidance (Eng, Heimberg, Hart, Schneier, & Liebowitz, 2001). Insecure attachment has also been associated with depression in psychiatric patients (Pettem, West, Mahoney, & Keller, 1993), in individuals adjusting to

divorce (Glogoski-Williams, 1997), and in college students (Carnelley, Pietromonaco, & Jaffe, 1994; Reinecke & Rogers, 2001; Zuroff & Fitzpatrick, 1995). Insecure attachment has been related to greater substance abuse as well (Brennan & Shaver, 1995; Senchak & Leonard, 1992).

Significant relationships between avoidant and anxious attachment, and mood disorders, anxiety disorders and drug and alcohol dependence have also been established (Mickelson et al., 1997). Additionally, the same study found that alcohol abuse and drug dependence were more associated with avoidant types than anxious types. Mickelson and colleagues postulate that avoidant individuals may use substances to ward off anguished feeling states as they believe they can't turn to others for assistance.

This hypothesis is supported by other researchers who maintain that particular attachment organizations are associated with specific symptom presentations (Cole-Detke & Kobak, 1996). Those with preoccupied styles tend to exhibit more internalized symptoms as they are hyperattentive to their own thoughts and emotions, whereas those with avoidant styles tend to exhibit externalized symptoms as they are inclined to dismiss internal responses to troubling circumstances. Rosenstein and Horowitz's (1996) research findings corroborated this assertion. Participants with preoccupied attachment were more prone to have affective disorders and obsessive-compulsive, histrionic, borderline or schizotypal personality disorders; whereas, those with dismissing attachment styles were more prone to have conduct or substance abuse disorders, and narcissistic or antisocial personality disorders. Other studies also found significant

relationships between preoccupied attachment and borderline personality disorder (Patrick, Hobson, Castle, & Howard, 1994), and dependent personality disorder (West, Rose, & Sheldon-Keller, 1994).

Family Influences

The family plays a crucial role in the socialization of children as childhood is a particularly impressionable time during which values and personality characteristics are formed, and social/interpersonal skills are learned (Maccoby, 1992). Barber (1997) described three elements of socialization related to parenting that are important in facilitating secure identity development in children. The first is "warmth" which allows the child to feel safe and helps him/her establish a positive view of self and others. The second component is "demandingness" in which the parental monitoring of a child's conduct assists the child in learning to manage his/her own behavior within social norms. The third part of Barber's model is "responsiveness" which stresses the importance of maintaining the right balance between providing structure and encouraging independence to facilitate the individuation process which occurs in adolescence.

Baumrind (1967) developed a similar model of parenting based on two dimensions: control/demandingness (c/d) and acceptance/responsiveness (a/r). Using these dimensions, Baumrind defined three styles of parenting: "authoritative", characterized by high c/d and high a/r and which promotes self confidence and responsibility in children; "authoritarian", characterized by high c/d and low a/r and which promotes low self-reliance and discouragement in children; and "permissive", characterized by low c/d and high a/r which promotes

impulsivity and egocentrism in children. A study comparing the effects of all three parenting styles on adolescents found that among adolescents raised in authoritative homes, girls were more autonomous and high achieving, and boys scored higher on measures of social responsibility than those raised in authoritarian or permissive homes (Baumrind, 1971).

Good parenting also includes a democratic style of decision-making which encourages input from both the parent and child (Steinberg, Elmen, & Mounts, 1989). Children are less impulsive and better at regulating their own behavior when children and parents regularly make decisions together (Maccoby, 1992). In contrast, children who come from homes where there is a high degree of coercive and aggressive interactions among family members are more at risk for internalizing and externalizing problems (Conger, Ge, Elder, Lorenz, & Simons, 1994).

Parenting and Attachment

Parenting styles continue to have an effect on a child's attachment organization long after infancy by mediating or reinforcing previously established internal working models of self and others. The following studies have observed differences in the way securely versus insecurely attached adults characterized their mothers' and fathers' parenting styles through their adolescent years. Blatt, Auerbach and Levy (1997) found that secure individuals represented both their parents as being reliable, loving, accepting, nonretaliative, reassuring, interested in their activities while they were growing up and viewed them as positive role models. On the other hand, insecure individuals described their parents' care as

deficient and unaffectionate. Of the insecure participants, the avoidantly-attached individuals portrayed their mothers and fathers as callous, critical, punitive and less helpful. Preoccupied individuals also described their parents as punitive and critical and less involved; but unlike the avoidant group, they also characterized their parents as "affectionate, warm and benevolent". Though this finding is seemingly contradictory, it supports Ainsworth et. al's (1978) proposition that ambivalent attachment results from inconsistent care including mixed messages from parents.

Collins and Read (1990) had similar findings. Securely attached participants described their mothers and fathers as caring and responsive, while anxiously attached individuals characterized their mothers and fathers as cold or inconsistent. Those who rated their mothers' care as rejecting and variable had lower self-esteem, less self-confidence in relating to others and viewed others as less reliable. Differences have also been found in the way various types of insecure participants viewed their parents (Brennan & Shaver, 1998). Fearfully avoidant individuals described their parents as being more rejecting and less encouraging in regards to their autonomy than did dismissing avoidant subjects. The fearful group also had a less idealized perception of their mothers.

In a study investigating the family histories of mothers with anxiously attached children, the participants portrayed their relationships with their fathers as enmeshed while taking on a caregiving role toward their mothers. These relationships served to maintain the homeostasis of the family rather than meeting the subjects' individual needs (Morris, 1980).

The levels and kinds of emotional expressiveness encouraged or discouraged by parents have also been associated with various attachment organizations. Bell (1998) found that dismissing individuals came from families characterized by low levels of emotional communication. In addition, avoidant childrens' mothers tended to discourage negative emotional expression, in contrast with mothers of secure children who were accepting of a broad array of emotions (Goldberg, MacKay-Soroka & Rochester, 1994). Goldberg and colleagues also found that negative emotions constituted the dominant manner of communication in families of preoccupied participants. Other researchers have found associations between emotional expression in families and personality (Halberstadt, 1991), peer acceptance (Cassidy, Parke, Butkovsky, & Braungart, 1992), and depression (Cooley, 1992).

Family Functioning and Psychopathology

"Pathological development is conceptualized as a lack of integration of the cognitive, social, and emotional competencies that are crucial to achieving adaption…children reared in maltreating family environments clearly experience sufficient disruption in the negotiation of developmental tasks to impede the development of [these] adaptive competencies" (Houck & King, 1989, p. 196). Several studies have shown detrimental long-term effects of maltreatment in childhood including earlier alcohol and drug abuse (Cavaiola & Schiff, 1988); self destructive and suicidal behavior in males (Yesavage & Widrow, 1985); and anxiety, depression, suicidal ideation and problems in interpersonal relationships in college females (Briere & Runtz, 1988). There is also evidence to suggest that

high levels of discord within the family-of-origin is related to later feelings of shame, substance abuse problems, violence in significant relationships and affective disorders (Hadley, Holloway & Mallinckrodt, 1993).

Although childhood physical and sexual abuse have commonly been associated with the later development of personality disorders (Bernstein, 2002; Gibb, Wheeler, Alloy & Abramson, 2001; Miller & Lisak, 1999), there is also research that suggests that even parental neglect may play a significant role in increased risk for PDs. Johnson, Smailes, Cohen, Brown and Bernstein (2000) investigated the relationships between parental cognitive neglect (lack of involvement in schooling), emotional neglect (lack of expressions of love and encouragement), physical neglect (lack of attention to basic medical and bodily needs), and supervision neglect (permissiveness), and personality disorders in young adults. Their findings indicated that emotional neglect was related with a schizoid and schizotypal symptoms, and avoidant PD; physical neglect was associated with schizoid and narcissistic symptoms, and schizotypal PD; and supervision neglect was related to borderline, paranoid, passive-aggressive, schizoid and histrionic symptoms, and passive-aggressive PD. Other studies also found parental neglect to be associated with dependent and passive aggressive PDs (Drake, Adler, & Vaillant, 1988) and antisocial PD (Luntz & Widom, 1994).

In addition, Hogue (1999) examined the different influences mothers versus fathers may have on the development of personality disorders. Maternal factors such as emotional abuse/neglect and psychological maladjustment were significantly related to avoidant, paranoid and schizoid PDs; whereas, paternal

psychological maladjustment and abuse was more associated with borderline and schizotypal PDs.

In conclusion, parents play a central role in childrens' lives through adolescence. Parental support is an important buffer against stressful circumstances children encounter throughout development, and therefore, disturbances in the parent-child relationship are likely to make children more vulnerable to later psychosocial disorders (Martin & Maharaj, 1993). Emery and Kitzman (1995) concur that "the effects of parenting on children's development are substantial…secure attachments, continued parental support, firm, consistent, developmentally sensitive discipline, and continued monitoring of children's behavior are all related to…[healthy] child adjustment" (p.15).

There are a myriad of ways developmental experiences may lead to an increased risk for later dysfunction. In order to better understand the evolution of psychopathology, a multidisciplinary approach which includes the investigation of family factors is needed to clarify the interpretation of previous findings related to attachment and maladustment (Carlson & Sroufe,1995).

CHAPTER 3

METHOD

The goal of this study was to determine the relationships among parental attachment, family functioning characteristics and personality patterns/clinical syndromes, to ascertain whether family functioning variables significantly predict variance in the clinical indicators above and beyond that which can be explained by parental attachment, and to learn whether there is a significant interaction between the attachment and family variables that predict variance in the clinical indicators above and beyond that which can be explained by attachment and family functioning alone. Instruments were chosen that assess the relationships of the above variables. The sample consisted of volunteers enrolled in undergraduate psychology courses. This chapter explains the structure of the study including the participants, the research design, instruments used and the procedure followed.

Participants

This study was conducted in a University in a semi-rural area in the Southeast Region of the United States. The sample was comprised of 275 undergraduate students ranging in age from 18 to 28 years, with a mean age of 19.42 years (SD = 1.5). Twenty-seven percent of the students were male and 73% were female. The group was approximately 86% Caucasian, 8% Asian, 4% African American, and 2% of mixed heritage. Seventy-eight percent of the participants reported that their parents were still married, 21% reported their

parents were divorced, and 1% reported that their parents had never been married. Also, on a scale measuring family-of-origin religiosity, 6% of the participants described their family as 'not at all' religious, 15% described their family as 'a little' religious, 17% described their family as 'somewhat' religious, 39% described their family as 'fairly' religious, and 23% described their family as 'very' religious.

Research Questions

The present study investigated the following questions:

Research Question 1: What are the relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression and the family functioning variables including Mother and Father Responsiveness, Mother and Father Acceptance, Mother and Father Physical Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and Father Substance Abuse?

Research Question 2: What are the relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, and the attachment variables including Mother and Father Attachment?

Research Question 3: What are the relationships between the family functioning variables including Mother and Father Responsiveness, Mother and

Father Acceptance, Mother and Father Physical Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and Father Substance Abuse, and the attachment variables including Mother and Father Attachment?

Research Question 4: Does family functioning predict variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, above and beyond that which can explained by mother and father attachment?

Research Question 5: Is there a significant interaction between mother and father attachment and family functioning that predicts variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, and Paranoid traits, and Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression above and beyond that which can be explained by mother and father attachment and family functioning alone?

Design

The study used a correlational research design to answer the above questions. Students from Introductory Psychology classes were invited to participate.

Instruments

Family Functioning Characteristics. The Family Background Questionnaire (FBQ; Melchert, 1998) was used to assess the participants'

perceptions of their family of origin. The FBQ consists of 179 items comprising 22 subscales. The scales were based on variables identified in the literature as having an effect on family functioning and children's development. The variables include parental responsiveness, acceptance, physical and sexual abuse, physical neglect, parental educational involvement, decision-making style, expression of affect, control, chores, parental psychological adjustment, substance abuse, parental coalition, child social support, and family stressors. Items are scored on a 5-point Likert type format with different responses available depending on the particular item. Some items include answers ranging from *almost never* to *almost always*. Responses on other items included phrases (e.g., *once or twice a month*) or sentences (e.g., *My parents decided this without discussing it with me*.) Sample questions include: "My mother would support and comfort me when I needed it," "In my family we talked about our sad feelings," and "When my father did not want me to do something, he explained why." The FBQ was normed on both clinical and non-clinical populations. Seventy-nine percent of the adults in the sample were undergraduate students. Melchert and Sayger (1998) report alpha coefficients for the subscales ranging from .76 to .96. Two-week test-retest reliabilities on more than half the scales range from .85 to .96, and the other half range from .68 to .84. Two scales falling below .68, sexual abuse at .59 and physical neglect at .50.

Recent studies have used the FBQ with college student populations. Melchert (2000) investigated the differential effects of parental substance dependence (SD) , childhood sexual abuse (CSA) and parental caregiving on later

adjustment and found that parental acceptance and responsiveness accounted for more of the variance in later psychological distress than did the SD and CSA. Another study examined differences in perceptions of parental care and control, attachment, anxiety and expected rejection in suicidal and non-suicidal students (Sears, 1999). Suicidal students reported higher levels of anxiety, insecure attachment, expected rejection, and perceived parents as having low care and high control. Hogue (1999) examined associations between family characteristics and personality disorder clusters and found significant relationships between the constructs investigated.

Melchert and Sayger (1998) point out that there has been much research on the effect of the following variable on child development: the responsiveness and acceptance of parents toward their children, the control and decision making style of parents and the expression of affect allowable in the family. As the reliabilities for these scales range between .80 and .93, and the literature supports the influence these variables have on individual adjustment, the following scales, as defined by Melchert and Sayger, were used to measure family functioning characteristics: Mother and Father Responsiveness (a continuum with reliable support, interest, understanding, sensitivity, attentive listening at one end, and the absence of these behaviors [i.e., emotional neglect] at the other end); Mother and Father Acceptance (a continuum with respect, loving approval, and acceptance at one end and judgementalness, shaming and rejection [i.e., emotional abuse] at the other end; Mother and Father Physical Abuse (a continuum including physical violence and abuse experienced 20 or more times at the maladaptive end and no

physical abuse at the adaptive end); Parental Physical Neglect (a dimension concerning children's physical needs defined as food, clothing and supervision and adequate care when ill or injured at one end and the absence of these factors at the other end); Mother and Father Educational Involvement (defined as displaying interest in a child's school work, school performance and career development at the adaptive end of the continuum and the lack of these behaviors at the other end); Mother and Father Decision-Making (the clarity and reasonableness of the decision-making around issues of behavioral control ranging from clear, reasonable, flexible and fair decision-making at one end to its opposite on the other); Expression of Affect (the degree of openness regarding the communication of emotion in the family); and Mother and Father Substance Abuse (a continuum from no use of substances at one end to frequent/daily intoxication causing problems in the home, socially and/or in the work place, etc. at the other end).

Attachment. The Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) is used to measure the participants' attachment to mother, father, and peers. The IPPA consists of 75 self-report items with 25 questions designated for each attachment figure. There are five response items available for each question including: *1= almost never or never true* through *5 = almost always true*. Sample questions include: "I feel it's no use letting my feelings show around my mother." "I tell my father about my problems and troubles." Reliability estimates of the IPPA subscales are high. Armsden and Greenberg (1987) originally reported three-week test-retest estimates and Cronbach's alphas with college students at approximately .90. The IPPA's convergent validity was

established by cross-validating it with several other instruments including the Tennessee Self-Concept Scale (Fitts, 1965), emotional scales from the Affective States Index (Bachman, 1970), the Family Environment Scale (Moos, 1974), the Life Events Checklist (Johnson & McCutcheon, 1980), and Family and Peer Utilization factors from the Inventory of Adolescent Attachment, (Greenberg, Siegal, & Leitch, 1983). The mother and father attachment scales were used in this study to examine the influence of parental attachment organization.

The IPPA has been used with college students to examine relationships between attachment and body dissatisfaction (Sive-Ramirez, 2001), social anxiety, general anxiety and depression (Anhalt, 2001), gender-role identity (Haigler, Day, & Marshall, 1995), and affect regulation and perceived stress (McCarthy, Moller, & Fouladi, 2001).

Personality/Psychopathology. The Millon Clinical Multiaxial Inventory-III is a clinical diagnostic assessment tool that measures several personality patterns/pathology and clinical syndromes. The MCMI-III contains 24 scales, including 11 clinical personality patterns (Schizoid, Avoidant, Depressive, Dependent, Histrionic, Narcissistic, Antisocial, Aggressive, Compulsive, Passive-Aggressive, Self-Defeating), three severe personality pathology scales (Schizotypal, Borderline, and Paranoid), seven clinical syndrome scales (Anxiety, Somatoform, Bipolar: Manic, Dysthymia, Alcohol Dependence, Drug Dependence, Post-Traumatic Stress Disorder), and three severe clinical syndromes scales (Thought Disorder, Major Depression, and Delusional Disorder). The measure consists of 175 true/false questions written at an eighth grade reading level, takes

approximately 25 minutes to complete, and can be administered to individuals 18 years and older. The retest reliabilities for the scales range from .82 to .96 (Millon, 1997).

Although the MCMI was normed on and designed to be used with clinical populations, Choca and Shanley (1992) argue that the MCMI measures personality "styles" rather than "disorders." The authors cite several studies that have found scale elevations when the MCMI was used with non-clinical populations (Cantrell & Dana, 1987; Holliman & Guthrie, 1989; Piersma, 1987; Repko & Cooper, 1985). In response to Choca and Shanley's article, Millon (1992) concurred that "there is a continuum from normal style to abnormal disorder especially within the sphere of personality functioning…where the line should be drawn, however, is a most difficult matter, there being not only conceptual aspects to consider, but also methodologic and psychometric ones" (p. 432).

Additionally, Watson and Sinha (1995) used four inventories including the MCMI to measure personality disorders (PDs) with clinical and normal samples and found similarities in PD structures across both populations. Sinha and Watson (2001) examined the prevalence of personality disorders in university students. Approximately 30% of the males and 23% of the females sampled showed evidence of a PD using the MCMI. These figures were comparable to the prevalence of PDs found in the same group (29% of males and 19% of females) using the Coolidge Axis II Inventory which was normed on non-clinical populations. Furthermore the MCMI is the third most researched instrument in recent years (Butcher & Rouse, 1996), including over 500 published articles

(Craig, 1999). A review of the literature confirmed that more than 30 of these studies were conducted with college student populations. Some of these studies included examinations of relationships between personality disorder and self-serving bias (McAllister, Baker, Mannes, Stewart, & Sutherland, 2002), personality type, attachment and ego development (Mclauchlin, 1999), malingering and dissociative disorder (Webb, 1999) and differences between American and Korean students on various personality scales (Chang Gunsalus & Kelly, 2001).

When the MCMI was used to measure personality disorders with non-clinical populations, in several studies the highest elevations were found on the Histrionic, Narcissistic and Compulsive scales (Craig,1999). Other researchers have also found the prevalence of the following PDs in normal samples: Paranoid, Avoidant, Dependent, Borderline and Antisocial (Sinha & Watson, 2001; Brennan & Shaver, 1998; Johnson, Bornstein & Sherman, 1996). As depression, anxiety and alcohol and drug dependence have also been related attachment and family functioning and are issues concerning college student populations, these scales along with the above Clinical Personality Pattern and Personality Pathology scales were used to measure psychopathology.

The Personality Pattern scales, as defined by Millon (2002), included: *Avoidant Personality*: (Basically fearful and vigilant, these individuals are perennially on guard, ever ready to distance themselves because of anxious anticipation of painful and humiliating experiences. By actively withdrawing they protect themselves in spite of deep desires to be close to others.); *Dependent*

Personality: (Turn primarily to others as a source of nurturance and security, these persons wait passively for others to provide affection, security, guidance, and leadership, while often submitting willingly to the wishes of others in order to maintain their affection. Lack of both initiative and autonomy is often a consequence of parental overprotection.); *Histrionic Personality:* (Facile and manipulating, these individuals seek to maximize the amount of attention and favorable treatment they receive while minimizing the disinterest and disapproval of others. Their clever and often artful social behaviors give the appearance of an inner confidence and independent self-assurance. Beneath this guise, however, lies a fear of genuine autonomy and a need for repeated signs of acceptance and approval from every interpersonal source and in every social context.); *Narcissistic Personality:* (Noted by their egotistic self-involvement, these individuals overvalue their self-worth, often maintaining confidence and superiority that is unsustainable by real or mature achievements. Nevertheless, they blithely assume that others will recognize their specialness and exhibit an air of arrogant self-assurance. A sublime confidence that things always work out provides with little incentive to engage in the reciprocal give-and-take of social life.); *Antisocial Personality:* (Engaging in duplicitous or illegal behaviors designed to exploit their environment for self-gain, these individuals are irresponsible and impulsive, judge others to be unreliable and disloyal, and use insensitivity and ruthlessness to head off abuse and victimization.); *Compulsive Personality:* (Prudent, controlled, and perfectionistic, high scorers experience a conflict between hostility and fear of social disapproval, typically suppressing

resentment by overconforming and by placing high demands on themselves. Their disciplined self-restraint controls intense, though hidden, oppositional feelings, resulting in an overt passivity and seeming public compliance.)

The Personality Pathology scales, as defined by Millon (2002), included: *Borderline Personality:* (Experiencing intense moods punctuated by recurring periods of dejection and apathy and spells of anger and anxiety, borderlines are defined by a dysregulation of affect, most clearly seen in the instability and lability of their moods. Many have recurring self-mutilating and suicidal thoughts, appear overly preoccupied with securing affection, have difficulty maintaining a clear sense of identity, and display a cognitive-affective ambivalence evident in conflicting feelings of rage, love, and guilt toward others.); *Paranoid Personality:* (Displaying a vigilant mistrust of others and an edgy defensiveness against anticipated criticism and deception, these persons evidence an abrasive irritability and a tendency to precipitate exasperation and anger in others, fear of losing independence, and vigorously resist external influence and control.)

The clinical syndromes, as defined by Millon (2002), included: *Anxiety:* (High scorers often report feeling either vaguely apprehensive or specifically phobic. They are is typically tense, indecisive, and restless, and tends to complain of a variety of physical discomforts, such as tightness, excessive perspiration, ill-defined muscular aches, and nausea. Most give evidence of a generalized state of tension, manifested by an inability to relax, fidgety movements, and a readiness to react and be easily startled. Somatic discomforts, for example, clammy hands or upset stomach, are also characteristic. Also notable are worrisomeness and an

apprehensive sense that problems are imminent, a hyperalertness to one's environment, edginess, and generalized touchiness.); *Major Depression*: (High scorers are severely depressed, express a dread of the future, suicidal ideation, and a sense of hopeless resignation. They may be incapable of functioning in a normal environment. Some exhibit a marked motor retardation, whereas others display an agitated quality, incessantly pacing about and bemoaning their sorry state. Several somatic processes are often disturbed during these periods—notably, a decreased appetite, fatigue, weight loss or gain, insomnia, or early rising. Problems of concentration are common, as are feelings of worthlessness or guilt. Repetitive fearfulness and brooding are frequently in evidence.); *Alcohol Dependence:* (High scorers probably have a history of alcoholism. They have made efforts to overcome this problem with minimal success, and, as a consequence, experience considerable discomfort in both family and work settings.); *Drug Dependence*: (High scorers are likely to have had a recurrent or recent history of drug abuse, tend to have difficulty in restraining impulses or keeping them within conventional social limits, and display an inability to manage the personal consequences of these behaviors.)

Procedures

The researcher administered the FBQ, IPPA and MCMI-III to undergraduate students in Introductory Psychology classes through the Psychology department's Research Pool (RP). Students in these courses participate in studies or may alternatively choose to summarize research articles to fulfill the courses' research participation requirements. Students signed up for the study on the RP

web-site. All participants were given the opportunity to indicate whether or not they wanted to participate and to ask questions regarding test items and procedures. They were also given the option of terminating their participation at any point during the session without penalty.

It took approximately 90 minutes to administer all the instruments and the participants received .5 credits for each half hour of participation per RP guidelines. All participants were provided a post-study debriefing statement. The debriefing statement consisted of a clear explanation of what was being studied, a summary of the hypotheses and the location of university counseling centers should they wish to seek services. After the instruments were completed, the IPPA mother and father scores and Family Background Questionnaire scores were converted to standardized T scores (M = 50, SD = 10) so they could be analyzed with the MCMI-III scores.

Data Analysis

Preliminary Analyses

Because there is conflicting research on the effects of parental divorce, ethnicity, gender and religiosity on parental attachment (Granqvist, 1999; Lapsley, Varshney, & Aalsma, 2000; Lopez, Melendez, & Rice, 2000; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000; Webster, 2000), family environment (Bendo, 2001; Besett-Alesch, 2001; Gillum, Gomez-Martin, & Prineas, 1984; Marjoribanks, 1999) and mental health (Bernard-Fisher, 2001; Bruce, 1998; Fergusson, Horwood, & Lynskey, 1994; Frank, 2000; Gartner, 1996; Rosenfield, 2000; Wallerstein, 1986), preliminary multivariate analyses of variance

(MANOVAs) were run to ascertain whether there were significant differences among the sample based on these variables. These tests were also run to determine whether gender, ethnicity, parental divorce and/or family religiosity had significant effects on the MCMI-III scales and therefore, needed to be included in the first step of the hierarchical regression analyses being performed to answer primary research questions 4 and 5 (Cohen & Cohen, 1975). Tukey Post hoc tests were run when significant univariate results were found on a categorical variable involving more than two levels (ethnicity, parental divorce, and family religiosity).

Primary Analyses

To answer primary research questions 1 through 3, Pearson product-moment correlations were run to examine the relationships among the personality/clinical syndrome variables, family functioning variables, and mother and father attachment.

To answer primary research question 4, regarding whether family functioning predicts variance in the personality/clinical syndrome variables above and beyond that which can explained by mother and father attachment, the researcher first created a family background index from the family functioning variables described above to solve problems of multicollinearity among the family variables and so the attachment and family functioning constructs could be compared through hierarchical multiple regression (Cohen & Cohen, 1975). Cohen and Cohen define the hierarchical model as "one in which the k IVs are entered cumulatively according to some specified hierarchy which is indicated in advance

by the purpose and logic of the research… [and explain that] a major advantage of the hierarchical analysis of data is that once the order of the IVs has been specified, a unique partitioning of the total Y variance accounted for by the k IVs, $R^2_{Y.12...k}$, may be made. Indeed this is the only basis on which variance partitioning can proceed with correlated IVs" (p.98).

The variance inflation factor (VIF) in a model is commonly used to measure multicollinearity. Any VIF greater than 10 is considered to be problematic (Kleinbaum, Kupper, & Muller, 1988). VIFs for all the independent variables used in this model were less than 4 except for dummy coded ethnicity variables which were less than 8. Dummy coding was used to code categorical variables (gender, ethnicity, parental divorce status and family religiosity) so they could be included in the hierarchical regression analysis with the family functioning and attachment continuous variables when the preliminary analyses described above indicated their inclusion in the model (Pedhazur, 1997).

The researcher also used a hierarchical multiple regression analysis to answer question 5 regarding whether there is a significant interaction between mother and father attachment and family functioning that predicts variance in personality/clinical syndrome variables above and beyond that which could be explained by mother and father attachment and family functioning alone. Father attachment/family functioning and mother attachment/family functioning interaction variables were created so the interactions could be analyzed against the attachment and family functioning variables alone (Aiken & West, 1991).

Limitations

Because the sample for this study was drawn from undergraduate psychology students in a rural, Southern university, there may be characteristics peculiar to this population that prevent generalizing the results to other college students in other settings. Also, individual personalities and psychopathology develop through complex, multi-determined pathways which are influenced by several factors such as temperament, genetics and environmental/social interactions outside of the family which are not being examined in this study. Although this investigation may find that family factors and attachment account for a significant amount of the variance in the personality patterns and clinical syndromes being studied, there will likely still be a substantial percentage of the variance that will be unexplained, and therefore, a causal relationship between the variables cannot be established. However, this study attempted to elucidate how attachment, family interactions and maladaptive functioning may be related and how early interpersonal experiences may contribute to the development of later psychopathology.

Assumptions

There were several assumptions that guided the conceptualization of the present study. It was assumed that since participants were assured of the anonymity of their responses on the instruments, they would be more likely to answer the questions regarding their mother and father relationships, family experiences and present problems honestly. It was also assumed that the IPPA, FBQ and MCMI-III measured the attachment, family functioning and

personality/clinical syndrome constructs being studied based on previous research and the reliability and validity data reported for each of these instruments. Finally, underlying the hypotheses presented in this study is the assumption that although there are likely relationships between attachment, family functioning and later maladjustment, family functioning does not add significantly more to the explanation of variance in pathology than that which can be explained by attachment. This is because the researcher assumes that the biopsychosocial consequences of early experiences with primary caregivers result in the development of a basic framework influencing all of one's future interactions inside and outside of the family-of-origin and how the outcome of these interactions are in turn perceived.

CHAPTER 4

RESULTS

The present study was designed to examine the relationships among parental attachment, family functioning characteristics and personality patterns/clinical syndromes, to determine whether family functioning variables significantly predict variance in the clinical indicators above and beyond that which can be explained by parental attachment, and to ascertain if there is a significant interaction between the attachment and family variables that predict variance in the clinical indicators above and beyond that which could be explained by attachment and family functioning alone.

Research Hypotheses

The hypotheses in the present investigation were that significant positive relationships would be found to exist between mother and father attachment and family functioning variables, and that significant negative relationships would be found to exist between the personality/clinical syndromes and the family functioning variables, and the personality/clinical syndromes and mother and father attachment variables. Also, family functioning would not add to the explanation of variance in the personality/clinical syndromes above and beyond that which can be accounted for by attachment. Additionally, interactions between parental attachment and family functioning would not add to the

explanation of variance in the personality/clinical syndromes above and beyond that which can be accounted for by attachment and family functioning alone.

Findings

The mean raw scores for the FBQ and IPPA scales and standardized scores for the MCMI-III scales used in this study are summarized in Table 4.1. Of the 275 participants, the following percentages scored 75 or higher on the MCMI-III scales suggesting the possible presence of that trait: Avoidant (13%), Dependent (28%), Histrionic (46%), Narcissistic (37%), Antisocial (10%), Compulsive (13%), Borderline (10%), Paranoid (5%), Anxiety Disorder (32%), Alcohol Dependence (8%), Drug Dependence (5%), and Major Depression (4%).

Before answering the primary research questions, preliminary multivariate analyses of variance (MANOVAs) were run to ascertain whether there were differences among the sample on the parental attachment, family functioning and personality/clinical syndrome variables based on gender, ethnicity, parental divorce status and family religiosity. This was done to gain a better understanding of the effect these differences had on the study variables and therefore, possible limitations to the conclusions that could be drawn from the data. These preliminary analyses were also necessary to determine whether divorce, ethnicity, gender or family religiosity needed to be included in the first step of the hierarchical regression models used to answer research questions 4 and 5 of this study.

Preliminary Analyses

Gender.

MANOVAs were conducted to determine if there were significant gender effects on the attachment, family functioning and clinical maladjustment variables being studied. (See Table 4.2 for standardized descriptive statistics on these variables by gender.)

With gender as the independent variable and Mother and Father Attachment as the dependent variables, the MANOVA resulted in a statistically nonsignificant difference between males and females, Wilks' Λ = .999, $F(2,272) = .182$, $p = .833$.

With gender as the independent variable and Family Background Questionnaire (FBQ) scales as the dependent variables, the MANOVA resulted in an overall significant multivariate finding, Wilks' Λ = .877, $F(14,260) = 2.601$, $p = .002$. There were significant univariate results for the Father Physical Abuse and Expression of Affect scales (see Table 4.2) with males reporting on average more physical abuse from fathers than females, and less comfort with expression of affect in the family than females.

With gender as the independent variable and the MCMI-III scales as the dependent variables, the MANOVA resulted in an overall significant multivariate finding, Wilks' Λ = .509, $F(25,249) = 9.597$, $p = .000$. There were significant univariate results for the Avoidant, Histrionic, Narcissistic, Compulsive, Borderline, Drug Dependence and Major Depression scales (see Table 4.2) with males scoring on average higher on the Avoidant, Borderline and Major

Depression scales and females scoring on average higher on the Histrionic, Narcissistic, Compulsive and Drug Dependence scales.

Ethnicity.

MANOVAs were conducted to determine if there were significant ethnicity effects on the attachment, family functioning and clinical maladjustment variables being studied. (See Table 4.3 for descriptive statistics on these variables by ethnicity.)

With ethnicity as the independent variable and the IPPA Mother and Father Attachment scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .922, F(6,540) = 3.711, p = .001. There were significant univariate results for Mother and Father Attachment, as well (see Table 4.3). Tukey Post hoc tests of pairwise comparisons indicated for Mother Attachment, on average Whites scored significantly higher (suggesting more secure attachment) than Asians (p = .000). For Father Attachment, on average Whites also scored significantly higher than Asians (p = .045).

With ethnicity as the independent variable and with the FBQ scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .718, F(42,766) = 2.156, p = .000. There were significant univariate results for Mother Responsiveness, Mother and Father Acceptance, Mother Physical Abuse, Father and Mother Decision Making Style and Expression of Affect (see Table 4.3). Tukey Post hoc tests of pairwise comparisons indicated for Mother Responsiveness, on average, Whites scored

significantly higher (suggesting more responsiveness) than Asians (p = .000). For Father and Mother Acceptance, on average, Whites scored significantly higher (suggesting more acceptance) than Asians (p = .002 and p = .000, respectively). For Mother Physical Abuse, on average, Whites scored significantly higher (suggesting less physical abuse) than African Americans (p = .040). For Father Decision Making Style, on average, Whites scored significantly higher (suggesting more participation/fairness in decision making) than Asians (p = .000). For Expression of Affect, on average, Whites scored significantly higher (suggesting more comfort with expression of affect in family) than Asians (p = .050).

With ethnicity as the independent variable and with the MCMI-III scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .799, F(39,767) = 1.549, p = .019. There were significant univariate results for the Dependent, Compulsive and Paranoid scales (see Table 4.3). Tukey Post hoc tests of pairwise comparisons indicated for Dependent, on average, Asians scored significantly higher on this scale than African Americans (p = .046). For Paranoid, on average, Asians scored significant higher on this scale than Whites (p = .008) and Mixed heritage participants (p = .043). Tukey Post hoc tests did not indicate significant results on the Compulsive scale.

Parental Divorce Status.

MANOVAs were conducted to determine if there were significant parental divorce effects on the attachment, family functioning and clinical maladjustment

variables being studied. (See Table 4.4 for descriptive statistics on these variables by divorce status.)

With divorce status as the independent variable and with the IPPA Mother and Father Attachment scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .905, $F(4,542) = 6.940$, $p = .000$. There were significant univariate results for Father Attachment, as well (see Table 4.4). Tukey Post hoc tests of pairwise comparisons indicated for Father Attachment, on average, participants from intact families scored significantly higher (suggesting more secure father attachment) than participants from divorced families ($p = .000$).

With divorce status as the independent variable and with the FBQ scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .800, $F(28,518) = 2.177$, $p = .001$. There were significant univariate results for Father Responsiveness, Father Acceptance, Parental Neglect, Father Educational Involvement, Father Decision Making Style and Father Substance Abuse (see Table 4.4). Tukey Post hoc tests of pairwise comparisons indicated for Father Responsiveness, on average, intact family participants scored significantly higher (suggesting more father responsiveness) than divorced family participants ($p = .000$). For Father Acceptance, on average, intact family participants scored significantly higher (suggesting more father acceptance) than divorced family participants ($p = .025$). For Parental Neglect, on average, intact family participants scored significantly higher (suggesting less parental neglect) than divorced family participants ($p =$

.002). For Father Educational Involvement, on average, intact family participants scored significantly higher (suggesting more father educational involvement) than divorced family participants (p = .000). For Father Decision Making Style, on average, intact family participants scored significantly higher (suggesting more participation/fairness in decisions) than divorced family participants (p = .010). For Father Substance Abuse, on average, intact family participants scored significantly higher (suggesting less father substance abuse) than divorced family participants (p = .016).

With divorce status as the independent variable and with the MCMI-III scales as the dependent variables, the MANOVA resulted in a statistically non-significant finding between the parental marital status groups, Wilks' Λ = .899, F(24,522) = 1.186, p = .247.

Religiosity.

MANOVAs were conducted to determine if there were significant family religiosity effects on the attachment, family functioning and clinical maladjustment variables being studied. (See Table 4.5 for descriptive statistics on these variables by religiosity grouping.)

With family religiosity as the independent variable and with the IPPA Mother and Father Attachment scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .914, F(8,538) = 3.078, p = .002. There were significant univariate results for Father Attachment, as well (see Table 4.5). Tukey Post hoc tests of pairwise comparisons indicated for Father Attachment, on average, participants from the

'fairly' and 'very' religious family groups scored significantly higher (suggesting more secure father attachment) than participants from the 'a little' religious family group (p = .020 and .000, respectively).

With family religiosity as the independent variable and with the FBQ scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .664, F(56,1001) = 1.989, p = .000. There were significant univariate results for Mother and Father Responsiveness, Mother and Father Acceptance, Parental Neglect, Mother and Father Educational Involvement, Father Decision Making Style, Expression of Affect and Mother and Father Substance Abuse (See Table 4.5). Tukey Post hoc tests of pairwise comparisons indicated for Father Responsiveness, on average, those from the 'very' religious family group scored significantly higher (suggesting more responsiveness) than the 'not at all' and 'a little' family groups (p = .035 and .001, respectively). For Mother Responsiveness, on average, those from the 'fairly' and 'very' religious family groups scored significantly higher than those from the 'not at all' family groups (p = .050 and .021, respectively). For Father Acceptance, on average, those from the 'very' religious family group scored significantly higher than those from the 'somewhat', 'a little' and 'not at all' religious family groups (p = .001, .026, and .035, respectively). For Mother Acceptance, on average, those from the 'very' religious family group scored significantly higher (suggesting more acceptance) than those from the 'a little' religious family group (p = .040). For Parental Neglect, on average, those from the 'very' religious family group scored significantly higher (suggesting less neglect) than those from the 'a little'

religious family group (p = .023). For Father Educational Involvement, on average, those from the 'very' religious family group scored significantly higher (suggesting more involvement) than those from the 'somewhat' and 'a little' religious family groups (p = .049 and .001, respectively). For Mother Educational Involvement, on average, those from the 'very' religious family group scored significantly higher (suggesting more involvement) that those from the 'somewhat', 'a little' and 'not at all' religious family groups (p = .008, .000, and .001, respectively). For Expression of Affect, on average, those from the 'a little' religious family group scored significantly lower (suggesting less comfort with affect) than those in the 'fairly' and 'very' religious groups (p = .020 and .003, respectively). For Father Substance Abuse, on average, those from the 'very' religious family group scored significantly higher (suggesting less substance abuse) than those from the 'fairly', 'somewhat', 'a little' and 'not at all' religious family groups (p = .000, .001, .001 and .006, respectively). For Mother Substance Abuse, on average, those from the 'very' religious family group scored significantly higher (suggesting less substance abuse) than those from the 'fairly', 'somewhat', 'a little' and 'not at all' religious family groups (p = .007, .006, .001 and .009, respectively).

With religiosity as the independent variable and with the MCMI-III scales as the dependent variables, the MANOVA resulted in an overall statistically significantly multivariate finding, Wilks' Λ = .583, F(100,977) = 1.427, p = .005. There were significant univariate results on the Avoidant, Histrionic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence and

Major Depression scales (see Table 4.5). Tukey Post hoc tests of pairwise comparisons indicated for Antisocial, on average, those from the 'very' religious family group scored significantly lower on this scale than those from the 'a little' religious family group ($p = .004$). For Compulsive, on average, those from 'very' religious family group scored significantly higher (suggesting more compulsiveness) on this scale than those from the 'somewhat' and 'a little' religious family groups ($p = .007$ and .000, respectively). For Borderline, on average, those from the 'very' religious family group scored significantly lower (suggesting less borderline traits) on this scale than those from the 'somewhat' and 'a little' religious family groups ($p = .041$ and .010, respectively). For Anxiety Disorder, on average, those from the 'somewhat' religious family group scored significantly higher (suggesting more anxiety) on this scale than those from the 'very' and 'fairly' religious family groups ($p = .004$ and .027, respectively). For Alcohol Dependence, on average, those from the 'a little' religious family group scored significantly higher (suggesting more alcohol use) on this scale than those from the 'very' religious family group ($p = .034$). For Major Depression, on average, those from the 'somewhat' religious family group scored significantly higher (suggesting more depression) on this scale than those from the 'very' religious family group ($p = .006$). Tukey Post hoc tests did not indicate significant results on the Avoidant, Histrionic and Paranoid scales.

Primary Analyses

To address the research questions 1 through 3, Pearson product-moment correlations were run for the above family functioning, attachment and clinical

variables. The results of this analysis are listed in Table 4.6. In order to assist in the interpretation of the results below, please note the following: High scores on the MCMI-III clinical scales are negative in that they suggest a higher prevalence of the applicable personality/clinical syndrome. High scores on the FBQ family functioning scales are positive in that they suggest more parental responsiveness, acceptance, educational involvement, fairness in decision making style, comfort with the expression of a wide range of affect in the family and lower parental physical abuse, neglect and substance abuse. High scores on the IPPA mother and father attachment scales are positive in that they indicate more secure parental attachment.

Hypothesis 1: There will be statistically significant negative relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression and the family functioning variables including Mother and Father Responsiveness, Mother and Father Acceptance, Mother and Father Physical Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and Father Substance Abuse. The results of the Pearson product-moment correlations for hypothesis 1 are discussed below by personality/clinical syndrome variable.

Avoidant.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Avoidant and Father Responsiveness (-.25), Mother

Responsiveness (-.21), Father Acceptance (-.30), Mother Acceptance (-.24), Parental Neglect (-.23), Father Decision Making Style (-.27), and Expression of Affect in the family (-.21). Mother Decision Making Style (-.18) was also significant ($p \leq .01$, two-tailed). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, decision making style and expression of affect) were associated with higher avoidant traits.

Dependent.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Dependent and Father Acceptance (-.23), Mother Acceptance (-.23), and Father Decision Making Style (-.21). Father Responsiveness (-.17), Mother Responsiveness (-.16), Mother Decision Making Style (-.19), and Expression of Affect (-.16) were also significant ($p \leq .01$, two-tailed). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, decision making style, expression of affect) were associated with higher dependent traits.

Histrionic.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Histrionic and Father Responsiveness (.22), Father Acceptance (.24), Parental Neglect (.21), and Expression of Affect in the family (.24). Mother Responsiveness (.19), and Father Education Involvement (.16) were

also significant ($p \leq .01$, two-tailed). The positive direction of the family functioning variables were not consistent with expectations; higher scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, education involvement and expression of affect) were associated with higher histrionic traits.

Narcissistic.

The researcher did not find statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Narcissistic and any family functioning variables.

Antisocial.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Antisocial and Father Responsiveness (-.30), Mother Responsiveness (-.30), Father Acceptance (-.38), Mother Acceptance (-.40), Parental Neglect (-.22), Father Educational Involvement (-.23), Father Decision Making Style (-.33), Mother Decision Making Style (-.32), and Expression of Affect in the family (-.28). Mother Education Involvement (-.19) and Father Substance Abuse (-.17) were also significant ($p \leq .01$, two-tailed). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, educational involvement, decision making style, expression of affect and substance abuse) were associated with higher antisocial traits.

Compulsive.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Compulsive and Father Responsiveness (.30), Mother

Responsiveness (.32), Father Acceptance (.42), Mother Acceptance (.42), Parental Neglect (.24), Father Educational Involvement (.22), Father Decision Making Style (.34), Mother Decision Making Style (.30), and Expression of Affect in the family (.30). Mother Education Involvement (.16) and Father Substance Abuse (.16) were also significant ($p \leq .01$, two-tailed). The positive direction of the family functioning variables were not consistent with expectations; higher scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, educational involvement, decision making style, expression of affect and substance abuse) were associated with higher compulsive traits.

Borderline.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Borderline and Father Responsiveness (-.33), Mother Responsiveness (-.31), Father Acceptance (-.40), Mother Acceptance (-.37), Parental Neglect (-.22), Father Educational Involvement (-.20), Father Decision Making Style (-.35), Mother Decision Making Style (-.27), and Expression of Affect in the family (-.27). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, educational involvement, decision making style and expression of affect) were associated with higher borderline traits.

Paranoid.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Paranoid and Father Responsiveness (-.26), Mother

Responsiveness (-.25), Father Acceptance (-.33), Mother Acceptance (-.32), Parental Neglect (-.24), Father Decision Making Style (-.30), Mother Decision Making Style (-.25), and Expression of Affect in the family (-.23). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, decision making style and expression of affect) were associated with higher paranoid traits.

Anxiety Disorder.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Anxiety Disorder and Father Acceptance (-.27) and Mother Acceptance (-.24). Father Responsiveness (-.18), Mother Responsiveness (-.16), Parental Neglect (-.17) and Father Decision Making Style (-.19) were also significant ($p \leq .01$, two-tailed). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental acceptance, responsiveness, neglect and decision making style) were associated with higher anxiety.

Alcohol Dependence.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Alcohol Dependence and Father Responsiveness (-.29), Mother Responsiveness (-.24), Father Acceptance (-.40), Mother Acceptance (-.35), Parental Neglect (-.25), Father Educational Involvement (-.20), Father Decision Making Style (-.34), Mother Decision Making Style (-.28), Expression of Affect in the family (-.27), and Father Substance Abuse (-.22).

Father Physical Abuse (-.18) was also significant ($p \leq .01$, two-tailed). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, educational involvement, decision making style, expression of affect, substance abuse and physical abuse) were associated with higher alcohol dependence.

Drug Dependence.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Drug Dependence and Father Responsiveness (-.20), Mother Responsiveness (-.25), Father Acceptance (-.26), Mother Acceptance (-.33), Father Decision Making Style (-.25), Mother Decision Making Style (-.28). Parental Neglect (-.16), Father Educational Involvement (-.16), Expression of Affect (-.17), and Mother Substance Abuse (-.17) were also significant ($p \leq .01$, two-tailed). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, decision making style, neglect, education involvement, expression of affect and substance abuse) were associated with higher drug dependence.

Major Depression.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Major Depression and Father Responsiveness (-.31), Mother Responsiveness (-.30), Father Acceptance (-.30), Mother Acceptance (-.27), Parental Neglect (-.22), Father Decision Making Style (-.27), Mother

Decision Making Style (-.21), and Expression of Affect in the family (-.29). Father Education Involvement (-.19) was also significant ($p \leq .01$, two-tailed). The negative direction of the family functioning variables were consistent with expectations; lower scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, decision making style, education involvement and expression of affect) were associated with higher depression.

Hypothesis 2: There will be statistically significant negative relationships between the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, and the attachment variables including Mother and Father Attachment.

The results of the Pearson product-moment correlations for hypothesis 2 are discussed below by attachment variable.

Mother Attachment.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Mother Attachment and Avoidant (-.24), Dependent (-.24), Histrionic (.20), Antisocial (-.36), Compulsive (.37), Borderline (-.36), Paranoid (-.31), Anxiety Disorder (-.26), Alcohol Dependence (-.33), Drug Dependence (-.30) and Major Depression (-.35). The negative direction of the personality/clinical syndrome variables were consistent with expectations; higher scores on the clinical indicator scales (avoidant, dependent, antisocial, borderline, paranoid, anxiety disorder, alcohol dependence, drug dependence and major depression) were associated with lower mother attachment. The positive direction

of the personality/clinical syndrome variables were not consistent with expectations; higher scores on the clinical indicator scales (histrionic and compulsive) were associated with higher mother attachment. There was not a statistically significant relationship between Mother Attachment and Narcissism.

Father Attachment.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Father Attachment and Avoidant (-.29), Dependent (-.22), Histrionic (.26), Antisocial (-.34), Compulsive (.34), Borderline (-.39), Paranoid (-.30), Anxiety Disorder (-.22), Alcohol Dependence (-.37), Drug Dependence (-.23) and Major Depression (-.34). The negative direction of the personality/clinical syndrome variables were consistent with expectations; higher scores on the clinical indicator scales (avoidant, dependent, antisocial, borderline, paranoid, anxiety disorder, alcohol dependence, drug dependence and major depression) were associated with lower father attachment. The positive direction of the personality/clinical syndrome variables were not consistent with expectations; higher scores on the clinical indicator scales (histrionic and compulsive) were associated with higher father attachment. There was not a statistically significant relationship between Father Attachment and Narcissism.

Hypothesis 3: There will be statistically significant positive relationships between the family functioning variables including Mother and Father Responsiveness, Mother and Father Acceptance, Mother and Father Physical Abuse, Parental Neglect, Mother and Father Educational Involvement, Mother and Father Decision Making Styles, Expression of Affect in the family and Mother and

Father Substance Abuse and the and the attachment variables including Mother and Father Attachment.

The results of the Pearson product-moment correlations for hypothesis 3 are discussed below by attachment variable.

Mother Attachment.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Mother Attachment and Father Responsiveness (.50), Mother Responsiveness (.79), Father Acceptance (.48), Mother Acceptance (.73), Parental Neglect (.47), Father Educational Involvement (.34), Mother Educational Involvement (.38), Father Decision Making Style (.53), Mother Decision Making Style (.79), Expression of Affect (.63). Mother Physical Abuse (.19) and Mother Substance Abuse (.17) were also significant ($p \leq .01$, two-tailed). The positive direction of the family functioning variables were consistent with expectations; higher scores on the family functioning indicator scales (parental responsiveness, acceptance, neglect, educational involvement, decision making style, expression of affect and mother physical and substance abuse) were associated with higher mother attachment.

Father Attachment.

The researcher found statistically significant correlation coefficients ($p \leq .001$, two-tailed) between Father Attachment and Father Responsiveness (.83), Mother Responsiveness (.45), Father Acceptance (.75), Mother Acceptance (.42), Father Physical Abuse (.32), Parental Neglect (.40), Father Educational Involvement (.59), Mother Educational Involvement (.28), Father Decision

Making Style (.77), Mother Decision Making Style (.48), Expression of Affect (.62) and Father Substance Abuse (.21). Mother Physical Abuse (.16) was also significant ($p \leq .01$, two-tailed). The positive direction of the family functioning variables were consistent with expectations; higher scores on the family functioning indicator scales (parental responsiveness, acceptance, father physical abuse, parental neglect, educational involvement, decision making style, expression of affect and father substance abuse) were associated with higher father attachment.

Hypothesis 4: Family functioning will not predict statistically significant variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression, above and beyond that which can explained by mother and father attachment.

To address research hypothesis 4, a family background index was created from the family functioning variables to solve problems of multicollinearity among the family variables and so the attachment and family functioning constructs could be compared through hierarchical multiple regression (Cohen & Cohen, 1975). The results of the hierarchical multiple regression analysis for each MCMI-III are listed in Tables 4.7 through 4.18.

As hypothesized, the researcher found that family functioning did not significantly add to the explanation of variance in the Avoidant, Dependent, Histrionic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder,

Alcohol Dependence, Drug Dependence and Major Depression variables above and beyond that which was accounted for by mother and father attachment ($p \leq .001$). Unexpectedly, neither attachment nor family functioning significantly added to the explanation of variance in Narcissistic above and beyond that which could be explained by Gender ($p \leq .001$).

Although parent attachment explained significantly more of the variance than family functioning in all the personality/clinical syndromes except for Narcissism, gender, religiosity, parent attachment and family functioning together significantly explained 14% of the variance in Avoidant ($p \leq .001$). Ethnicity, parent attachment and family functioning together significantly explained 10% of the variance in Dependent ($p \leq .001$). Gender, religiosity, parent attachment and family functioning together significantly explained 29% of the variance in Histrionic ($p \leq .001$). Gender, parent attachment and family functioning together significantly explained 5% of the variance in Narcissistic ($p \leq .01$). Religiosity, parent attachment and family functioning together significantly explained 19% of the variance in Antisocial ($p \leq .001$). Gender, ethnicity, religiosity, parent attachment and family functioning together significantly explained 28% of the variance in Compulsive ($p \leq .001$). Gender, religiosity, parent attachment and family functioning together significantly explained 22% of the variance in Borderline ($p \leq .001$). Ethnicity, religiosity, parent attachment and family functioning together significantly explained 16% of the variance in Paranoid ($p \leq .001$). Religiosity, parent attachment and family functioning together significantly explained 12% of the variance in Anxiety Disorder ($p \leq .001$). Religiosity, parent

attachment and family functioning together significantly explained 18% of the variance in Alcohol Dependence ($p \leq .001$). Gender, parent attachment and family functioning together significantly explained 13% of the variance in Drug Dependence ($p \leq .001$). Gender, religiosity, parent attachment and family functioning together significantly explained 23% of the variance in Major Depression ($p \leq .001$).

Hypothesis 5: The interaction between mother and father attachment and family functioning will not predict statistically significant variance in the personality patterns/clinical syndrome variables including Avoidant, Dependent, Histrionic, Narcissistic, Antisocial, Compulsive, Borderline, and Paranoid traits, and Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression above and beyond that which can be explained by mother and father attachment and family functioning alone.

Father attachment/family functioning and mother attachment/family functioning interaction variables were created so the interactions could be examined in a hierarchical multiple regression analysis against the attachment and family functioning variables alone (Aiken & West, 1991). The results of this hierarchical multiple regression analysis for each MCMI-III scale are listed in Tables 4.7 through 4.18.

As hypothesized, the researcher found that the interaction between mother and father attachment and family functioning did not predict variance in the personality patterns and clinical syndrome variables including Avoidant, Dependent, Histrionic, Antisocial, Compulsive, Borderline, and Paranoid traits, and Anxiety

Disorder, Alcohol Dependence, Drug Dependence and Major Depression above and beyond that which could be explained by mother and father attachment and family functioning alone ($p \leq .001$).

Summary Tables

Table 4.1
Means and Standard Deviations for Study Variables (*N* = 275)

Variable	*M*	*SD*
FBQ		
Father Responsiveness	66.25	12.65
Mother Responsiveness	72.11	8.67
Father Acceptance	51.33	8.22
Mother Acceptance	53.56	6.59
Father Physical Abuse	8.13	1.95
Mother Physical Abuse	8.31	1.77
Parental Neglect	33.35	2.62
Father Educational Involvement	35.56	7.19
Mother Educational Involvement	38.10	5.47
Father Decision Making Style	37.06	8.74
Mother Decision Making Style	38.73	8.06
Expression of Affect	32.70	7.92
Father Substance Abuse	16.83	3.83
Mother Substance Abuse	18.04	2.69
IPPA		
Mother Attachment	103.39	17.25
Father Attachment	93.05	22.34
MCMI-III		
Avoidant	34.32	29.86
Dependent	49.97	27.42
Histrionic	67.33	22.95
Narcissistic	69.39	19.24
Antisocial	46.08	23.03
Compulsive	55.37	17.46
Borderline	36.38	27.17
Paranoid	42.30	27.51
Anxiety Disorder	42.82	31.89
Alcohol Dependence	46.31	26.07
Drug Dependence	49.09	20.84
Major Depression	25.74	26.19

Table 4.2
Means and Standard Deviations for Study Variables by Gender and Univariate Tests for Gender Effect

Variable	Female		Male		
	M	*SD*	*M*	*SD*	*F*
IPPA					
Mother Attachment	50.18	10.41	49.52	8.87	.24
Father Attachment	49.97	10.05	50.09	9.93	.01
FBQ					
Father Responsiveness	50.54	9.50	48.53	11.18	2.21
Mother Responsiveness	50.15	10.13	49.58	9.66	.18
Father Acceptance	50.25	9.61	49.32	11.04	.47
Mother Acceptance	49.88	10.33	50.32	9.12	.11
Father Physical Abuse	51.08	9.41	47.00	10.91	9.33**
Mother Physical Abuse	50.30	9.90	49.11	10.37	.77
Parental Neglect	50.66	9.51	48.16	11.00	3.43
Father Educational Involvement	50.48	9.27	48.68	11.74	1.77
Mother Educational Involvement	50.45	9.28	48.75	11.71	1.57
Father Decision Making Style	49.95	10.15	49.96	9.69	.00
Mother Decision Making Style	49.83	10.51	50.47	8.54	.22
Expression of Affect	50.94	9.59	47.44	10.71	6.76**
Father Substance Abuse	50.22	10.06	49.39	9.89	.38
Mother Substance Abuse	50.07	9.98	49.85	10.15	.03
MCMI-III					
Avoidant	31.64	28.12	41.61	33.28	6.14*
Dependent	50.26	26.94	49.20	28.87	.08
Histrionic	73.49	21.60	50.62	17.62	66.57***
Narcissistic	71.56	18.83	63.50	19.23	9.80**
Antisocial	46.84	22.67	44.01	24.03	.81
Compulsive	58.15	18.05	47.81	13.13	20.30***
Borderline	34.40	26.66	41.76	27.98	4.01*
Paranoid	41.12	27.41	45.50	27.72	1.37
Anxiety Disorder	40.63	30.56	48.73	34.77	3.57
Alcohol Dependence	45.75	26.17	47.84	25.92	.35
Drug Dependence	50.65	20.13	44.85	22.25	4.23*
Major Depression	22.63	23.76	34.19	30.47	10.92***

*p < .05, **p < .01, ***p < .001, Females = 201, Males = 74

Table 4.3

Means and Standard Deviations for Study Variables by Ethnicity and Univariate Tests for Ethnic Effect

	White		Black		Asian		Mixed		
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
IPPA									
Mother Attachment	51.04	9.09	46.51	10.06	41.99	14.50	43.30	11.57	7.14***
Father Attachment	50.66	9.68	46.64	11.09	44.78	10.60	48.41	14.01	2.77*
FBQ									
Father Responsiveness	50.64	9.71	47.14	9.17	44.98	12.01	47.83	11.58	2.52
Mother Responsiveness	51.24	8.55	45.26	10.42	41.03	16.56	41.22	12.63	10.13***
Father Acceptance	50.75	9.42	49.04	11.37	42.70	12.75	47.77	11.26	4.50**
Mother Acceptance	51.11	8.81	44.74	13.75	42.29	15.44	42.57	7.54	7.80***
Father Physical Abuse	50.24	9.86	49.32	4.03	49.07	13.02	44.11	10.42	.82
Mother Physical Abuse	50.62	9.31	42.54	11.30	48.73	13.48	42.54	14.30	3.66*
Parental Neglect	50.42	9.57	45.56	8.97	47.40	14.59	49.93	6.21	1.35
Father Educ. Involv.	50.17	10.14	48.72	9.54	49.42	9.81	47.60	7.50	.22
Mother Educ. Involv.	50.51	9.63	49.82	11.30	45.99	12.51	44.03	10.11	2.07
Father Decis. Making Style	50.90	9.48	45.41	11.44	41.98	10.74	48.74	12.82	6.29***
Mother Decis. Making Style	51.18	8.85	41.99	16.30	42.00	12.70	46.20	10.84	8.92***
Expression of Affect	50.65	9.73	46.60	11.34	44.85	10.53	48.91	12.46	2.68*
Father Substance Abuse	49.55	10.22	50.68	10.73	53.55	7.04	53.93	6.74	1.37
Mother Substance Abuse	49.60	10.21	50.53	10.36	52.51	7.99	57.29	.00	1.66
MCMI-III									
Avoidant	33.27	29.84	31.36	27.52	49.00	29.12	29.67	30.59	1.89
Dependent	49.38	27.21	37.73	31.59	64.05	23.26	46.83	30.24	2.69*
Histrionic	66.83	23.05	74.18	18.66	65.90	24.40	79.83	19.59	.99
Narcissistic	69.00	19.00	76.72	15.27	68.19	22.79	75.83	22.89	.82
Antisocial	45.27	23.47	46.36	19.38	55.33	20.09	45.17	17.69	1.23
Compulsive	55.78	17.38	62.18	14.59	46.14	18.78	59.00	11.00	2.69*
Borderline	35.15	26.58	37.64	32.51	49.86	27.82	35.67	32.52	1.91
Paranoid	40.84	27.34	47.18	36.43	60.43	14.76	27.50	29.68	4.09**
Anxiety Disorder	41.48	31.94	47.36	32.88	55.67	29.42	42.50	33.63	1.40
Alcohol Dependence	45.59	26.59	48.18	22.31	54.57	21.12	42.52	27.70	.82
Drug Dependence	47.97	20.94	51.55	20.15	58.52	20.17	55.67	12.61	1.93
Major Depression	24.16	25.21	33.00	28.37	35.48	29.37	40.67	40.37	2.21

*p < .05, **p < .01, ***p < .001, Whites = 237, Blacks = 11, Asians = 21, Mixed = 6

Table 4.4

Means and SDs for Study Variables by Divorce Status and Univariate Tests for Divorce Effect

	Divorced		Intact		Never Married		
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
IPPA							
Mother Attachment	49.06	10.76	50.20	9.83	55.57	4.92	.61
Father Attachment	44.44	11.24	51.49	9.12	51.32	10.76	12.27***
FBQ							
Father Responsiveness	45.37	11.23	51.22	9.32	53.36	.56	8.35***
Mother Responsiveness	48.54	11.06	50.45	9.70	43.53	8.97	1.26
Father Acceptance	46.99	11.66	50.82	9.39	48.99	11.20	3.41*
Mother Acceptance	49.33	10.84	50.26	9.69	40.80	20.39	1.046
Father Physical Abuse	49.41	10.62	50.15	9.86	49.32	7.37	.13
Mother Physical Abuse	48.97	10.23	50.32	9.93	42.54	15.98	.97
Parental Neglect	46.18	12.53	51.04	8.97	46.77	2.69	5.72**
Father Educ. Involv.	44.31	10.93	51.49	9.20	54.09	10.82	13.00***
Mother Educ. Involv.	49.60	9.49	50.09	10.16	51.65	12.93	.082
Father Decis. Making Style	46.59	11.41	50.85	9.46	51.03	6.48	4.26*
Mother Decis. Making Style	48.41	12.30	50.43	9.29	50.33	12.28	.92
Expression of Affect	48.07	10.19	50.48	9.95	54.80	2.68	1.56
Father Substance Abuse	46.84	12.11	50.90	9.16	45.22	18.46	4.06*
Mother Substance Abuse	49.15	11.89	50.21	9.49	53.57	5.26	.39
MCMI-III							
Avoidant	32.71	29.18	34.52	30.14	59.50	.71	.80
Dependent	46.19	28.41	50.97	27.23	52.50	17.68	.70
Histrionic	69.67	22.74	66.72	23.10	66.00	14.14	.38
Narcissistic	68.28	17.36	69.71	19.82	67.50	4.95	.14
Antisocial	45.31	20.17	46.22	23.87	53.50	12.02	.14
Compulsive	56.45	14.43	55.10	18.29	57.50	3.54	.16
Borderline	34.14	26.18	36.70	27.43	67.00	4.24	1.49
Paranoid	44.24	24.80	41.59	28.28	63.00	1.41	.78
Anxiety Disorder	35.45	28.48	44.67	32.60	58.50	26.16	2.17
Alcohol Dependence	48.03	23.00	45.67	26.93	64.50	.71	.68
Drug Dependence	47.88	20.41	49.29	21.05	62.00	.00	.49
Major Depression	28.09	23.48	24.95	26.88	42.50	28.99	.738

*p < .05, **p < .01, ***p < .001, Divorced = 58, Intact = 215, Never Married = 2

Table 4.5

Means and Standard Deviations for Study Variables by Religiosity and Univariate Tests for Religiosity

	Not at all		A little		Somewhat		Fairly		Very		
Variable	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
IPPA											
Mother Attach.	47.49	12.66	46.46	9.79	49.58	8.92	50.98	10.43	51.68	8.94	2.32
Father Attach.	47.52	12.40	45.34	8.54	48.28	10.20	50.69	10.49	53.92	7.47	5.76***
FBQ											
Father Respons.	45.95	12.15	46.13	10.12	48.70	9.37	50.55	10.60	53.73	7.10	4.94***
Mother Respons.	44.47	16.52	45.78	10.64	48.62	10.30	51.54	8.92	52.68	7.24	5.40***
Father Accept.	46.40	11.60	48.44	9.24	46.91	11.52	50.11	10.06	54.20	7.10	4.91***
Mother Accept.	46.68	14.51	47.56	9.25	48.20	10.41	50.46	9.98	53.09	7.99	3.08*
Father Phys. Abuse	49.32	8.72	48.95	10.12	48.78	12.40	50.25	9.93	51.34	8.13	.61
Mother Phys. Abuse	51.02	8.51	49.81	9.77	49.02	11.77	50.52	9.72	49.65	9.81	.25
Parental Neglect	49.62	10.62	46.95	9.91	47.88	12.65	50.52	9.86	52.84	6.52	2.94*
Father Ed.. Involv.	47.40	10.40	46.31	10.43	48.84	9.19	50.04	10.51	53.98	8.05	4.53***
Mother Ed. Involv.	43.30	13.86	44.81	11.14	47.61	10.69	52.00	8.11	53.62	7.80	9.45***
Father Dec. Mak.	46.66	10.92	48.09	8.40	47.93	10.23	50.50	10.41	52.70	9.28	2.59*
Mother Dec. Mak..	47.47	10.85	47.53	9.29	48.63	10.35	51.20	9.93	51.32	9.86	1.80
Express. of Affect	47.70	13.13	45.75	9.33	48.25	10.12	51.15	9.49	52.86	9.30	4.29**
Father Sub. Abuse	46.20	12.68	48.14	11.11	48.05	10.26	49.03	10.15	55.41	5.17	6.70***
Mother Sub. Abuse	45.90	15.85	47.20	12.54	48.53	8.38	49.61	9.98	54.83	4.41	5.78***
MCMI-III											
Avoidant	50.06	28.63	37.57	32.93	40.10	31.30	29.18	27.75	32.45	28.90	2.60*
Dependent	52.75	28.08	50.86	29.81	51.48	28.74	48.42	26.56	50.18	26.76	.17
Histrionic	57.81	21.39	64.50	25.46	61.60	23.96	71.50	21.31	68.95	22.29	2.62*
Narcissistic	71.63	19.36	69.14	20.90	71.21	19.52	69.73	18.87	67.00	18.84	.41
Antisocial	48.50	25.99	54.81	21.18	49.48	23.97	44.97	23.23	38.82	20.41	3.54**
Compulsive	55.00	12.95	48.10	14.29	51.38	19.86	56.05	18.07	62.31	14.86	5.25***
Borderline	36.00	27.57	45.95	24.56	42.96	30.21	34.24	27.36	28.60	23.52	3.57**
Paranoid	53.19	21.47	51.43	18.80	45.27	30.46	38.26	28.65	37.98	27.64	2.96*
Anxiety Disorder	34.75	32.11	47.48	30.09	56.42	33.55	40.45	31.51	35.32	29.47	3.82**
Alcohol Depend.	56.19	22.66	53.83	23.00	50.65	25.18	44.08	27.17	39.15	25.69	3.25*
Drug Dependence	56.25	23.74	52.76	20.37	48.96	22.94	48.68	20.30	45.55	19.37	1.26
Major Depression	30.38	32.15	28.31	24.46	34.52	30.75	24.84	24.66	17.56	22.33	3.22*

*p < .05, **p < .01, ***p < .001, Not at all = 16, A little = 42, Somewhat = 48, Fairly = 107, Very = 62

Table 4.6

Intercorrelations Among Study Variables (N = 275)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1. F Responsive	-																											
2. M Responsive	.62**	-																										
3. F Acceptance	.82**	.56**	-																									
4. M Acceptance	.53**	.81**	.69**	-																								
5. F Phys. Abuse	.33**	.18*	.47**	.27**	-																							
6. M Phys. Abuse	.16**	.23**	.24**	.30**	.72**	-																						
7. Parental Neglect	.53**	.60**	.50**	.53**	.20**	.20**	-																					
8. F Ed.. Involv.	.65**	.39**	.49**	.30**	.15	.10	.41**	-																				
9. M Ed. Involv.	.33**	.49**	.27**	.31**	.12	.08	.35**	.62**	-																			
10. F Dec. Mak.	.78**	.53**	.80**	.57**	.36**	.19*	.42**	.53**	.31**	-																		
11. M Dec. Mak.	.49**	.74**	.53**	.74**	.21**	.26**	.43**	.34**	.38**	.72**	-																	
12. Expres. of Afct	.71**	.68**	.56**	.54**	.23**	.15	.43**	.51**	.47**	.65**	.62**	-																
13. F Subs. Abuse	.18*	.03	.18*	.06	.09	.04	.13	.27**	.12	.12	-.01	.05	-															
14. M Subs. Abuse	.01	.12	-.01	.11	.04	.03	.14	.03	.12	-.02	.12	.07	.44**	-														
15. M Attachment	.50**	.79**	.48**	.73**	.13	.19*	.47**	.34**	.38**	.53**	.79**	.63**	.07	.17*	-													
16. F Attachment	.83**	.45**	.75**	.42**	.32**	.16*	.40**	.59**	.28**	.77**	.48**	.62**	.21**	-.03	.47**	-												
17. Avoidant	-.25**	-.21**	-.30**	-.24**	-.04	-.02	-.23**	-.12	-.11	-.27**	-.18*	-.21**	-.10	-.00	-.24**	-.29**	-											
18. Dependent	-.17*	-.16*	-.22**	-.23**	.00	.02	-.13	-.04	-.02	-.21**	-.19*	-.16*	.07	.02	-.24**	-.22**	.56**	-										
19. Histrionic	.21**	.19*	.23**	.15	.02	-.02	.21**	.16*	.14	.15	.09	.24**	.09	-.03	.20**	.26**	-.72**	-.31**	-									
20. Narcissistic	.04	.05	.04	.04	-.08	-.06	.10	.08	-.02	.06	.04	.06	-.01	-.06	.07	.09	-.60**	-.42**	.60**	-								
21. Antisocial	-.30**	-.30**	-.38**	-.40**	-.13	-.10	-.21**	-.23**	-.19*	-.33**	-.32**	-.28**	-.17*	-.13	-.36**	-.34**	.11	.23**	.02	.22**	-							
22. Compulsive	.30**	.32**	.41**	.41**	.15	.06	.24**	.22**	.16*	.34**	.30**	.30**	.16*	.09	.37**	.34**	-.23**	-.29**	.26**	.08	-.64**	-						
23. Borderline	-.33**	-.30**	-.39**	-.37**	-.13	-.08	-.22**	-.19**	-.10	-.34**	-.27**	-.27**	-.14	-.09	-.36**	-.39**	.48**	.54**	-.40**	-.23**	.52**	-.57**	-					
24. Paranoid	-.26**	-.25**	-.33**	-.32**	-.07	-.10	-.24**	-.13	-.13	-.30**	-.25**	-.23**	-.15	-.10	-.31**	-.30**	.51**	.45**	-.36**	-.14	.32**	-.28**	.51**	-				
25. Anxiety Dis.	-.18*	-.16*	-.27**	-.24**	-.12	-.13	-.17*	-.08	-.06	-.19*	-.15	-.14	-.07	-.08	-.26**	-.22**	.48**	.55**	-.37**	-.26**	.28**	-.30**	.61**	.46**	-			
26. Alc. Depend.	-.29**	-.24**	-.40**	-.35**	-.18*	-.11	-.25**	-.20**	-.12	-.34**	-.28**	-.21**	-.22**	-.12	-.33**	-.37**	.22**	.26**	-.11	.11	.74**	-.49**	.51**	.36**	.34**	-		
27. Drug Depend.	-.20**	-.25**	-.26**	-.33**	-.09	-.07	-.16*	-.16*	-.12	-.25**	-.28**	-.17*	-.12	-.17*	-.30**	-.22**	.02	.13	.11	.22**	.83**	-.47**	.35**	.20**	.18**	.57**	-	
28. Maj. Depress.	-.32**	-.29**	-.30**	-.27**	-.03	-.03	-.22**	-.19*	-.11	-.27**	-.21**	-.29**	-.12	.02	-.35**	-.34**	.48**	.43**	-.47**	-.31**	.24**	-.40**	.62**	.43**	.53**	.31**	.12	-

*p ≤ .01, **p ≤ .001

Table 4.7
Hierarchical Multiple Regression Summary for Avoidant (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Avoidant						
Step 1				.05*	.05	.01*
Gender	8.41	4.03	.13			
Religiosity 1	16.36	8.25	.13			
Religiosity 2	4.22	5.88	.05			
Religiosity 3	6.57	5.66	.08			
Religiosity 4	-3.18	4.68	-.05			
Step 2				.14**	.09	13.35**
Mother Attachment	-.37	.19	-.13**			
Father Attachment	-.68	.20	-.23			
Step 3				.14**	.00	.20
FBQ Index	.16	.35	.05			
Step 4				.15**	.01	1.32
MA X FBQ	-.02	.01	-.13			
FA X FBQ	-.01	.01	.04			

*$p \leq .01$, **$p \leq .001$

Table 4.8
Hierarchical Multiple Regression Summary for Dependent (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Dependent						
Step 1				.03	.03	2.69
Ethnicity 1	2.54	11.23	.03			
Ethnicity 2	-9.12	13.79	-.07			
Ethnicity 3	17.21	12.58	.17			
Step 2				.09**	.06	9.37**
Mother Attachment	-.47	.19	-.17*			
Father Attachment	-.36	.18	-.13			
Step 3				.10**	.01	2.57
FBQ Index	.51	.32	.16			
Step 4				.11**	.01	.58
MA X FBQ	-.01	.01	-.05			
FA X FBQ	-.00	.01	-.04			

*$p \leq .01$, **$p \leq .001$

Table 4.9
Hierarchical Multiple Regression Summary for Histrionic (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Histrionic						
Step 1				.21**	.21	14.63**
Gender	-21.92	2.82	-.43**			
Religiosity 1	-7.87	5.77	-.08			
Religiosity 2	-2.09	4.12	-.03			
Religiosity 3	-4.53	3.96	-.08			
Religiosity 4	2.32	3.28	.05			
Step 2				.28**	.07	12.40**
Mother Attachment	.20	.14	.09			
Father Attachment	.50	.14	.22*			
Step 3				.29**	.01	.09
FBQ Index	-.43	.25	-.16			
Step 4				.29**	.00	.08
MA X FBQ	.00	.01	.03			
FA X FBQ	-.00	.01	-.01			

*$p \leq .01$, **$p \leq .001$

Table 4.10
Hierarchical Multiple Regression Summary for Narcissistic (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Narcissistic						
Step 1				.04*	.04	9.80*
Gender	-8.06	2.58	-.19*			
Step 2				.04*	.00	1.26
Mother Attachment	.04	.13	.02			
Father Attachment	.16	.13	.08			
Step 3				.05*	.01	3.10
FBQ Index	-.40	.23	-.19			
Step 4				.06*	.01	.89
MA X FBQ	.01	.01	.11			
FA X FBQ	-.00	.01	-.02			

*$p \leq .01$, **$p \leq .001$

Table 4.11
Hierarchical Multiple Regression Summary for Antisocial (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Antisocial						
Step 1				.05*	.05	3.54*
Religiosity 1	9.68	6.34	.10			
Religiosity 2	15.99	4.52	.25**			
Religiosity 3	10.66	4.35	.18			
Religiosity 4	6.15	3.61	.13			
Step 2				.18**	.13	21.66**
Mother Attachment	-.58	.15	-.25**			
Father Attachment	-.43	.15	-.19*			
Step 3				.19**	.01	2.03
FBQ Index	-.37	.26	-.14			
Step 4				.19**	.00	.23
MA X FBQ	.01	.01	.05			
FA X FBQ	-.00	.01	-.05			

*$p \leq .01$, **$p \leq .001$

Table 4.12
Hierarchical Multiple Regression Summary for Compulsive (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Compulsive						
Step 1				.16**	.16	6.36**
Gender	-10.57	2.28	-.27**			
Ethnicity 1	1.80	6.78	.04			
Ethnicity 2	6.58	8.30	.07			
Ethnicity 3	-9.53	7.55	-.15			
Religiosity 1	-3.95	4.61	-.05			
Religiosity 2	-12.18	3.28	-.25**			
Religiosity 3	-9.01	3.15	-.20*			
Religiosity 4	-6.58	2.60	-.18			
Step 2				.28**	.12	21.94**
Mother Attachment	.44	.11	.25**			
Father Attachment	.31	.11	.18*			
Step 3				.28**	.00	.81
FBQ Index	.17	.19	.09			
Step 4				.28**	.00	.10
MA X FBQ	-.00	.01	-.02			
FA X FBQ	-.00	.01	-.02			

*$p \leq .01$, **$p \leq .001$

Table 4.13
Hierarchical Multiple Regression Summary for Borderline (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Borderline						
Step 1				.06*	.06	3.40*
Gender	5.90	3.66	.10			
Religiosity 1	6.52	7.50	.06			
Religiosity 2	16.72	5.33	.22*			
Religiosity 3	13.60	5.14	.19*			
Religiosity 4	5.71	4.25	.10			
Step 2				.22**	.16	27.11**
Mother Attachment	-.61	.17	-.22**			
Father Attachment	-.70	.17	-.26**			
Step 3				.22**	.00	.17
FBQ Index	.12	.31	.04			
Step 4				.23**	.01	1.25
MA X FBQ	.00	.01	.13			
FA X FBQ	-.01	.01	-.10			

*$p \leq .01$, **$p \leq .001$

Table 4.14
Hierarchical Multiple Regression Summary for Paranoid (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Paranoid						
Step 1				.08*	.08	3.19*
Ethnicity 1	13.02	11.12	.16			
Ethnicity 2	21.90	13.67	.16			
Ethnicity 3	29.91	12.46	.29			
Religiosity 1	13.53	7.57	.12			
Religiosity 2	12.12	5.39	.16			
Religiosity 3	6.11	5.16	.08			
Religiosity 4	-.17	4.30	-.00			
Step 2				.16**	.08	13.38**
Mother Attachment	-.53	.18	-.19*			
Father Attachment	-.47	.18	-.17*			
Step 3				.16**	.00	.69
FBQ Index	-.27	.32	-.09			
Step 4				.18**	.02	1.99
MA X FBQ	.00	.01	.02			
FA X FBQ	-.01	.01	-.14			

*$p \leq .01$, **$p \leq .001$

Table 4.15
Hierarchical Multiple Regression Summary for Anxiety Disorder (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Anxiety Disorder						
Step 1				.05*	.05	3.82*
Religiosity 1	-.57	8.76	-.00			
Religiosity 2	12.15	6.25	.14			
Religiosity 3	21.09	6.10	.25**			
Religiosity 4	5.13	4.99	.08			
Step 2				.12**	.07	10.49**
Mother Attachment	-.67	.21	-.21**			
Father Attachment	-.31	.21	-.10			
Step 3				.12**	.00	.23
FBQ Index	.18	.38	.05			
Step 4				.12**	.00	.22
MA X FBQ	-.00	.01	-.01			
FA X FBQ	-.00	.01	-.04			

*$p \leq .01$, **$p \leq .001$

Table 4.16
Hierarchical Multiple Regression Summary for Alcohol Dependence (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Alcohol Dependence						
Step 1				.05*	.05	3.25*
Religiosity 1	17.04	7.19	.15			
Religiosity 2	14.69	5.13	.20*			
Religiosity 3	11.50	4.93	.17			
Religiosity 4	4.94	4.10	.10			
Step 2				.18**	.13	21.63**
Mother Attachment	-.50	.16	-.20*			
Father Attachment	-.64	.17	-.25**			
Step 3				.18**	.00	.79
FBQ Index	-.26	.30	-.09			
Step 4				.19**	.01	.64
MA X FBQ	.00	.01	.01			
FA X FBQ	-.01	.10	-.08			

*$p \leq .01$, **$p \leq .001$

Table 4.17
Hierarchical Multiple Regression Summary for Drug Dependence (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Drug Dependence						
Step 1				.02	.02	4.23
Gender	-5.80	2.82	-.12			
Step 2				.12**	.10	15.13**
Mother Attachment	-.52	.14	-.25**			
Father Attachment	-.22	.14	-.11			
Step 3				.13**	.01	3.19
FBQ Index	-.43	.24	-.18			
Step 4				.13**	.00	.84
MA X FBQ	.00	.01	.03			
FA X FBQ	-.01	.01	-.10			

*$p \leq .01$, **$p \leq .001$

Table 4.18
Hierarchical Multiple Regression Summary for Major Depression (*N* = 275)

Criterion/Step/Predictor	B	SEB	ß	R^2	ΔR^2	ΔF
Major Depression						
Step 1				.08**	.08	4.40**
Gender	10.34	3.50	.10			
Religiosity 1	11.27	7.15	.13			
Religiosity 2	9.63	5.10	.23			
Religiosity 3	15.63	4.91	.14*			
Religiosity 4	7.39	4.10	.18			
Step 2				.22**	.14	23.73**
Mother Attachment	-.62	.16	-.24**			
Father Attachment	-.56	.17	-.21**			
Step 3				.23**	.01	4.04
FBQ Index	.59	.29	.20			
Step 4				.23**	.00	1.04
MA X FBQ	.01	.01	.10			
FA X FBQ	-.00	.01	-.01			

*$p \leq .01$, **$p \leq .001$

CHAPTER 5

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Summary

The literature indicates that attachment styles formed in the first few years of life and later family experiences may play a role in the development of future interpersonal and emotional problems. However we have yet to fully explain the relationships between these variables and how they may interact to create future maladaptive functioning. Given the growing number of mental health concerns among students on college campuses today (Arnstein, 1985; O'Malley, Wheeler, Murphey, O'Connell & Waldo, 1990), the present study examined both of these variables together in an attempt to better understand the associations between parental attachment and family functioning and how they may contribute to psychological problems in this population.

Specifically, the present study sought to determine the relationships among parental attachment, family functioning characteristics and personality patterns/clinical syndromes, to ascertain whether family functioning variables significantly predict variance in the clinical indicators above and beyond that which can be explained by parental attachment, and to learn whether there is a significant interaction between the attachment and family variables that predict variance in the clinical indicators above and beyond that which can be explained by attachment and family functioning alone. This study was conducted in a

University in a semi-rural area in the Southeast Region of the United States. The researcher administered the FBQ, IPPA and MCMI-III to 275 undergraduate students in Introductory Psychology classes through the Psychology department's Research Pool (RP). Students in these courses participate in studies or may alternatively choose to summarize research articles to fulfill the courses' research participation requirements.

Before answering the primary research questions, preliminary multivariate analyses of variance (MANOVAs) were run to ascertain whether there were differences among the sample on the parental attachment, family functioning and personality/clinical syndrome variables based on gender, ethnicity, parental divorce status and family religiosity. This was done to gain a better understanding of the effect these differences had on the study variables and therefore, possible limitations on the conclusions that could be drawn from the data. These preliminary analyses were also necessary to determine whether divorce, ethnicity, gender or family religiosity needed to be included in the first step of the hierarchical regression models used to answer research questions 4 and 5 of this study.

Significant multivariate results were found for gender on the FBQ and MCMI-III scales, for ethnicity and family religiosity on the IPPA, FBQ and MCMI-III scales, and for parental divorce status on the IPPA and FBQ scales ($p < .01$, two-tailed). Tukey Post hoc tests were run when significant univariate results were found on categorical variables involving more than two levels.

Pearson product-moment correlations were calculated to answer research questions 1 through 3 regarding the relationships that existed among the FBQ family functioning variables, the IPPA attachment variables and MCMI-III clinical variables. There were significant correlations found among the study variables.

Hierarchical regression analyses were conducted to answer question 4 regarding whether family functioning added to the explanation of variance in the personality patterns/clinical syndromes being studied above and beyond that which could be explained by attachment. Preliminary analyses indicated that there were significant effects on Avoidant, Histrionic, Narcissistic, Compulsive, Borderline, Drug Dependent and Major Depression by gender, significant effects on Dependent, Compulsive and Paranoid by ethnicity, and significant effects on Avoidant, Histrionic, Antisocial, Compulsive, Borderline, Paranoid, Anxiety Disorder, Alcohol Dependence, Drug Dependence and Major Depression by religiosity. As a result gender, ethnicity and religiosity were dummy coded and included in the first step of the hierarchical regression models where applicable. The results indicated that family functioning did not significantly add to the explanation of variance in personality pattern/clinical syndrome variables beyond that which could be explained by attachment.

Hierarchical regression analyses were also used to answer question 5 regarding whether there was a significant interaction between mother and father attachment and family functioning that predicted variance in the personality patterns/clinical syndrome variables above and beyond that which can be explained by mother and father attachment and family functioning alone. Father

attachment/family functioning and mother attachment/family functioning interaction variables were created so the interactions could be compared with the attachment and family functioning variables alone in the analysis. The results indicated that the interaction between mother and father attachment and family functioning did not significantly predict variance in the personality patterns/clinical syndrome variables above and beyond that which can be explained by mother and father attachment and family functioning alone.

The hypotheses in the present study were that significant positive relationships would be found to exist between mother and father attachment and family functioning variables, and that significant negative relationships would be found to exist between the personality/clinical syndromes and the family functioning variables, and the personality/clinical syndromes and mother and father attachment variables. Also, family functioning would not add to the explanation of variance in the personality/clinical syndromes above and beyond that which can be accounted for by attachment. Additionally, interactions between parental attachment and family functioning would not add to the explanation of variance in the personality/clinical syndromes above and beyond that which can be accounted for by attachment and family functioning alone.

Conclusions

Findings from the Preliminary Analyses

Gender.

The results of the preliminary analyses indicated that there were significant differences in family functioning experiences based on gender. Males reported

significantly more father physical abuse and less comfort with expression of affect in the family. This finding is consistent with previous research that indicates that punitive socialization is related to level of emotional expressivity (David-Vilker 2000) and that men in general feel less comfortable disclosing emotion than women (Snell, Miller, Belk, Garcia-Falconi, & Hernandez-Sanchez, 1989).

There were also significant differences on the personality/clinical syndrome variables based on gender. Males scored significantly higher on Avoidant, Borderline, and Major Depression; whereas, females scored significantly higher on Histrionic, Narcissistic, Compulsive and Drug Dependence. Varying socialization practices and biology have been implicated in findings of gender differences in psychopathology (Frank, 2000); however, it is difficult say whether varying results reflect true personality differences between genders or if they may be explained by possible gender-biased items on MCMI Dependent, Narcissistic, Antisocial and Histrionic scales (Lindsay & Widiger,1995).

Of particular interest in these findings was the fact that the females reported significantly higher narcissism than males. Narcissism has typically been associated with male identity development and/or possible male gender bias on personality assessments (Brennan & Shaver, 1998). These results may lend credence to feminist theories that the cultural emphasis on the external physicality of women may delay their progress toward autonomy and an internalized sense of self in late adolescence thereby necessitating a longer reliance on narcissistic defense mechanisms to maintain feelings of self-worth (Meyers, 2002).

Also of note was the finding that males scored higher on Major Depression than females. The pervasiveness of male depression in the general population may be underrated as men are socialized to repress demonstrations of sadness (Vrendenburg, Krames & Flett, 1986). Vrendenburg, Krames and Flett found significant gender differences in the way males and females express depression. Men tended to report physical complaints and work problems; whereas, women conveyed feelings of depression in more stereotypical ways such as weeping, loss of energy, and poor self-esteem.

There was not a significant difference found between females and males on Mother and Father Attachment. This finding corroborates prior research that has found few gender differences in parental attachment (Lapsley et. al, 2000; Webster, 2000) and is consistent with Bowlby's (1980) belief that one is not predisposed to be more or less attached based on gender; attachment security is influenced by experiences with early caregivers and the individualized strategies one develops for coping with those experiences.

Ethnicity.

MANOVA's also showed significant differences in the study variables based on ethnicity (Whites, African American, Asian, Mixed Heritage). There were significant differences in parental attachment found with Whites reporting more secure mother attachment and father attachment than Asians. These results are consistent with other studies finding ethnicity effects with college students on "attachment measures [and] underscores potential importance [of culture] as background and a contextual factor affecting perceptions of early parental

relationships and [has implications for] subsequent intimate peer relationships" (Lopez, Melendez, & Rice, 2000, p. 182).

There were also significant differences in family functioning experiences based on ethnicity, with Whites reporting more mother responsiveness, mother and father acceptance, fairness in father decision making style, and comfort with expression of affect in the family than Asians. Whites also reported less mother physical abuse than African Americans. Additionally, there were significant differences on the personality/clinical syndrome clinical scales with Asians scoring higher on Dependent than African Americans, and Asians scoring higher on Paranoid than Whites and mixed heritage participants.

There has been much controversy regarding cultural differences in parenting practices. Deater-Deckard and Dodge (1997) suggested that physical punishment is a common method of discipline in Black communities and is not detrimental for African American children. Others contend that differences in socialization practices are based more on the socioeconomic environment of the family than on ethnicity (Kohn, 1977) and that authoritative versus authoritarian parenting practices have benefits for all children (Amato & Fowler, 2002).

There has also been previous research to suggest that there may be differences in personality assessments results based on ethnicity. Gunsalus and Kelly (2001) theorized that because Asian culture stresses a passive collectivist approach toward others, that they may be more likely to score higher on scales that reflect this interpersonal passivity. Gunsalus and Kelly's subsequent research found that Korean participants did score higher than other groups on Dependent and Compulsive scales on the MCMI-III.

Divorce Status.

Based on parental divorce status, there were significant differences found in parental attachment with intact family participants reporting more secure father attachment than participants from divorced families. These results are consistent with previous findings that college students from divorced families tend to report weaker attachments to the noncustodial parent, who is most often the father (White, Brinkerhoff, & Booth, 1985). There were also significant differences in the reporting of family functioning experiences; intact family participants reported more father responsiveness, father acceptance, father educational involvement, and fairness in father decision making style and less parental neglect and father substance abuse than participants from divorced families. These findings may point to the negative impact of divorce on participants' relationships with their fathers, a lack of paternal interpersonal responsiveness, substance abuse, etc. that may predate and contribute to the divorce status of the family and poor father relationships, or parental alienation syndrome in which systematic programming is used in an attempt by one parent to alienate a child from the other parent (Gardner, 1998).

No significant differences were found between participants from intact and divorced families on the personality/clinical syndrome variables. Although parental divorce has been associated with increased risk of substance abuse, mood and anxiety disorders through adolescence (Fergusson, Horwood & Lynskey, 1994), the literature points to other factors such as child gender, developmental

stage (Wallerstein, 1986) and post-divorce family functioning (Besett-Alesch, 2001) as critical conditions that influence adjustment outcomes.

Religiosity.

Based on family religiosity, there were significant differences in parental attachment with, in general, participants from the more religious family groups reporting more secure father attachment than participants from less religious family groups. Significant differences were also found in family functioning experiences with, in general, those from the more religious family groups reporting more father and mother responsiveness, father and mother acceptance, father and mother educational involvement, comfort with expression of affect in the family, and less parental neglect and father and mother substance abuse than those from groups reporting less religiosity in the family. These findings are consistent with previous studies that found correlations between religiosity and attachment security (Granqvist, 1999) and religious commitment and healthy family relationships (Bernard-Fisher, 2001).

Additionally there were significant differences based on family religiosity on the personality/clinical syndrome variables with, in general, those from the more religious family groups scoring lower on Antisocial, Borderline, Anxiety Disorder, Alcohol Dependence and Major Depression and higher on Compulsive than those from groups reporting less religiosity in the family. An extensive review of the literature on relationships between religiosity and mental health found three diverging areas of results: those studies linking religiosity to mental health, those finding correlations between religiosity and psychopathology, and

others suggesting an indeterminate association (Gartner, 1996). Pfeifer and Waelty (1999) contend that these conflicting results may be related to the difficulty in "operationalizing religion in its broad phenomenological diversity" so that relationships can be quantified (p.42). Also, although associations have previously been found between obsessive-compulsiveness and religiosity (Higgins & Pollard, 1992). Pfeifer and Waelty's research suggests that neurotic functioning may not be related as much to one's religious commitment as to a pre-existing underlying psychopathology that manifests itself in religious rituals/compulsions.

Relationships Among the Study Variables

Pearson product-moment correlations found significant relationships between the study variables. As expected, more secure mother and father attachment were associated with higher scores on family functioning variables, and higher scores on family functioning scales and more secure mother and father attachment were associated with lower Avoidant, Dependent, Antisocial, Borderline, and Paranoid traits, and less Anxiety, Depression, and Alcohol and Drug Dependence. However, unexpectedly, higher scores on family functioning scales and more secure mother and father attachment were associated with higher Compulsive and Histrionic scores. More secure parental attachment and healthy family functioning appeared to provide a protective factor in regard to psychopathology with the exception of Compulsive and Histrionic traits.

Compulsiveness has previously been associated with overprotective child rearing practices (Ehiobuche, 1988) and histrionic traits have been correlated with functional family characteristics (Hogue, 1999). Although those with histrionic

traits actively seek attention, while those with compulsive traits display a more passive level of compliance with others expectations, both personalities share a sense of externalized self-worth and a fear of disapproval. It is possible that very high scores on family functioning assessments may indicate enmeshed, over-involved parenting which does not allow children to develop internalized feelings of self-regard and competence that result from exploring the world and recovering from their own mistakes.

Also inconsistent with expectations was the finding that no significant correlations existed between family functioning or parental attachment and Narcissistic traits. This may be due to the fact that narcissism has been associated with the changes in identity status that occur in late adolescence and may be a way of maintaining self-esteem rather than viewed as a sign of pathology in this stage of life (Cramer, 1995).

Attachment, Family Functioning and Variance in the Clinical Variables

As hypothesized, the results indicated that family functioning did not significantly add to the explanation of variance in personality pattern/clinical syndrome variables beyond that which could be explained by attachment. This finding suggests the prominence of attachment security as a basic building block of personality consisting of core beliefs about self and other, and strategies for meeting one's needs.

Neither family functioning nor attachment significantly added to the explanation of variance in Narcissistic. The basic tasks of late adolescence and early adulthood involve achieving autonomy, finding one's own identity, and

forming intimate adult relationships (Erickson, 1968). Achieving these goals requires redefining one's relationship with one's parents. In order to separate from them, adolescents may use narcissism to maintain self-esteem during the pulling away process. The appearance of narcissism in this developmental stage involves the "regulation of self-esteem, self-love and intrapsychic ascriptions of power. As development proceeds, the regulation of self-esteem becomes more autonomous; one mechanism by which this occurs has to do with first finding idealized qualities in others, and then, as a result of disillusionment and internalization, acquiring these actualities as internal standards of one's own" (Spruiell, 1975, p. 519).

Interaction of Mother and Father Attachment and Family

As hypothesized, the results indicated that the interaction between mother and father attachment and family functioning did not significantly predict variance in the personality patterns/clinical syndrome variables above and beyond that which can be explained by mother and father attachment and family functioning alone. Again, this finding suggests the weight of attachment's role in mental health.

Implications

The results of the present study suggest that because there are significant relationships between parental attachment, family history characteristics and clinical maladjustment in students which may be effected by gender, ethnicity, parental divorce status and/or family religiosity, it may be prudent to take all of these factors into account in therapeutic settings. The results also indicate that

although poor family functioning experiences may play a substantial role in later pathology, they do not significantly add to the prediction of mental health problems beyond that which can be explained by attachment. In light of these findings, it may be beneficial to consider the attachment organization of college students when conceptualizing and forming therapeutic interventions in response to their mental health concerns.

Attachment-based Therapy

Parallels may be seen between the attitudes and behaviors of an attuned caregiver and a truly present therapist. A secure caregiver serves to encourage positive arousal states and hold and mediate distressing arousal states in a child. Similarly, an empathic clinician is attuned to the shifting emotional states of his/her client creating a working alliance in which the clinician helps regulate the client's affective states and restructure internal models of self and other (Sable, 2000). Because the orbitofrontal cortex is uniquely sensitive to face-to-face nonverbal communication, it is important that the therapist remain conscious of his/her facial expressions, posture, movements, and physical/emotional responses to client messages. Attuned, interactive regulation between the therapist and client allows them to "interactively hold on-line and amplify internal affective stimuli long enough for them to be recognized, regulated, labelled and given meaning…this context provides a corrective emotional experience" (Schore, 2001b, p. 318). Research using magnetic resonance imaging has suggested that affectively focused therapy promotes right brain limbic learning and produces changes in the self-regulatory circuits of the orbitalfrontal system responsible for

emotional, memory and cognitive processing (Hariri, Bookheimer & Mazziotta, 2000).

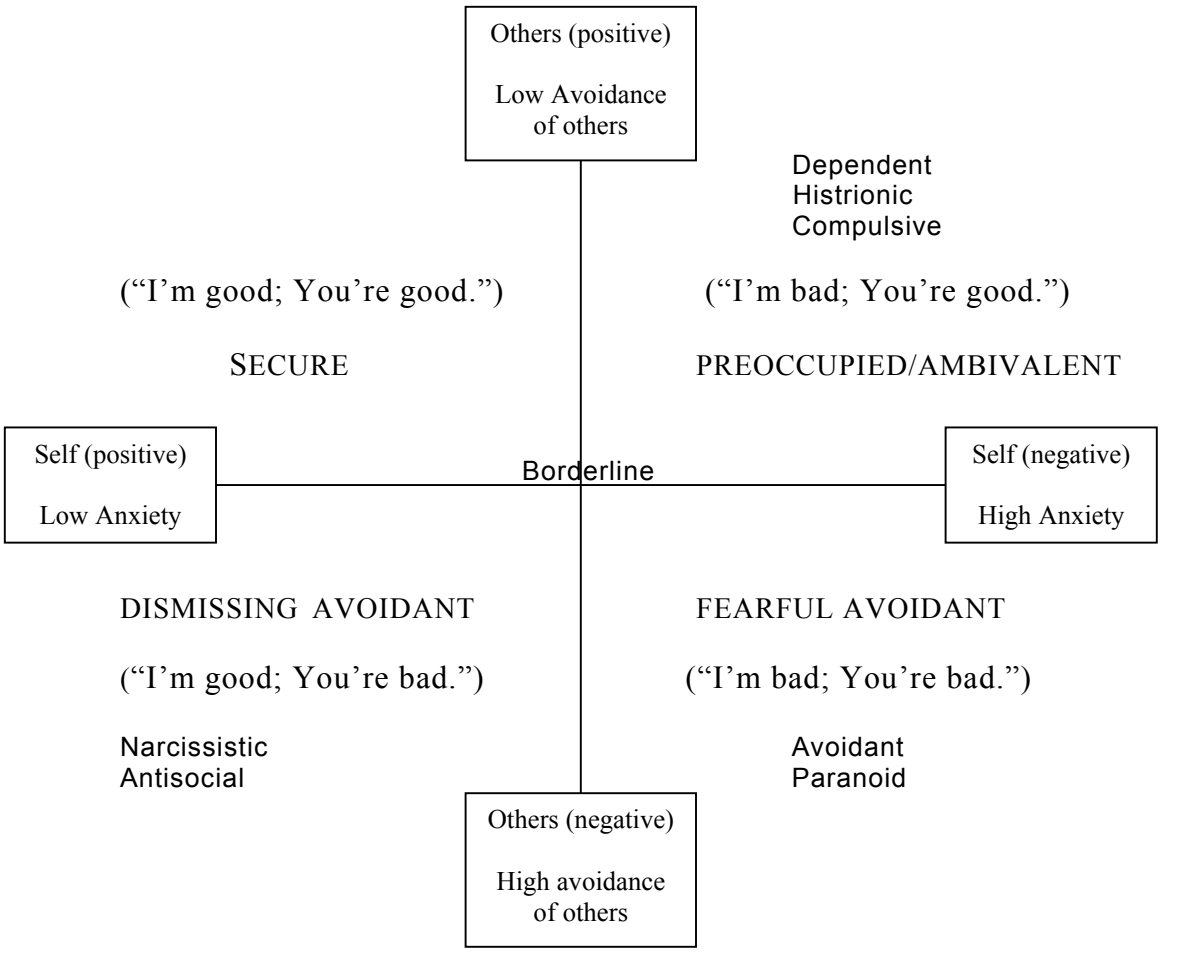
These concepts may be particularly meaningful for therapy with college students in late adolescence. The right hemisphere reverts back into growth spurts at varying stages in life (Thatcher, 1994). Studies indicate that the brain goes through a major reorganization during this developmental phase, particularly in aforementioned areas responsible for affect regulation and stress coping mechanisms (Schore, 2001a; Spear, 2000). Therefore, this time in a young person's life may present unique reparative therapeutic opportunities. Liggan and Kay (1999) contend that "psychotherapy is not merely a conversation or an intellectual exchange of words and ideas. Instead, it is an attachment relationship, which is a physiologic process capable of regulating neurophysiology and altering underlying neural structure" (p. 109).

Attachment-based Conceptualization

Fraley, Waller and Brennan (2000) in the development of their Experiences in Close Relationships-Revised (ECR-R) assessment conceptualized attachment in terms of level of avoidance and level of anxiety, whereas Bartholomew and Horowitz's (1991) model is based on two dimensions: view of self and others, and positive and negative. Together, these models may provide a useful basis for conceptualizing client problems/interpersonal styles within an attachment framework. (See Figure 5.1). Securely attached individuals have a positive working model of themselves and others and so experience low anxiety and feel comfortable forming close, meaningful relationships. Those with

preoccupied/ambivalent attachment styles have a working model that involves a negative view of self and a positive view of others and so experience high anxiety and seek the approval of others to maintain self–esteem, common traits among Dependent, Histrionic and Compulsive personalities. Those with fearful-avoidant attachment styles have a negative view of themselves and others and so experience

Figure 5.1 *Attachment Conceptual Model*



Note: Figure adapted from attachment models of Bartholomew & Horowitz (1991), and Fraley, Waller & Brennan (2000).

high anxiety and avoid social interactions due to fear of rejection, common traits among Avoidant and Paranoid personalities. Finally those with dismissing-avoidant attachment styles have a positive view of self and a negative view of others and so experience low anxiety, but avoid intimacy, common traits among Antisocial and Narcissistic personalities. Borderline personalities are related to a disorganized attachment style characterized by extreme fluctuations in their representations of self and others and their affective states.

Viewed within an attachment framework, anxiety, depression and other mood problems are consequences of these negative working models of self and/or others and resulting dysfunctional interpersonal stances. Substance abuse may then be used as a way of alleviating or avoiding these distressing emotions. Hence, there is an emphasis in attachment-based approaches on using the therapeutic relationship to help the client form more healthy views of self and expectations of others, and promote more functional relational behavior.

Attachment-based Assessment

In order to better understand a client's basic attachment style, accompanying self-beliefs and common affective responses, assessment questions may focus on what (s)he desires from others, what (s)he anticipates from others, how (s)he perceives him/herself in relation to others, what are his/her typical resulting emotional states, what are his/her interpersonal strategies for getting his/her needs met in relationships (e.g., complying with, controlling or withdrawing from others), and the kinds of responses these strategies usually elicit from others (Teyber, 2000).

Another attachment-based assessment method involves identifying the client's memory organization system. Descriptions of autobiographical events have distinct patterns based on one's attachment style (Main, Kaplan, & Cassidy, 1985). Securely attached adults are able to easily access and coherently describe positive and negative memories and accompanying feelings, relate a realistic, balanced view of their parents, and support their perspective with details. In contrast, the narratives of avoidantly attached adults are often incoherent and brief. They tend to idealize their parents, although details of specific events do not corroborate their initial characterizations. The narratives of adults with preoccupied attachment styles are also incoherent, but usually excessively long. Responses about childhood memories typically include fearful or hurtful feelings concerning present relationships, and they are often still embroiled with anger or conflicted feelings toward their parents. Discerning the client's attachment style through this method may provide useful clinical information and, based on his/her particular core issues and relational style, present a more individualized approach to working with that client.

Attachment-based Interventions

Research has suggested that therapists who consider the attachment style of the client and alter their interpersonal stance accordingly, may be better able to establish working alliances and enhance treatment outcomes (Dolan, Arnkoff, & Glass, 1993). Also, it may be helpful to concentrate on particular interventions based on the client's attachment style. Page (2001) explains avoidantly attached clients may benefit from treatment that focuses on challenging the defenses they

use to avoid their feelings, helping them develop an affective vocabulary to describe their own emotionally-laden experiences, and assisting them in comprehending and empathizing with the feelings of others. In contrast, clients with ambivalent/ preoccupied attachment styles who tend to be overwhelmed by emotional states may benefit more from interventions that emphasize building self-esteem, challenging core beliefs and generalizations pertaining to self and others, and helping them gain insight into the associations between getting their needs met in relationships and the behavioral strategies they use to achieve those goals.

Due to problems those with insecure attachment styles have with memory system organization, narrative therapies may also be beneficial. The ability to tell "coherent stories [reflects] an integration of the left hemisphere's drive to tell a logical story about events and the right brain's ability to grasp emotionally the mental processes of the people in those events…Storytelling involves planning, sequencing ideas, using language coherently… and interacting appropriately with other people…The ability to tell a good story is a measure of mental health and a well-functioning brain" (Wylie & Simon, 2002, p. 37). In summary, attachment-based models may offer sound guidelines for establishing strong therapeutic alliances with clients, assisting clients with the identification of faulty working models of self and others, and altering their maladaptive interpersonal stances and affective regulatory systems.

Limitations

The sample for this study was comprised largely of white, female, psychology undergraduate students at a southern University. There may be unique characteristics within this sample which may make it difficult to generalize the findings of the present study to other college student populations. In reviewing the results of preliminary analyses, although the findings may have confirmed previous research on differences related to gender, ethnicity, divorce status and family religiosity effects on the study variables, it should be taken into account that some of the groups had such small N sizes that again it is difficult to generalize the findings regarding these categorical variables.

In addition, the study required participants to disclose sensitive information regarding parental relationships, family experiences and possible mental health concerns. Despite the fact that the self-report questionnaires used were given anonymously, students consciously or unconsciously may have been reluctant to be completely honest on questions they found uncomfortable. In fact, on the MCMI-III, 43% of the sample scored 75 or higher on the desirability index indicating an attempt to minimize their problems.

Furthermore the present investigation may have been limited by some isometric concerns. The fact that some of the FBQ scales had lower reported alphas than the IPPA scales may have had an effect on the findings. Also, the exclusion of questions related to scales not used in the study may have had some bearing on the results.

Moreover, although the MCMI-III has been used in research with normal populations, it was normed on a clinical population and therefore may produce false positive results. However, Millon (1992) concedes that personality patterns are present in the general population on a continuum ranging from normal to disordered and so there exists a need to study these constructs in divergent populations. In response to this need, he is developing a 'normality' instrument tentatively titled the Millon Personality Style Inventory based on the same theoretical model as the MCMI-III. In the meantime, it was determined that the MCMI-III, despite its limitations, was the best instrument available for examining the personality pattern and clinical syndrome variables included in the present investigation.

Recommendations

The findings of this study suggest the importance of parental attachment security as a predictor of personality traits and clinical syndromes in college students. Our personalities and ability to regulate our emotional states may greatly effect our interpersonal relationships and our ability to cope with life stressors. The synthesis of attachment concepts into therapeutic work with students may help them better understand how their working models of self and others effect their relational styles and emotional responses, and therefore more successfully navigate the tasks of late adolescence/early adulthood, developing a healthy identity and forming successful intimate relationships with others.

The results also indicated that ethnicity, religiosity and family functioning were associated with the quality of students' attachment. As such, it may be

beneficial to explore these contextual factors to determine the subjective meaning those experiences hold for students seeking counseling and how they may be effecting their felt security in relationships with others and the therapist. Discussing how these conditions along with other salient issues such as gender and sexual orientation might play a role in the therapeutic relationship may be advantageous in establishing genuine communication, a true working alliance, and an atmosphere of trust in which the client feels respected, accepted and comfortable expressing his/her concerns. Attachment-based approaches concentrate on the specific needs of the client, emphasize exploration of the personal experiences and cultural context of the client, and encourage attempting to understand and respond to the client as a unique individual with a complex developmental history.

There exists a wealth of studies on the effects of attachment quality in infancy through adulthood. What is greatly needed at this time is an integration of the research that lends itself to the development of applied interventions not only in university therapeutic settings, but in the areas of early childcare, and school environments, as well.

Child Care

According to a survey in 1990, 40% of U.S. babies receive primary care from someone other than a parent (Karen, 1998). In the early 1980s their was wide proliferation of the idea that daycare was beneficial for children or at least did not put them more at risk than children receiving home care. The problem with these statements was that most of the research being quoted at that time was done in high quality, developmentally sensitive University childcare centers. Since then, there has been much

research in other childcare settings focusing on children coming from low-risk, middle class environments which suggests there may indeed be social-emotional problems associated with early placement in commercial daycare settings.

For instance, Belsky (1987) reported 40% of children in daycare more than 20 hours per week beginning before the age of one were insecurely attached. Vandell and Corasaniti (1990) found 3rd grade children with 30 or more hours of day care begun in infancy displayed more problems with peer relations, work habits, emotional adjustment and discipline regardless of other factors such as parental marital status, ethnicity, etc.. Bates, Marvinney, Kelly & Dodge (1994) found after controlling for SES, discipline methods, family stress, etc., the more daycare a child had received regardless of when it occurred, the more likely (s)he was to display problematic levels of aggression in kindergarten. A meta-analysis concerning the effects of nonmaternal care on child development using 101 studies published between 1957-1995 and involving 32,271 children supported this previous data (Violato & Russell, 2000). The researchers found negative effects for nonmaternal care on cognitive and social-emotional indicators and even larger negative effects on behavioral and mother attachment variables.

Although this data appears grim, there is also evidence to suggest that children placed in good quality daycare defined as care including high staff/child ratios, developmentally-educated caretakers, low staff turnover and the pairing of children with specific caretakers may not suffer these ill effects (Sroufe, Cooper & Dehart, 1992). Considering the large numbers of children being raised outside of the home today, it may be beneficial to educate parents about attachment to help them make more informed decisions regarding the quality of care their children receive, and to encourage policy

makers to place a higher emphasis on the provision of good childcare alternatives for families.

School Environments

Straus (2003) points out that many of the behavioral, emotional and relational problems teachers are seeing with children in classrooms today may be related to poor attachment. Granot (2001) found that insecurely attached 4th and 5th graders displayed significantly more problems in the areas of academic achievement, emotional, social and behavioral adjustment and peer relations than did securely attached children. Van Ijzendoorn and Tavecchio (1987) suggest that secure relationships with their teachers may help children compensate for poor parental bonds. In fact, academic achievement, competence and motivation have been found to be significantly related to perceived teacher support (Wong, Wiest & Cusik, 2002; Ryan & Grolnick, 1986).

One program, the Gatehouse Project (Patton et al., 2000), based on attachment concepts of security, trust, connectedness and good communication, strives to promote better adolescent mental health in secondary schools. To facilitate this process, teachers were given intensive training on how to implement an integrated curriculum which focused on cognitive and interpersonal skills underlying emotional well being through the use of one-on-one interactions, small groups, personal journals and role play. Programs like this may be helpful in promoting more supportive school environments where all children, especially those without strong parental bonds who are most at-risk, may flourish and grow.

In conclusion, our personal well-being is strongly related to our ability to form meaningful connections with others. Attachment offers a comprehensive

biopsychosocial model which may have unlimited potential for promoting a more compassionate understanding of one another and improving human relations throughout the lifespan.

REFERENCES

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newberry Park, CA: Sage.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (Eds.). (1978). *Patterns of Attachment: A Psychological Study of the Strange Situation*. Hillsdale, NJ: Erlbaum.

Allen, J. P., Hauser, S. T., & Borman-Spurell, E. (1996). Attachment theory as a framework for understanding sequelae of severe adolescent psychopathology: An 11-year follow-up study. *Journal of Consulting and Clinical Psychology, 64*, 254-263.

Allen, S. T. (2001). Attachment status, affect regulation, and behavioral control in young adults. (Doctoral dissertation, University of Connecticut, 2001). D*issertation Abstracts International, 61* (8/B), Z4386.

Amato, P. R., & Fowler, F. (2002). Parenting practices, child adjustment and family diversity. *Journal of Marriage and Family, 64*, 703-716.

American Psychological Association. (2002). *Counseling psychology: Division 17 executive board handbook*. Washington, D. C.: Author.

Anhalt, K. (2001). The relation between parenting factors and social anxiety: A retrospective study. Doctoral dissertation, West Virginia University, 2001). D*issertation Abstracts International, 62* (1/B), Z0534.

Apsel, K. B. (1999). Quality of attachment and borderline tendency among female hospitalized adolescents. (Doctoral dissertation, University of Virginia, 1999). D*issertation Abstracts International, 59* (7/B), Z3679.

Armsden, G. C., & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16,* 427-454.

Armogida, R. E. (2001). Quality and style of attachment, emotional self-regulation, and engagement in sexual high-risk behaviors and alcohol and substance abuse in late adolescence. (Doctoral dissertation, Pacific Graduate School of Psychology, 2001). *Dissertation Abstracts International, 61* (9/B), Z5023.

Arnstein, R. L. (1985). Mental health on the campus revisited. *Journal of American College Health, 43*, 248-251.

Bachman, J. G. (1970). *Youth in Transition: The Impact of Family Background and Intelligence of Tenth-Grade Boys, Vol. 2.* Ann Arbor, MI: Blumfield.

Barber, B. K. (1997). Introduction: Adolescent socialization in context—the role of connection, regulation, and autonomy in the family. *Journal of Adolescent Research, 12*, 5-11.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147-178.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four category model. *Journal of Personality and Social Psychology, 61*, 226-244.

Bates, J. E., Marvinney, D., Kelly, T., & Dodge, K. A. (1994). Child care history and kindergarten adjustment. *Developmental Psychopathology, 30* (5), 690-700.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117* (3), 497-529.

Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology, 9*, 165-195.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs, 75*, 43-88.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology, 4* (1,Part 2), 1-103.

Baumrind, D. (1991). Effective parenting during the early adolescent transition. In P. A. Cowan & E. M. Hetherington (Eds.), *Family transitions*. Hillsdale, NJ: Erlbaum.

Bell, K. L. (1998). Family expressiveness and attachment. *Social Development, 7* (1), 37-53.

Belsky, J. (1987). Risks remain. *Zero to Three, 7* (3), 22-24.

Belsky, J., & Nezworski, T. (1988). *Clinical implications of attachment*. Hillsdale, NJ: Erlbaum.

Bendo, M. E. (2001). Maladaptive cognitive schemas associated with perceptions of family functioning. (Doctoral dissertation, Texas Women's University, 2001). *Dissertation Abstracts International, 61* (9/B), Z5014.

Bernard-Fisher, J. (2001). Religious commitment as a correlate of mental health and life satisfaction among black american families. (Doctoral dissertation,

Andrews University, 2001). *Dissertation Abstracts International, 61* (7/B), Z3897.

Bernstein, D. P. (2002). Cognitive therapy of personality disorders in patients with histories of emotional abuse or neglect. *Psychiatric Annals, 32* (10), 618-628.

Bertocci, D., Hirsch, E., Sommer, W., & Williams, A. (1992). Student mental health needs: Survey results and implications for service. *Journal of American College Health, 42*, 3-10.

Besett-Alesch, T. M. (2001). Family environment and attributions among adult children of intact and nonintact families. (Doctoral dissertation, University of Nebraska-Lincoln, 2001). *Dissertation Abstracts International, 61* (7/B), Z3897.

Blatt, S. J., Auerbach, J. S., & Levy, K. N. (1997). Mental representations in personality development, psychopathology, and the therapeutic process. *Review of General Psychology, 1* (4), 351-374.

Bowlby, J. (1973). *Attachment and Loss, Volume 2: Separation*. New York: Basic Books.

Bowlby, J. (1980). *Loss*. New York: Basic Books.

Bowlby, J. (1988). *A Secure Base: Parent-Child Attachment and Healthy Human Development*. New York: Basic Books.

Brennan, K. A., & Shaver, P. R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality & Social Psychology Bulletin, 21* (3), 267-283.

Brennan, K. A. & Shaver, P. R. (1998). Attachment styles and personality disorders: Their connections to each other and to parental divorce, parental death and perceptions of parental caregiving. *Journal of Personality, 66* (5), 835-878.

Briere, J., & Runtz, M. (1988). Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child Abuse and Neglect, 12*, 331-341.

Bruce, M. L. (1998). Divorce and psychopathology. In B. P. Dohrenwend (Ed.), *Adversity, stress, and psychopathology* (pp. 219-232). London: Oxford University Press.

Butcher, J. N., & Rouse, S. V. (1996). Personality: Individual differences and clinical assessment. *Annual Review of Psychology, 47*, 87-111.

Cantrell, J. D., & Dana, R. H. (1987). Use of the Millon Clinical Multiaxial Inventory (MCMI) as a screening instrument in community mental health center. *Journal of Clinical Psychology, 43*, 366-375.

Carlson, E. A., & Sroufe, L. A. (1995). Contribution of attachment theory to developmental psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental Psychopathology, Volume I: Theory and Methods* (pp. 581-617). NewYork: Wiley & Sons.

Carnelley, K. B., Pietromonaco, P. R., & Jaffe, K. (1994). Depression, working models of others, and relationship functioning. *Journal of Personality and Social Psychology, 66* (1), 127-140.

Cassidy, J., Parke, R. D., Butkovsky, L., & Braungart, J. M. (1992). Family-peer connections: The roles of emotional expressiveness within the family and children's understanding of emotions. *Child Development, 63*, 603-618.

Cavada, C., & Schultz, W. (2000). The mysterious orbitofrontal cortex. *Cerebral Cortex, 10*, 220-242.

Cavaiola, A. A., & Schiff, M. (1988). Behavioral sequelae of physical and/or sexual abuse in adolescents. *Child Abuse and Neglect, 12*, 181-188.

Chang Gunsalus, A., & Kelly, K. R. (2001). Korean Cultural Influences on the Millon Clinical Multiaxial Inventory III. *Journal of Mental Health Counseling, 23* (2), 151-161.

Choca, J., & Shanley, L. (1992). Personality disorder or personality style: That is the question. *Journal of Counseling & Development, 70* (3), 429.

Cohen, J., & Cohen, P. (1975). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.

Cole-Detke, H., & Kobak, R. (1996). Attachment processes in eating disorder and depression. *Journal of Consulting & Clinical Psychology, 64* (2), 282-290.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58* (4), 644-663.

Conger, R. D., Ge, X., Elder, G. H., Lorenz, F. O., & Simons, R. L. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development, 65*, 541-561.

Cooley, E. (1992). Family expressiveness and proneness to depression among college women. *Journal of Research in Personality, 26*, 281-287.

Craig, R. J. (1999). Overview and current status of the Millon Clinical Multiaxial Inventory. *Journal of Personality Assessment, 72* (3), 390-401.

Cramer, P. (1995). Identity, narcissism, and defense mechanisms in late adolescence. *Journal of Research in Personality, 29* (3), 341-361.

David-Vilker, R. J. (2000). The contribution of emotion socialization and attachment to adult emotion organization and regulation. (Doctoral dissertation, Long Island University, 2000). *Dissertation Abstracts International, 61* (1/B), Z561.

Deater-Deckard, K., & Dodge, K A. (1997). Externalizing behavior problems and discipline revisited: Nonlinear effects and variations by culture, context and gender. *Psychological Inquiry, 8*, 161-175.

Dobbing, J., & Sands, J. (1973). Quantitative growth and development of human brain. *Archives of Diseases of Childhood, 48*, 757-767.

Dolan, B., Evans, C., & Norton, K. (1995). Multiple axis II diagnoses of personality disorder. *British Journal of Psychiatry, 166*, 107-112.

Dolan, R., Arnkoff, D., & Glass, C. (1993). Client attachment style and the psychotherapist's interpersonal stance. *Psychotherapy, 30*, 408-412.

Dozier, M., Stovall, K. C., & Albus, K. E. (1999). Attachment and psychopathology in adulthood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of Attachment: Theory, Research, and Clinical Implications* (pp. 497-519). New York: Guilford.

Drake, R. E., Adler, D. A., & Vaillant, G. E. (1988). Antecedents of personality disorders in a community sample of men. *Journal of Personality Disorders, 2*, 60-68.

Ehiobuche, I. (1988). Obsessive-compulsive neurosis in relationship to parental child-rearing patterns amongst the Greek, Italian, and Anglo-Australian subjects. *Acta Psychiatrica Scandinavica, 78* (344), 115-120.

Emery, R. E., & Kitzman, K. M. (1995). The child in the family: Disruptions in family functions. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental Psychopathology, Volume 2: Risk, Disorder, and Adaption* (pp. 3-31). New York: Wiley & Sons.

Eng, W., Heimberg, R. G., Hart, T. A., Schneier, F. R., & Liebowitz, M. R. (2001). Attachment in individuals with social anxiety disorder: The relationship among adult attachment styles, social anxiety, and depression. *Emotion, 1* (4), 365-380.

Erickson, E. H. (1968). *Identity, youth, and crisis*. New York: Norton.

Fergusson, D. M., Horwood, L. J., & Lynskey, M. T. (1994). Parental separation, adolescent psychopathology and problem behaviors. *Journal of the American Academy of Child & Adolescent Psychiatry, 33* (8), 1122-1131.

Fitts, W. H.. (1965). *Tennessee Self-Concept Scale Manual.* Nashville: Counselor Recordings and Tests.

Fraley, R. C., Waller, N. G., & Brennan, K. G. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*, 350-365.

Frank, E. (2000). *Gender and its effects on psychopathology*. Washington D.C.: American Psychiatric Publishing.

Gardner, R. (1998). *The parental alienation syndrome, 2nd ed*. Cresskill, NJ: Creative Therapeutics.

Gartner, J. (1996). Religious commitment, mental health, and prosocial behavior: A review of the empirical literature. In E. P. Shafranske (Ed.), *Religion and the clinical practice of psychology* (pp. 187-214). Washington D. C.: American Psychological Association.

George, C., Kaplan, N., & Main, M. (1985). *An Adult Attachment Interview: Interview Protocol.* Unpublished manuscript, Department of Psychology, University of California, Berkeley.

Gibb, B. E., Wheeler, R., Alloy, L. B., & Abramson, L. Y. (2001). Emotional, physical, and sexual maltreatment in childhood versus adolescence and personality dysfunction in young adulthood. *Journal of Personality Disorders, 15* (6), 505-511.

Gillum, R. F., Gomez-Martin, O., & Prineas, R. J. (1984). Racial differences in personality, behavior, and family environment in Minneapolis school children. *Journal of the National Medical Association, 76* (11), 1097-1105.

Glogoski-Williams, C. (1997). Attachment styles and depression in a divorced population. (Doctoral dissertation, The Wright Institute, 1997). *Dissertation Abstracts International, 58* (4/B), Z2121.

Goldberg, S., MacKay-Soroka, S., & Rochester, M. (1994). Affect, attachment and maternal responsiveness. *Infant Behavior and Development, 17*, 335-339.

Granqvist, P. (1999). Religiousness and perceived childhood attachment: Profiling socialized correspondence and emotional compensation. *Journal for Scientific Study of Religion, 38* (2), 254-273.

Granot, D. (2001). Attachment security and adjustment to school in middle childhood. *International Journal of Behavioral Development, 25* (6), 530-541.

Greenberg, M. T. (1999). Attachment and psychopathology in childhood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of Attachment: Theory, Research, and Clinical Implications* (pp. 469-496). New York: Guilford.

Greenberg, M., Siegal, J., & Leitch, C. (1983). The nature and importance of attachment relationships to parents and peers during adolescence. *Journal of Youth & Adolescents, 12* (5), 373-386.

Greenberg, M. T., Speltz, M. I., & DeKlyen, M. (1993). The role of attachment in the early development of disruptive behavior problems. *Development and Psychopathology, 5,* 191-213.

Gunsalus, A. C., & Kelly, K. R. (2001). Korean Cultural Influences on the Millon Clinical Multiaxial Inventory III. *Journal of Mental Health Counseling, 23* (2), 151-161.

Haddad, Y. (2001). Attachment patterns and their relationships to daily social interaction and psychological adjustment in college students. *Educational Sciences, 28* (2), 456-479.

Hadley, J. A., Holloway, E. L., & Mallinckrodt, B. (1993). Common aspects of object relations and self-representations in offspring from disparate dysfunctional families. *Journal of Counseling Psychology, 40* (3), 348-356.

Haigler, V. F., Day, H. D., & Marshall, D. D. (1995). Parental attachment and gender-role identity. *Sex Roles, 33* (3-4), 203-220.

Halberstadt, A. G. (1991). Toward an ecology of expressiveness: Family socialization in particular and a model in general. In R. S. Feldman & B. Rime (Eds.), *Fundamentals of nonverbal behavior* (pp. 106-160). New York: Cambridge University Press.

Hariri, A. R., Bookheimer, S. Y., & Mazziotta, J. C. (2000). Modulating emotional responses: Effects of a neocortical network on the limbic system. *NeuroReport, 11*, 43-48.

Heppner, P. P., Kivlighan, D. M., Good, G. E., Roehlke, H. J., Hills, H. I., & Ashby, J. S. (1994). Presenting problems of university counseling center clients: a snapshot and multivariate classification. *Journal of Counseling Psychology, 41* (3), 315-324.

Higgins, N. C., & Pollard, C. A. (1992). Relationship between religion-related factors and obsessive compulsive behavior. *Current Psychology, 11* (1), 79-86.

Hoffman, J. A., & Weiss, B. (1987). Family dynamics and presenting problems in college students. *Journal of Counseling Psychology, 34* (2), 157-163.

Hogue, S. L. (1999). Relationship between family of origin history and personality pathology. (Doctoral dissertation, Texas Tech University, 1999). *Dissertation Abstracts International, 59* (11/B), Z6067.

Holliman, N. B., & Guthrie, P. C. (1989). A comparison of the Millon Clinical Multiaxial Inventory and the California Psychological Inventory in assessment of a nonclinical population. *Journal of Clinical Psychology, 45*, 373-382.

Horowitz, L. M., Rosenberg, S. E., & Bartholomew, K. (1993). Interpersonal problems, attachment styles, and outcome in brief dynamic psychotherapy. *Journal of Consulting and Clinical Psychology, 61* (4), 549-560.

Houck, G. M., & King, M. C. (1989). Child maltreatment: family characteristics and developmental consequences. *Issues in Mental Health Nursing, 10*, 193-208.

Johnson, J. G., Bornstein, R. F., & Sherman, M. F. (1996). A modified scoring algorithm for the PDQ-R: Psychiatric symptomatology and substance use in adolescents with personality disorders. *Educational and Psychological Measurements, 56*, 76-89.

Johnson, J. H., & McCutcheon, S. (1980). Assessing life stress in older children and adolescents: Preliminary findings with the Life Events Checklist. In I. G. Sarason, & C. D. Spielberger (Eds.), *Stress and Anxiety, Volume 7*. Washington, DC: Hemisphere.

Johnson, J. G., Smailes, E. M., Cohen, P., Brown, J., & Bernstein, D. P. (2000). Associations between four types of childhood neglect and personality

disorder symptoms during adolescence and early adulthood: Findings of a community based study. *Journal of Personality Disorders, 14* (2), 171-187.

Karen, R. (1994). *Becoming attached: First relationships and how they shape our capacity to love.* New York: Oxford University Press.

Kleinbaum, D., Kupper, L., & Muller, K. (1988*). Applied regression analysis and other multivariate methods*. Boston: PWS-Kent.

Kobak, R. R., & Sceery, A. (1988). Attachment in later adolescence: Working models, affect regulation, and perceptions of self and others. *Child Development, 59*, 135-146.

Kohn, M. L. (1977). *Class and conformity: A study of values* (2nd ed.). Chicago: University of Chicago Press.

Lapsley, D. K., Varshney, N. M., & Aalsma, M. C. (2000). Pathological attachment and attachment style in late adolescence. *Journal of Adolescence, 23* (2), 137-155.

Leary, M. R. (1990). Responses to social exclusion: Social anxiety, jealousy, loneliness, depression, and low self-esteem. *Journal of Social & Clinical Psychology, 9* (2), 221-229.

Levy, K. N. (2000). Attachment style, representation of self and others, and affect regulation: implications for the experience of depression. (Doctoral dissertation, University of New York, 1999). *Dissertation Abstracts International, 60* (9/B), Z4895.

Liggan, D. Y., & Kay, J. (1999). Some neurological aspects of psychotherapy: A review. *Journal of Psychotherapy Practice & Research, 8* (2), 103-114.

Lindsay, K. A., & Widiger, T. A. (1995). Sex and gender bias in self-report personality disorder inventories: Item analyses of the MCMI-II, MMPI, and PDQ-R. *Journal of Personality Assessment, 65* (1), 1-20.

Lopez, F. G., Melendez, M. C., & Rice, K. G. (2000). Parental divorce, parent-child bonds, and adult attachment orientations among college students: A comparison of three racial/ethnic groups. *Journal of Counseling Psychology, 47* (2), 177-186.

Luntz, B. K., & Widom, C. S. (1994). Antisocial personality disorder in abused and neglected children grown up. *American Journal of Psychiatry, 151*, 670-674.

Lynch, J. J. (1979). The broken heart: The medical consequences of loneliness. New York: Basic Books.

Lyons-Ruth, K. (1996). Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. *Journal of Consulting and Clinical Psychology, 64*, 64-73.

Lyons-Ruth, K., Repacholi, B., McLeod, S., & Silva, E. (1991). Disorganized attachment behavior in infancy: Short-term stability, maternal and infant correlates, and risk-related subtypes. *Development & Psychopathology, 3* (4), 377-396.

Maccoby, E. E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology, 28* (6), 1006-1017.

Main, M. (1996). Introduction to the special section on attachment and psychopathology 2: overview of the field of attachment. *Journal of Consulting and Clinical Psychology, 64* (2), 237-243.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), Growing points of attachment theory and research. *Monographs of the Society for Research in Child Development, 50* (2-3, Serial No. 209), 66-104.

Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the Preschool Years* (pp. 121-160). Chicago: University of Chicago Press.

Marjoribanks, K. (1999). Ethnicity, birth order, and family environment. *Psychological Reports, 84* (3), 758-760.

Martin, M. H. (2002). The roles of attachment and the cognitive triad in depression. (Doctoral dissertation, Case Western Reserve University, 2002). *Dissertation Abstracts International, 62* (11/B), Z5035.

Marton, P., & Maharaj, M. A. (1993). Family factors in adolescent unipolar depression. *Canadian Journal of Psychiatry, 38* (6), 373-382.

McAllister, H. A., Baker, J. D., Mannes, C., Stewart, H., & Sutherland, A. (2002). The optimal margin of illusion hypothesis: Evidence from the self-serving bias and personality disorders. *Journal of Social & Clinical Psychology, 21* (4), 414-426.

McCarthy, C. J., Moller, N. P., & Fouladi, R. T. (2001). Continued attachment to parents: Its relationship to affect regulation and perceived stress among college students. *Measurement & Evaluation in Counseling & Development, 33* (4), 198-214.

Mclauchlin, C. C. (1999). Toward an integrated model of internalized representations of self and other: An examination of personality type, adult attachment category, and level of ego development. (Doctoral dissertation, Georgia State University, 1999). *Dissertation Abstracts International, 59* (7/B), Z3755.

Melchert, T. P. (1998). Testing the validity of an instrument for assessing family of origin history. *Journal of Clinical Psychology, 54*, 863-875.

Melchert, T. P. (2000). Clarifying the effects of parental substance abuse, child sexual abuse, and parental caregiving on adult adjustment. *Professional Psychology: Research & Practice, 31* (1), 64-69.

Melchert, T. P., & Sayger, T. V. (1998). The development of an instrument for measuring memories of family of origin characteristics. *Educational and Psychological Measurement, 58*, 99-118.

Meyers, D. T., (2002). *Gender in the Mirror: Cultural Imagery and Women's Agency*. London: Oxford University Press

Mickelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology, 73* (5), 1092-1106.

Miller, P. M., & Lisak, D. (1999). Associations between childhood abuse and personality disorder symptoms in college males. *Journal of Interpersonal Violence, 14* (6), 642-656.

Millon, T. (1992). An appreciative rejoinder. *Journal of Counseling & Development, 70* (3), 432.

Millon, T. (1997). Millon Clinical Multiaxial Inventory—III manual (2nd ed.). Minneapolis, MN: National Computer Systems.

Millon, T. (2002). The Official Website of Theodore Millon, Ph.D., D.Sc., http://www.millon.net/Instruments/MCMI.htm#COMPUTER SCORING AND INTERPRETATION.

Minuchin, S. (1974). *Families and family therapy*. Cambridge: Harvard University Press.

Moos, R. H. (1974). *Family Environment Scale*. Palo Alto, CA: Consulting Psychologists Press.

Morris, D. L. (1980). Infant attachment problem solving in the toddler: Relations to mother's family history. Unpublished doctoral dissertation, University of Minnesota.

Muris, P., & Meesters, C. (2002). Attachment, behavioral inhibition, and anxiety disorders symptoms in normal adolescents. *Journal of Psychopathology & Behavioral Assessment, 24* (2), 97-106.

O'Malley, K., Wheeler, I., Murphey, J., O'Connell, J., & Waldo, M. (1990). Changes in levels of psychopathology being treated at college and

university counseling centers. *Journal of College Student Development, 31*, 464-465.

Page, T. F. (2001). Attachment and personality disorders: Exploring maladaptive developmental pathways. *Child and Adolescent Social Work Journal, 18* (5), 313-334.

Patrick, M., Hobson, R. P., Castle, D., & Howard, R. (1994). Personality disorder and the mental representation of early social experience. *Development & Psychopathology 6* (2), 375-388.

Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist, 44*, 329-335.

Patton, G. C., Glover, S., Bond, L., Butler, H., Godfrey, C., Pietro, G. D., & Bowen, G. (2000). The Gatehouse Project: a systemic approach to mental health promotion in secondary schools. *Australian & New Zealand Journal of Psychiatry, 34* (4), 586-593.

Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). New York: Harcourt Brace College Publishers.

Perris, C. (1999). A conceptualization of personality-related disorders of interpersonal behaviour with implications for treatment. *Clinical Psychology and Psychotherapy, 6*, 239-260.

Petersmeyer, C. (1999). Adolescent risk behaviour as related to parenting styles. (eighth-grade). (Doctoral dissertation, University of Victoria, Canada, 1999). *Dissertation Abstracts International, 59* (11/a), Z4058.

Pettem, O., West, M., Mahoney, A., & Keller, A. (1993). Depression and attachment problems. *Journal of Psychiatry & Neuroscience, 18* (2), 78-81.

Pfeifer, S., & Waelty, U. (1999). Anxiety, depression, and religiosity-a controlled clinical study. *Mental Health, Religion & Culture, 2* (1), 35-45.

Piersma, H. L. (1987). The MCMI as a measure of DSM-III Axis II diagnoses: An empirical comparison. *Journal of Clinical Psychology, 43*, 478-483.

Presley, C. A., & Meilman, P. W. (1994). Development of the core alcohol and drug survey: Initial findings and future decisions. *Journal of American College Health, 42* (6), 248-255.

Radke-Yarrow, M., McCann, K., DeMulder, E., Belmont, B., Martinez, P., & Richardson, D. T. (1995). Attachment in the context of high-risk conditions. *Development and Psychopathology, 7*, 247-266.

Reinecke, M. A. & Rogers, G. M. (2001). Dysfunctional attitudes and attachment style among clinically depressed adults. *Behavioral & Cognitive Psychotherapy, 29* (2), 129-141.

Repko G. R., & Cooper, R. (1985). The diagnosis of personality disorder: A comparison of MMPI profile, Millon inventory, and clinical judgment in workers' compensation population. *Journal of Clinical Psychology, 41*, 867- 881.

Riggs, S. A., & Jacobvitz, D. (2002). Expectant parents' representations of early attachment relationships: Associations with mental health and family history. *Journal of Consulting and Clinical Psychology, 70* (1), 195-204.

Robertson, J., & Robertson, J. (1989). *Separation and the very young.* London: Free Association Books.

Rosenfield, S. (2000). Gender and dimensions of the self: Implications for internalizing and externalizing behavior. In E. Frank (Ed.), *Gender and its effects on Psychopathology* (pp. 23-36). Washington D.C.: American Psychiatric Publishing, Inc..

Rosenstein, D. S., & Horowitz, H. A. (1996). Adolescent attachment and psychopathology. *Journal of Consulting & Clinical Psychology, 64* (2), 244-253.

Rosenthal, B. S. & Schreiner, A. C. (2000). Prevalence of psychological symptoms among undergraduate students in an ethnically diverse urban public college. *Journal of American College Health, 49* (1), 12-19.

Rutter, M. (1997). Clinical implications of attachment concepts: Retrospect and prospect. In L. Atkinson & K. J. Zucker (Eds.), *Attachment and Psychopathology* (pp. 17-46). New York: Guilford.

Rutter, M., & Sroufe, L. A. (2000). Developmental psychopathology: Concepts and challenges. *Development and Psychopathology, 12*, 265-296.

Ryan, R. M., & Grolnick, W. S. (1986). Origin and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of Personality and Social Psychology, 50*, 550-558.

Sable, P. (2000). *Attachment and Adult Psychotherapy*. New York: Jason Aronson.

Samuels, J., Eaton, W. W., Bienvenu, O. J., Brown, C., Costa, P. T., & Nestadt, G. (2002). Prevalence and correlates of personality disorders in a community sample. *British Journal of Psychiatry, 180* (6), 536-542.

Schaffer, H. R., & Emerson, P. E. (1964). The development of social attachment in infancy. *Monographs of the Society for Research in Child Development, 29* (3, Serial No. 94).

Schore, A. N. (1997). Early organization of the nonlinear right brain and development of a predisposition to psychiatric disorders. *Development & Psychopathology, 9* (4), 595-631.

Schore, A. N. (2001a). Effects of secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal, 22* (1-2), 7-66.

Schore, A. N. (2001b). Minds in the making: Attachment, the self-organizing brain, and developmentally-oriented psychoanalytic psychotherapy. *British Journal of Psychotherapy, 13* (3), 299-328.

Sears, M. L. (1999). The relationship between attachment and separation difficulties and suicide risk among college youth. (Doctoral dissertation, The Fielding Institute, 1999). *Dissertation Abstracts International, 59* (8/B), Z4484.

Senchak, M., & Leonard, K. E. (1992). Attachment styles and marital adjustment among newlywed couples. *Journal of Social & Personal Relationships, 9* (1), 51-64.

Sibcy, G. A. (2001). Adult attachment styles and psychopathology in a clinical sample. (Doctoral dissertation, The Union Institute, 2001). D*issertation Abstracts International, 61* (12/B), Z6721.

Siegel, D. J. (1999). *The developing mind: Toward a neurobiology of interpersonal experience*. New York: Guilford Press.

Sinha, B. K., & Watson, D. C. (2001). Personality disorder in university students: A multitrait-multimethod matrix study. *Journal of Personality Disorders, 15* (3), 235-244.

Sive-Ramirez, V. D. (2001). Body dissatisfaction, dieting behavior, and parental attachment among college women. (Doctoral dissertation, University of San Francisco, 2001). D*issertation Abstracts International, 61* (10/A), Z4200.

Snell, W. E., Jr., Miller, R. S., Belk, S. S., Garcia-Falconi, R., & Hernandez-Sanchez, J. E. (1989). Men and women's emotional disclosures: The impact of disclosure recipient, culture and the masculine role. *Sex Roles, 21*, 467-486.

Spanier, G. B., & Casto, R. F. (1979). Adjustment to separation and divorce: A qualitative analysis. In G. Levinger & O. C. Moles (Eds.), *Divorce and separation: Context, causes, and consequences* (pp. 211-227). New York: Basic Books.

Spear, L. P. (2000). The adolescent brain and age-related behavioral manifestations. *Neuroscience and Biobehavioral Reviews, 24*, 417-463.

Spruiell, V. (1975). Transformations in adolescence. *International Journal of Psychoanalytic Psychotherapy, 4*, 518-536.

Sroufe, L. A. (2000). Early relationships and the development of children. *Infant Mental Health, 21* (1/2), 67-74.

Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. *Development and Psychopathology, 11*, 1-13.

Sroufe, L. A., Duggal, S., Weinfield, N., & Carlson, E. (2000). Relationships, development, and psychopathology. In A. Sameroff & M. Lewis (Eds.), *Handbook of Developmental Psychopathology (*2nd ed.*).* (pp. 75-91).

Steinberg, L., Elmen, J. D., & Mounts, N. S. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development, 60* (6), 1424-1436.

Straus, M. (Speaker). (2003). *Attachment disorder in the classroom: a hidden problem* (CD Recording No. 713-320A-B). Washington, DC: 2003 Psychotherapy Networker Symposium.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.

Teyber, E. (2000). *Interpersonal process in psychotherapy: A relational approach* (4th ed.). Stanford, CT: Brooks/Cole.

Thatcher, R. W. (1994). Cyclical cortical reorganization: Origins of human cognitive development. In G. Dawson & K. W. Fischer (Eds.), *Human Behavior and the Developing Brain*. New York: Guilford Press.

Vandell, D. L., & Corasaniti, M. A. (1990). Variations in early child care: Do they predict subsequent social, emotional, and cognitive differences? *Early Childhood Research Quarterly, 5* (4), 555-572.

Van Ijzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin, 117*, 387-403.

Van Ijzendoorn, M. H., & Tavecchio, L. W. C. (1987). The development of attachment theory as a Lakatosian research program: Philosophical and methodological aspects. In L. W. C. Tavecchio & M. H. Van Ijzendoorn (Eds.), *Attachment in social networks* (pp.3-34). Amsterdam: Elsevier Science.

Violato, C., & Russell, C. (2000). Effects of nonmaternal care on child development: A meta-analysis of published research. In *The changing family and child development* (Eds. C. Violato and E. Oddone-Paolucci). Aldershot, England: Ashgate Publishing Ltd.

Voss, K. (2001). Understanding adolescent antisocial behavior from attachment theory and coercion theory perspectives. (Doctoral dissertation, Concordia University, Canada, 2001). *Dissertation Abstracts International, 61* (12/B), Z6725.

Vrendenburg, K., Krames, L., & Flett, G. L. (1986). Sex differences in the clinical expression of depression. *Sex Roles, 14* (1-2), 37-49.

Wallerstein, J. S. (1986). Child of divorce: An overview. *Behavioral Sciences & the Law, 4* (2), 105-118.

Wallerstein, J. S. (1995). *The good marriage*. New York: Houghton-Mifflin.

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development, 71* (3), 684-689.

Watson, D. C., & Sinha, B. K. (1995). Dimensional structure of personality disorder inventories: A comparison of normal and clinical populations. *Personality & Individual Differences, 19* (6), 817-826.

Webb, L. M. (1999). Clinical assessment of malingering utilizing the Minnesota Multiphasic Personality Inventory-II (MMPI-II), Millon Clinical Multiaxial Inventory-III (MCMI-III), and Dissociative Experiences Scale. The roles of attachment and the cognitive triad in depression. (Doctoral dissertation, Chicago School of Professional Psychology, 1999). *Dissertation Abstracts International, 59* (12/A), Z4362.

Webster, H. L. (2000). The relationship between parental attachments, perceptions of social supports and depressive symptoms in adolescent boys and girls. (Doctoral dissertation, Boston College, 2000). *Dissertation Abstracts International, 61* (2/A), Z513.

West, M., Rose, S., & Sheldon-Keller, A. (1994). Assessment of patterns of insecure attachment in adults and application to dependent and schizoid personality disorders. *Journal of Personality Disorders, 8* (3), 249-256.

White, L. K., Brinkerhoff, D. B., & Booth, A. (1985). The effect of marital disruption on child's attachment to parents. *Journal of Family Issues, 6*, 5-22.

Wong, E. H., Wiest, D. J., & Cusick, L. B. (2002). Perceptions of autonomy support, parent attachment, competence and self-worth as predictors of motivational orientation and academic achievement: An examination of sixth-and-ninth-grade regular education students. *Adolescence, 37* (146), 255-266.

Wylie, M. S., & Simon, R. (2002, September/October). Discoveries from the black box. *Psychotherapy Networker*, 26-37.

Yesavage, J. A., & Widrow, L. (1985). Early parental discipline and adult self-destructive acts. *Journal of Nervous and Mental Disease, 17*, 74-77.

Zimmerman, M., & Coryell, W. (1989). DSM-III personality disorder diagnoses in a nonpatient sample: Demographic correlates and comorbidity. *Archives of General Psychiatry, 46* (8), 682-689.

Zucker, A. L. (2000). Presenting problems, symptoms, abuse history, and demographic characteristics of students requesting services at a university counseling center. (Doctoral dissertation, Georgia State University, 2000). *Dissertation Abstracts International, 60* (8/B), Z4263.

Zuroff, D. C., & Fitzpatrick, D. K. (1995). Depressive personality styles: Implications for adult attachment. *Personality & Individual Differences, 18* (2), 253-365.

APPENDICES

APPENDIX A

CONSENT FORM

I agree to participate in the research study titled "Relationships Between Attachment, Family-of-Origin Characteristics and Personality Variables," which is being conducted by Kristin A. Clemens, a doctoral student in the Counseling Psychology Program at The University of Georgia, (706)542-1812, under the direction of Dr. Georgia B. Calhoun, Department of Counseling and Human Development Services. I understand that my participation in this research project is voluntary, and I do not have to participate in this study if I do not want to do so. I also understand that I have the right to leave the study at any time without any reason and without penalty.

The primary reason for this research project is to learn more about relationships of experiences and adaptive functioning. I may expect to benefit directly from this study by receiving research participation credits in my psychology class, and indirectly by gaining more knowledge about clinical assessments.

I understand the research study will consist of asking me to respond to three paper-pencil appraisal instruments. My involvement is likely to take a total of approximately 90 minutes.

No foreseeable risks are likely to be associated with participation in this research study. If, however, issues do arise for you while participating in this study, you may pursue counseling services or find appropriate referrals through the following local mental health services: 1) Counseling and Psychological Services (CAPS), University Health Center, The University of Georgia, telephone (706)542-2273; 2) Center for Counseling and Personal Evaluation, Room, 424, Aderhold Hall, telephone (706) 542-8508; or 3) Mental Health Association of Northeast Georgia, 250 North Avenue, Athens, GA, (706) 549-7888.

In order to make this study a valid one, some information will be withheld until after the study.

My participation is this research study will be anonymous. My identity will not be connected to my answers to the battery of questions. This consent form will be stored in a separate place from my answers to the survey. My identity will not appear anywhere on my survey answer forms. The results of my participation will not be released in any individually identifiable form.

The researcher will answer any further questions about the research now or during the course of the project. She can be reached by phone at (706) 542-1812 or by email at kclemens@arches.uga.edu.

Please sign both copies of this form. Return one copy to the researcher and retain the other copy for your records.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____

Signature of Researcher, 542-1812, kclemens@arches.uga.edu Date

_____

Signature of Participant Date

For questions or problems about your rights, please call or write: Chris A. Joseph, Ph.D., Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-6514; E-Mail Address IRB@uga.edu

APPENDIX B

DEBRIEFING STATEMENT

Thank you very much for participating in this study. The purpose of this study is to examine the relationship between experience and adjustment. The research questions developed for this study are: 1) Are their significant relationships between the family functioning, mother and father attachment and personality, depression, anxiety, and drug/alcohol dependence? 2) Do family functioning characteristics predict variance in the clinical indicators above and beyond that which can explained by attachment? 3) Is there a significant interaction between attachment and family variables that predict variance in the clinical indicators above and beyond that which can be explained by attachment and family functioning alone?

Past research indicates that both the quality of attachment formed with primary caregivers in infancy and later family experiences likely play a role in interpersonal, psychological and emotional adjustment. My hypotheses are that these variables are related, that family experiences do not predict later adjustment beyond that which can be explained by parental attachment relationships, and that the interaction between attachment and family experiences do not play a greater role in predicting adjustment beyond that which can be explained by either variable alone.

Information on test results will be available July 15, 2003. If you have any questions or you would like information about this study, please contact Kristin Clemens via email: kclemens@arches.uga.edu or by telephone: 542-1812 in the Department of Counseling and Human Development Services at The University of Georgia.

It is not expected that you will suffer any adverse effects from this study; however,if issues do arise for you while participating in this study, you may pursue counseling services or find appropriate referrals through the following local mental health agencies: 1) Counseling and Psychological Services (CAPS), University Health Center, The University of Georgia, telephone (706)542-2273; 2) Center for Counseling and Personal Evaluation, Room, 424, Aderhold Hall, telephone (706) 542-8508; or 3) Mental Health Association of Northeast Georgia, 250 North Avenue, Athens, GA, (706) 549-7888.