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APPLICATION OF ATTACHMENT THEORY
TO ADOLESCENT SUICIDALITY:
AN ETIOLOGICAL MODEL

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APPLICATION OF ATTACHMENT THEORY TO ADOLESCENT SUICIDALITY:
AN ETIOLOGICAL MODEL

By

Sondra Renee Wilen

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ABSTRACT

APPLICATION OF ATTACHMENT THEORY TO ADOLESCENT SUICIDALITY:
AN ETIOLOGICAL MODEL

By

Sondra Renee Wilen

A theoretical model of adolescent suicidality based on attachment theory that incorporated internal working models, the dynamic characteristics of interpersonal anxiety and avoidance of negative affect, and the developmentally salient challenges of separation/individuation and interpersonal stress was investigated through structural equation modeling with a sample of 354 undergraduate students at a large Midwestern university.

As predicted, high levels of family risk, including family violence and parental rejection, were more likely to be associated with negative views of self and negative views of others, working models that are characteristic of insecure attachment styles. These negative models of self and others were associated with poorer separation/individuation and greater levels of anxiety. In addition, negative views of self were significantly related to avoidance of negative affect, although negative views of others were not related to avoidance, as had been predicted.

Although the hypothesized dynamic characteristic of interpersonal anxiety was significantly related to depression and suicidality, limited support was found for the role of avoidance of negative affect; avoidance was not associated with suicidality and was positively related to depression, which was not in the direction hypothesized. Potential

difficulties with assessing the hypothesized unconscious coping style, avoidance of negative affect, are discussed. Additionally, the hypothesized developmentally salient challenges of separation/individuation and interpersonal stress were not associated with suicidality. However, as predicted, depression was positively associated with suicidality.

Post hoc modifications of the original model were performed, resulting in a more parsimonious, better fitting model; adequate support was found for overall model fit (CFI=.979, NFI=.970, TLI=.973, RMSEA=.079), and the model accounted for 35% of the variance in self-reported suicidality.

Overall, the model based on attachment theory offers a valuable alternative to models previously utilized in the literature, which frequently have relied upon main effects between variables such as risk factors and adolescent suicidality. The findings are consistent with the role of attachment cognitions as mechanisms by which associated family-related risk factors may impact the development of suicidality and suggest that attachment theory provides an important framework from which to address the etiology of suicidality.

Dedicated to Michael Nodine

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Suicidal ideation and suicidal behavior are prevalent among the youth of our society. Recent studies have revealed increases in the already high incidence rates of adolescent suicidality, which includes suicidal thoughts, plans, and attempts as well as completed suicide (Garland & Zigler, 1993; Henry, Stephenson, Hanson, & Hargett, 1993). Suicide now accounts for 11.3 deaths per 100,000 adolescents and is the third leading cause of adolescent death (Garland & Zigler, 1993). Among 15- to 24-year olds, an average of 14 suicides occur every day, accounting for over 5,000 deaths each year (Henry et al., 1993). While the suicide rate for the general population has increased by 17% since 1960, adolescent suicide increased by more than 200% (Garland & Zigler, 1993).

Unfortunately, these rates are probably underestimates. Many attempts and completed suicides never come to the attention of the authorities or are intentionally misclassified as "accidents" due to factors such as social stigma, religious reasons, and insurance benefits; it is therefore difficult to report the incidence rate accurately (Holinger, Offer, Barter, & Bell, 1994). Despite such measurement difficulties, suicide attempts are estimated to be 5 to 20 times more prevalent than completed suicides (Asarnow, 1992).

Much of the research on adolescent suicide has focused on distinguishing characteristics of suicidal adolescents in order to assist in the identification of those who are at risk for suicide. As a result, although a substantial body of empirical evidence now exists supporting an association between adolescent suicidality and family-related risk

factors (e.g., Asarnow, 1992; Cohen-Sandler, Berman, & King, 1982; Krarup, Nielsen, Rask, & Petersen, 1991), including parental psychopathology (e.g., Brent, Kolko, Allan, & Brown, 1990; Kashani, Ezpeleta, Dandoy, Doi, & Reid, 1991; Shafi, Carrigan, Whittinghill, & Derrick, 1985) and family violence (e.g., Husain, 1990; Spirito, Brown, Overholser, & Fitz, 1989; Pfeffer, 1985), an understanding of the etiology of adolescent suicidality eludes the literature, as no risk factor appears to be necessary or sufficient for the development of suicidality. The purpose of the current investigation is to develop and test empirically a theoretically-based model of adolescent suicidality which not only accounts for the mechanisms underlying the previously established relationships between family-related risk factors and adolescent suicidality but also addresses the etiology of suicidality within a developmental context. It is proposed that a model founded in attachment theory which also accounts for underlying mechanisms and the impact of the age-salient developmental task of separation/individuation will provide a more comprehensive understanding of the development of adolescent suicidality (See Figure 1).

The model proposed in Figure 1 is founded in attachment theory and addresses methodological weaknesses of prior research which have hindered efforts not only to identify the mechanisms by which family risk factors influence the development of suicidality (Kazdin & Kagan, 1994) but also to understand this problem within a developmental context. This model proposes that early family characteristics impact early attachment style, which then produces specific combinations of positive and negative models of self and other (Bartholomew, 1990; Bowlby, 1977). The current investigation proposes that the resulting patterns of positive and negative views of self

2

and others not only produce particular levels of avoidance of negative affect and interpersonal anxiety (Shaver & Clark, 1996) but also impact resolution of the task of separation/individuation during adolescence (e.g., Allen, Hauser, Bell, & O'Connor, 1994; Kroger & Haslett, 1988; Salzman, 1996). Particular combinations of avoidance and anxiety are hypothesized to influence the manifestation of both suicidality and depression (e.g., Borst & Noam, 1993; Van der Kolk, Perry, & Herman, 1991). Similarly, it is proposed that resolution of the task of separation/individuation impacts both suicidality and depression, with inadequate resolution functioning as a stressor during adolescence. Furthermore, both depression and interpersonal stressors are hypothesized to be related to suicidality.

Therefore, this study utilizes attachment theory as a foundation from which to investigate "common developmental pathways" (Adam, 1994, p. 276) which lead to suicidality specifically during the developmental stage of adolescence. By incorporating underlying mechanisms, as well as the stage salient task of separation/individuation, this study addresses major weaknesses of past research which primarily has examined direct causal relationships between risk factors and suicidality in adolescents. It is hypothesized that the proposed model will offer a valuable alternative to models previously utilized to address the development of adolescent suicidality.

Family Characteristics

Over thirty years ago Morrison and Collier (1969) stated that childhood and adolescent suicidal behavior is "a symptom not only of individual upheaval but of underlying family disruption" (Pfeffer, 1986, p. 124). Today there exists a substantial body of empirical evidence to support the conclusion that "pervasive and long-standing family disturbances" (Blumenthal & Kupfer, 1990, p. 159) are associated with an increased risk for adolescent suicide (Brent et al., 1990; Cohen-Sandler et al., 1982; Husain, 1990; Kashani, Beck, & Burk, 1987; Krarup et al., 1991; Pfeffer, 1989; Seiden, 1984; Shafi et al., 1985). Adolescent suicide is associated with a range of familial disruption, such as parental psychopathology, parental abuse, parental absence, antisocial behavior, drug and alcohol abuse, and previous suicidal behavior (Shafi et al., 1985). Parental problems precipitate as many as 50% of adolescent suicide attempts, and adolescent self-reported lack of family support discriminates suicide attempters from nonattempters even when hopelessness and the severity of depression are controlled (Asarnow & Carlson, 1988; Brent et al., 1990; Spirito et al., 1989; Tishler, McKenry & Morgan, 1981).

The current discussion will focus on the familial characteristics which are most commonly associated with adolescent suicide and therefore have been the subject of much research: parental psychopathology, family violence, and general family disturbances. However, while a substantial body of literature has attempted to identify particular factors which place adolescents specifically at risk for suicidality, it will be

seen that no risk factor appears to be necessary or sufficient for the development of suicidality.

<div align="center">Parental Psychopathology</div>

Research has found parental psychopathology to be a major factor contributing to adolescent suicide (Henry et al., 1993; Kashani et al., 1987; Kashani et al., 1991; Pfeffer, 1989; Shafi et al., 1985). When suicidal patients are compared to non-suicidal depressed patients, the parents of the suicidal patients are characterized by higher rates of affective disorders and "an earlier onset of chronic psychiatric illness" (Brent et al., 1990, p. 587). The severity of parental psychopathology also is significantly related to a child's risk for a psychiatric diagnosis, such as depression and suicidal ideation (e.g., Kashani et al., 1987). Furthermore, a history of family suicide attempts is more common in adolescent suicide attempters than in relevant controls (e.g., Henry et al., 1993; Krarup et al., 1991). However, while a substantial amount of empirical evidence exists to support a relationship between parental psychopathology and adolescent suicidality, parental psychopathology does not appear to be either necessary or sufficient for the development of adolescent suicidality. For example, a study conducted by Shafi et al. (1985) found that 60% of the adolescents who committed suicide had a parent with emotional problems compared to 24% of a non-suicidal control group.

Kashani et al. (1991) identified the qualities of emotional coldness, negativism, and abuse from the mother, as perceived by the child, as factors mediating the relationship between parental psychiatric illness and child psychopathology. Kashani et al. (1991) argue that the results of this study "provide further evidence of the parental contribution to child psychopathology" (p. 572). More importantly, this study provides

information regarding possible mechanisms by which parental psychopathology affects children's outcomes. This will be an important area for future research.

Family Violence

Another factor that is related to adolescent suicidal behavior is family violence (Pfeffer, 1985). Both physical and sexual abuse are commonly found in the histories of suicidal adolescents (Husain, 1990; Pfeffer, 1989; Seiden, 1984). Additionally, a history of family aggression is related to adolescent suicidal behavior (Spirito et al., 1989), and suicidal and assaultive tendencies are commonly found in the parents of suicidal adolescents (Pfeffer, 1985). In fact, the literature suggests that parental behavior characterized by "self-directed and outwardly directed" violence is a significant risk factor for adolescent suicidal behavior (Pfeffer, 1985, p. 224). However, it does not appear that a history of family violence is either necessary or sufficient for the development of adolescent suicidality.

General Family Disturbances

The climate of the suicidal adolescent's family has been described as hostile, indifferent, and openly rejecting (Asarnow, 1992; Curran, 1987; DeMan, Labreche-Gauthier, & Leduc, 1993; Kosky, Silburn, & Zubrick, 1986; McIntire & Angle, 1975). Family environment characteristics such as a lack of maternal support (DeMan et al., 1993), disturbed child-father and child-sibling relationships (Kosky et al., 1986), severe disciplinary techniques (often characterized by a lack of reasoning) (Kosky, et al., 1986; Spirito, Brown, Overholser, & Fritz, 1989), as well as a high level of parental control and a perceived lack of parental warmth (DeMan et al., 1993), are all associated with increased risk for suicidality in adolescents. Other parental characteristics which are

6

associated with suicidality in adolescents include a tendency toward rejection, nagging, criticism, perfectionism, withholding of approval, yelling, and a lack of nurturance (Curran, 1989; Henry et al., 1993; Kosky et al., 1986). In fact, Godwin (1986) reports that the cross-cultural literature available on adolescent suicide provides additional evidence that the family environment is related to suicidality cross-culturally.

Additionally, the way that adolescents view their family environment plays an important role in their development of suicidal tendencies (Asarnow, 1992; McKenry, Tishler, & Kelley, 1982). For example, Asarnow (1992) found that children who had attempted suicide saw their families as less expressive, less cohesive, and higher in conflict than the non-attempter psychiatric controls. Furthermore, the scores of children with suicide ideation, but no attempt, fell between those of the attempter and the non-suicidal groups, lending additional support to the potential predictive value of these variables (Asarnow, 1992). While the family stress that characterizes the families of suicidal children may be both quantitatively and qualitatively different than the stress experienced by other children, the child's perception of the experienced family stress and lack of support appears to be particularly influential in the later development of suicidality (Asarnow, 1992; McKenry et al., 1982).

Another general family characteristic that is associated with adolescent suicidality is a history of severe and chronic life stress, including the loss of significant others (e.g., Cohen-Sandler et al., 1982). In fact, the most common precipitants of suicidal behavior in adolescents are interpersonal conflict with or the loss of a significant family member or friend (Henry et al., 1993). Cohen-Sandler et al. (1982) compared the life experiences of suicidal children to those of a control sample of non-suicidal, psychiatrically hospitalized

children. The results showed that, compared to the control group, the frequency and severity of life stress experienced by the suicidal children increased throughout their childhood, with these children experiencing many losses such as separation from their parents and death of a grandparent (Cohen-Sandler et al., 1982).

Although suicidality in adolescents is related to a history of an adverse family environment, it again remains unclear as to the exact nature of this relationship (Spirito, et al., 1989). Not only have inadequate control groups frequently been utilized in these investigations (Kosky et al., 1986), but no individual family characteristic appears to be necessary or sufficient for the development of suicidality. More research investigating family characteristics and adolescent suicidality is necessary in order to gain a better understanding of the mechanisms underlying these relationships.

<u>Individual Characteristics</u>

In addition to the empirical evidence that exists regarding the relationship between family-related risk factors and adolescent suicidality, there also exists a substantial body of empirical evidence that links individual characteristics, such as depression and anger, to an increased risk for suicide during adolescence (Bettes & Walker, 1986; Friedman et al., 1984; Harrington, Brendenkamp, Groothues, & Rutter, 1994; Kovacs, Goldston, & Gatsonis, 1993; Robbins & Alessi, 1985; Pfeffer, Plutchik, & Mizruchi, 1983; Withers & Kaplan, 1987). While a complete review of this literature is beyond the scope of the current investigation, the major individual characteristics that have been associated with adolescent suicidality will be addressed briefly.

The individual characteristic that has been most thoroughly investigated in relation to adolescent suicidality is depression (Spirito et al., 1989). It is well-established

that depression is associated with an increased risk for adolescent suicidality (e.g., Friedman et al., 1984; Harrington et al., 1994; Hollis, 1996; Kovacs et al., 1993); however, it also is well-established that depression is not sufficient for the development of suicidality, as a majority of depressed adolescents never evidence suicidality. As a result, the adolescent suicide literature frequently utilizes control groups of nonsuicidal depressed adolescents in an attempt to isolate those factors specific to suicidality (e.g., Brent et al., 1990; Kosky et al., 1986).

Furthermore, depression is not a necessary emotional state for the development of suicidality (Feldman & Wilson, 1997; Hollis, 1996; Khan, 1987; Spirito, 1989; Taylor & Stansfeld, 1984). Hollis (1997) reports that although depression was the largest single risk factor associated with suicidal behavior in his study, only twenty-seven percent of the suicidal adolescents were categorized as depressed. In fact, Spirito et al. (1989) conducted a thorough review of the literature and concluded that, while depression is a characteristic common to many suicidal adolescents, not all adolescents who are suicidal evidence depressive symptomatology. They argue that the samples utilized to investigate adolescent suicidality suffer from several confounding factors, resulting in an over-representation of depressed adolescents (Spirito et al., 1989). For example, affective disorders often are over-represented in inpatient psychiatric populations due to hospital admission criteria, and many suicidal adolescents who do not evidence depressive symptomatology never come to the attention of the medical community (Spirito et al., 1989).

Similarly, Feldman and Wilson (1997) located different subsets of suicidal adolescents and concluded that the typical method of identifying adolescents at-risk for

suicidality, which relies upon measures of depressive symptomatology, "overlooks a majority of at-risk adolescents" (p. 75). They suggest, instead, that structural personality variables, such as affect tolerance ("the way in which a person manages affective arousal") and affect expression ("how an individual's emotions play a role in a communicational matrix with important others"), be utilized to identify adolescents who are at-risk for suicidality (Feldman & Wilson, 1997, p. 77). The identification of subgroups as well as the utilization of structural personality variables in relation to suicidal adolescents will be addressed more thoroughly at a later point in this manuscript.

While studies have focused primarily upon depression, hopelessness and anger also have been associated with suicidality (Asarnow, Carlson, & Guthrie, 1987; Beck, Steer, Kovacs, & Garrison, 1985; Bettes & Walker, 1986; Kazdin et al., 1983; Pfeffer et al., 1983). However, similar to the research regarding both family-related risk factors and depression, neither hopelessness nor anger appear to be necessary or sufficient for the development of suicidality during adolescence (Spirito et al., 1989). Again, it seems that more research investigating the mechanisms underlying the relationships between risk factors and adolescent suicidality is necessary.

METHODOLOGICAL WEAKNESSES OF PRIOR RESEARCH

While significant differences between the characteristics of suicidal adolescents and control subjects have been identified, the adolescent suicide literature unfortunately has been characterized by many of the methodological weaknesses outlined by Kazdin and Kagan (1994) as common impediments in developmental psychopathology research. These researchers state that developmental psychopathology research typically assumes single pathways of dysfunction and investigates main effects between variables such as risk factors and outcomes (Kazdin & Kagan, 1994). However, despite the identification of a statistically significant relationship between a risk factor and an outcome, it generally is the case that a large proportion of individuals who experienced the risk factor do not develop the outcome of interest, implying an important relationship "between the experience...[of the risk factor]...and some other internal or external condition (Kazdin & Kagan, 1994, p. 37).

The etiology of adolescent suicidality remains poorly understood. While a variety of familial risk factors are associated with adolescent suicide, frequently these variables are not specific to suicidality, but rather place an adolescent at risk for psychopathology in general. Similarly, while several family characteristics are associated with suicidality during adolescence, such as parental psychopathology and poor parent-child relationships (e.g., Henry et al., 1993; King et al., 1990), there does not appear to exist a particular risk factor that is either necessary or sufficient for the development of suicidality in adolescents. Only recently has the adolescent suicide literature, which has long been characterized by assumptions of single causal pathways and outcomes, begun exploring

alternatives to direct effects models (e.g., Adam, Sheldon-Keller, & West, 1996; Hollis, 1996).

Kazdin and Kagan (1994) also argue that the dynamic nature of potential risk factors needs to be taken into consideration when developing models of dysfunction in developmental psychopathology, and different models may be necessary to explain similar outcomes at different ages. While some of the research investigating adolescent suicidality investigated the dynamic nature of factors (e.g., Cohen-Sandler et al., 1982), many studies have not considered the potential impact of the particular developmental tasks associated with the stage of adolescence.

Perhaps of greatest relevance to the adolescent suicide literature is the observation by Kazdin and Kagan (1994) that researchers in developmental psychopathology often identify particular constructs "as the basis for the relation when in fact other constructs or a larger set of correlated constructs could be responsible" (p. 42). They suggest that future developmental psychopathology research should investigate the mechanisms underlying correlated factors, as variables which are related to a particular outcome often can be more accurately explained by an underlying condition. As mentioned previously, there are a paucity of studies in the adolescent suicide literature that investigate possible mechanisms which may underlie the significant but potentially spurious relationships that have been identified between familial risk factors and adolescent suicidality. Despite the strong association between family risk factors and suicidal behavior in adolescents, researchers acknowledge that the relationship between these variables requires further investigation, as the mechanism by which family factors may influence the development of adolescent suicidality remains unclear (e.g., Asarnow, 1992; Pfeffer, 1985).

In addition, Kazdin & Kagan (1994) argue that future research should take into account that there exists a significant amount of variability in the way in which individuals "cognitively process and represent 'objective' events" (p. 47) and that it may be the subjective experience of events, rather than the events themselves, that is related to their impact. Internal representations of particular events, therefore, can lead to significantly different effects of those events and should be considered in models of developmental psychopathology (Kazdin & Kagan, 1994). This is another area in which the adolescent suicide literature could be improved, as previous studies have tended to focus on the mere presence or absence of events rather than to account for differences in the meaning of events for individuals.

ATTACHMENT

The extensive literature investigating the relationship between family risk factors and adolescent suicidality contains many methodological difficulties. Proposed models generally have failed to incorporate the dynamic nature of factors, underlying mechanisms, and internal representations of external events. Not only have previous studies been searching in vain for a common singular event or risk factor underlying adolescent suicidality (Curran, 1987), but the methodological difficulties associated with these studies have hindered our understanding of the etiology of adolescent suicidality.

In an attempt to gain a more complete understanding of this problem, the current investigation proposes attachment theory as a foundation for building a model to explain adolescent suicidality. Attachment theory addresses differences in the way that individuals conceptualize the world around them. The present study proposes that the internal working models of attachment theory provide the mechanisms by which familial risk factors influence the development of adolescent suicidality. Attachment theory will allow for the investigation of "common developmental pathways" (Adam, 1994, p. 276) leading to suicidality rather than the mere examination of single causal relationships between stressful events and adolescent suicidality. In this way, not only may a model based in attachment theory account for the fact that a specific risk factor may result in suicidality for some adolescents but not for others, but it also may provide the mechanisms by which different risk factors can lead to the common outcome of suicidality.

To support this argument, a brief overview of attachment theory and a discussion

of its relationship to relevant psychodynamic theory is offered. Empirical evidence regarding the impact of characteristics of the family on the formation of attachment is discussed. In particular, it will be seen that many risk factors that are associated with adolescent suicidality also adversely impact attachment security. Additionally, because empirical evidence about the relationship between attachment and psychological distress may reveal important information regarding attachment and suicidality, previous research in this area is reviewed as well as the few existing, yet promising, studies that have investigated attachment and suicidality.

Introduction to Attachment Theory

Attachment, as defined by Bowlby (1977) and Ainsworth (1968), refers to affectional bonds that human beings make to specific others that are enduring and occur throughout life. Bowlby (1977, 1988) describes attachment behavior as that which serves the homeostatic function of maintaining proximity to a caregiver, with perceptions of safety versus danger regulating the preferred distance from the attachment figure. While attachment behavior is the medium through which attachment can be observed, the behavior is distinct from attachment itself, as fluctuations in the attachment behavior elicited in different situations are not necessarily considered to be indications of changes in the strength of the internal attachment (Ainsworth, 1968).

An enduring attachment to important others is thought to result from the formation of internal working models of the self and of attachment figures, which are constructed from past experiences and serve the function of guiding future behavior in response to predictions of the behavior of others (Bowlby, 1988; Bretherton, 1985). In this way, internal working models are formed representing caregivers as available or

unavailable and the self as worthy or unworthy of care and protection (Bowlby, 1977; Bretherton, 1985). These internal working models, which are formed early in childhood, produce qualitatively different internal experiences of the same external events throughout the lifetime of different individuals. The present investigation proposes that these internal working models are the mechanisms by which familial risk factors influence the manifestation of suicidality during adolescence. In order to gain a more complete understanding of the internal working models that are hypothesized by attachment theory, a brief discussion of the related psychodynamic theories of object relations theory and self psychology theory is presented.

<div align="center">Psychodynamic Theory</div>

Object relations theory, much like the theory of attachment proposed by Bowlby and Ainsworth, considers the quality of the relationship between the infant and the caregiver to form the basis of the child's internal models of relationships which continue to significantly influence the way in which the individual relates to others throughout his life (Bowlby, 1977). This theory presumes that the "good-enough mother," who provides adequate emotional and physical care for her child, and the formation of the holding environment, in which the child is consistently protected by the caregiver, facilitates the child's attachment to the caregiver and promotes healthy development (Mitchell & Black, 1995).

Object relations theorists propose that infants begin to divide the world into good and bad experiences in the earliest stages of life. When the caretaker is experienced as bad due to the frustration of the child's needs, the child's unconscious internal representations of the caretaker are "split" into good and bad internal objects in an

attempt to maintain the positive parts of the caretaker (Cashdan, 1988). Over the course

of development, the "splitting" of experiences with caretakers results in the unconscious

"splitting" of aspects of the developing self, resulting in feelings of being lovable and

worthwhile or unlovable and worthless (Cashdan, 1988).

Pine (1990) argues that internal representations of other and self are not

considered in object relations theory to be true reflections of past and present

relationships, but rather, represent the child's experience of both real and fantasized

relationships. The emphasis which is placed on the role of fantasy in the development of

children's internal representations of self and other in the object relations perspective is

an important area of divergence between object relations theory and attachment theory

(Lopez, 1995).

In self psychology theory, Kohut emphasized the importance of empathy in the

parent-child relationship and proposed that the formation of the child's positive sense of

self required parental mirroring of the child's worth and the presence of a parental figure

whom the child could idealize (Mitchell & Black, 1995; Slade & Aber, 1992). Kohut

argued that the child experienced the caregiver as part of the self and believed that the

child's internal models of the self grew out of this merger with as well as the empathic

responses and appropriate failures of the caregiver (Taylor, 1992). Similar to attachment

theory and object relations theory, self psychology considers early experiences to be

templates for later relationships and labels these internal models "transmuting

internalizations" (Slade & Aber, 1992). To Kohut, psychopathology originates in early

development from deficiencies in the individual's experience with empathic self-objects

(Taylor, 1992).

Blass and Blatt (1992) argue that the primary difference between object relations theory and self psychology is the goal which is hypothesized to predominate psychological development. Within object relations theory, the relationship with the caregiver is viewed as primarily serving the goal of attachment, with the goal of separateness remaining secondary. Within self psychology, the converse is true; the relationship with the caregiver primarily promotes the development of separateness.

<u>Attachment Theory</u>

Attachment theory, while compatible with and having grown out of existing psychodynamic theories such as object relations theory, proposes that while internal working models of self and other are distinct concepts, they need to be understood in relation to one another, as they signify opposite sides of the same relationship (Bretherton, 1985). In this way, attachment theory captures Blatt and Schichman's (1983) conception of the development of personality, which they argue results from an intricate transaction of two developmental paths, one of which leads to the development of fulfilling, intimate relationships with others, the other leading to the establishment of a positive, enduring sense of self. In attachment theory, the goals of separateness and attachment remain inextricably connected to one another over the course of development.

Empirical findings from Ainsworth, Blehar, Waters, and Wall's (1978) studies not only revealed three reliable classifications of child attachment to the caregiver, but also illustrated the way in which the two developmental paths are intertwined. Evidence supporting the child's use of the attachment figure as a secure base from which exploration and autonomy develops clarified the way in which separation of self and autonomous exploration was affected by development of a secure attachment to the

caregiver. Whereas securely attached children are confident that the attachment figure will be helpful and available if the child should encounter danger, insecurely attached children are not, with anxious-resistant (insecure-ambivalent) children being uncertain of their ability to rely on the caregiver and anxious-avoidant (insecure-avoidant) children being confident that they cannot rely on the attachment figure (Bowlby, 1988). Furthermore, Ainsworth et al.'s (1978) investigations have provided empirical support for the relationship between the quality of caretaking over the first year of life and the resulting child attachment classifications, as assessments of parental care were predictive of later attachment style (Bowlby, 1988).

Although the importance of attachment to or the relationship with caregivers in infancy and childhood has been discussed by prior psychodynamic theorists (e.g., Freud, Mahler, Winnicott, and Kohut), the context of ethology in which Bowlby placed the development and evolutionary function of attachment to caregivers provided a mechanism through which the formation of connection to others and a sense of oneself as worthy of care from caregivers would develop in all human beings (Bowlby, 1977, 1988; Lay, Waters, Posada, & Ridgeway, 1995). In fact, Pine (1990) argues that Bowlby's idea of the evolutionary adaptiveness of the innate biological process of attachment to caregivers provided a link between biology and the psychology of the object tie proposed by psychodynamic theory. Additionally, through the application of ethological findings to human development, such as Harlow's (1958) report on the effects of maternal deprivation in rhesus monkeys, Bowlby highlighted a limitation of earlier theories which regarded the primary motivational force behind infant attachment as the satisfaction of biological needs, with the establishment of relationships occurring as a derivative of

19

instinctual gratification (Bretherton, 1992; Slade & Aber, 1995). In contrast, Bowlby asserted that humans are inherently social, with an inborn capacity to form "intimate emotional bonds" which is neither secondary to nor a derivative of the fulfillment of biological needs (Bowlby, 1988; Bretherton, 1992; Fishler, Sperling, & Carr, 1990; Slade & Aber, 1995).

The theory of attachment proposed by Bowlby, and the research of Ainsworth which followed, operationalized the behavioral manifestations of the internal working models and a stable self concept which had been proposed by others such as Winnicott and Kohut, allowing observation and measurement of these theoretical constructs in infants and children (Bretherton, 1992; Lay et al., 1995; Sroufe, 1986). As a result, empirical evidence was provided by attachment researchers which indicated that infants had an innate ability to accurately perceive, integrate, represent, and adapt to reality (Oppenheim & Waters, 1995; Slade & Aber, 1995). Not only have classifications of adult attachment styles been found to be similar to those found in infants and children, but studies have also revealed that parental attachment, as assessed by the Adult Attachment Interview (AAI), was related to the attachment styles of the children of these adults (Bretherton, 1992; Main, Kaplan, & Cassidy, 1985). Furthermore, empirical support for a relationship between a child's attachment to the caregiver and the development of the child's sense of self exists (Cassidy, 1988; Salzman, 1996).

Internal Working Models of Self and Others

Attachment categories correspond to four quadrants representing combinations of positive/negative views of self/other. A secure attachment is associated with positive models of self and other. Individuals in this quadrant tend not only to be comfortable

with both autonomy and intimacy but also to be characterized by a positive self-esteem

and a sense of basic trust (Bartholomew, 1990; Feeney, Noller, & Hanrahan, 1994). A

preoccupied/anxious-ambivalent insecure attachment category is characterized by

negative views of self and positive views of other. Individuals in this quadrant tend to be

overdependent on others, interpersonally anxious, focused on approval, and preoccupied

with relationships (Bartholomew, 1990; Feeney et al., 1994).

Bartholomew (1990) argues that the consideration of positive and negative views

of self and other results in two subclassifications of avoidant attachment, dismissing and

fearful. Negative views of others and positive views of self correspond to a dismissing

avoidant attachment, whereas negative view of self and others correspond to a fearful

avoidant attachment (Bartholomew, 1990). Dismissing individuals tend to be

characterized by independence, self-reliance, a lack of trust, and an avoidance and

dismissiveness of intimacy (Bartholomew, 1990; Feeney et al., 1994). Fearful

individuals tend to be characterized by low self-esteem, interpersonal anxiety, and a lack

of trust coupled with a desire for intimate relationships and approval from others, a

combination which often leads these individuals to feel alone and experience a significant

amount of hostility and anger (Bartholomew, 1990; Feeney et al., 1994). A disorganized

attachment style does not directly correspond to one of the quadrants representing

positive/negative views of self/other but rather represents an inability to resolve past

traumatic events.

Research has revealed that specific combinations of positive/negative models of

self/other are related to gender. Shaver and Clark (1996) report that more males than

females are characterized by a positive view of self combined with a negative view of

other (dismissing avoidant). Also, more females than males are characterized by a negative view of self combined with a positive view of other (pre-occupied) and by a negative view of self and other (fearful avoidant) (Shaver & Clark, 1996). In addition, not only have views of self/others been found to mediate the relationship between attachment and outcomes (Kenny, Moilanen, Lomax, & Brabeck, 1993; Roberts, Gotlib, & Kassel, 1996), but relationships between specific patterns of positive/negative views of self/others and specific psychopathology also have been hypothesized (e.g., Carnelley, Pietromonaco, & Jaffe, 1994); these topics will be discussed in more detail at a later point in this manuscript.

Dynamic Characteristics

In addition, Shaver and Clark (1996) argue that combinations of positive/negative models of self/others result in differences in two dynamic characteristics: interpersonal anxiety and avoidance of negative affect. A two-axis model of human development proposed by Kaplan (1988) provides a useful heuristic for understanding the levels of interpersonal anxiety and avoidance of negative affect that result from the intersection of these constructs (i.e., Shaver & Clark, 1996). In this model, attachment and individuation are conceptualized as orthogonal dimensions on which individuals vary; this results in a four quadrant diagram representing four categories: attached and individuated; detached and individuated; attached and deindividuated; and detached and deindividuated (Kaplan, 1988; See Figure 4).

Because Kaplan (1988) presents attachment as a dichotomous variable, it does not directly correspond to Bowlby's conception of attachment. However, Kaplan's model has certain heuristic advantages. His first axis describes the internal working models of

22

others proposed by Bowlby-- positive models of others are at the end of the axis representing attachment and relatedness, while negative models of others are at the detachment end. The second axis, representing individuation/autonomy and de-individuation, captures the models of self proposed by attachment theory, as positive models of self are at the end of this axis representing the achievement of individuation and negative models of self are at the de-individuation end. The attachment categories fall within the four quadrants representing the intersection of attachment and individuation. Each of these quadrants produces different combinations of interpersonal anxiety and avoidance of negative affect, as illustrated in Figure 4 (Shaver & Clark, 1996). Perhaps combinations of these two dynamic characteristics mediate the relationship between views of self/others and symptomatology. Again, this topic will be discussed further at a later point in this manuscript.

FAMILY CHARACTERISTICS AND INSECURE ATTACHMENT

As can be seen, through the pioneering work of Bowlby, Ainsworth, and others, the impact of reality-based characteristics of the parent-child relationship on children's attachment and the significant impact that early parenting can have on development throughout life has been supported empirically. Empirical evidence also has been provided regarding the importance and endurance of internal working models in relationships across the lifespan as well as their effects on adult caregiving and the intergenerational transmission of attachment styles (Main et al., 1985). In addition, the attachment literature consistently has revealed that when family characteristics, such as parental psychopathology and family violence, adversely affect parental availability and responsiveness, insecure attachment styles result (Cassidy & Berlin, 1994). In fact, many of the family characteristics identified as risk factors for adolescent suicidality are known to produce insecure attachment styles in children, and several examples will be discussed. The current investigation proposes that, while there do not exist specific risk factors which are necessary or sufficient for the development of suicidality, the numerous familial risk factors which are associated with adolescent suicidality frequently impact a "common developmental pathway" (Adam, 1994, p. 276), producing common attachment patterns and their associated internal working models and dynamic characteristics.

As discussed previously, a history of separation from parents as well as a history of parental completed suicide or suicide attempts consistently is associated with an increased risk of suicidality in adolescents (Henry et al., 1993; Kienhorst, Wolters, Diekstra, & Otte, 1987; Krarup et al., 1991). While this frequently has been understood

within a behavioral learning theory context, this also could be understood from an attachment theory perspective. Parental suicidality could adversely impact the formation of a secure attachment to caregivers, as the act of parental suicide may be the ultimate form of abandonment.

Similarly, not only is the level of parental psychopathology present in the families of suicidal adolescents more severe than those of control groups, including non-suicidal depressed patients, but the onset of psychiatric illness occurs significantly earlier in the parents of suicidal adolescents (e.g., Brent et al., 1990; Kashani et al., 1991). Parental psychopathology can significantly impact parental responsiveness and availability, both of which are the basis for the formation of internal working models in attachment theory (Ainsworth et al., 1978; Bowlby, 1977, 1988). Therefore, the relationship between severe parental psychopathology, often present from an early age, and adolescent suicidality may result from the formation of an insecure attachment to caregivers.

Additionally, the family environments of suicidal adolescents are significantly more likely to be characterized by maternal emotional coldness, negativism, and abuse as well as by a general family climate of conflict, anomie, hostility and rejection (e.g., Curran, 1987; Kosky et al., 1986). In addition, the way in which adolescents view their family environment plays an important role in their development of suicidal tendencies. Research has found that an individual's perception of family stress and lack of support can be influential in the etiology of suicidality (e.g., Asarnow, 1992; Marttunen, Aro, & Lonnqvist, 1993). Again, parental responsiveness characterized by qualities such as those described above, including rejection and emotional coldness, are associated with the formation of insecure attachment styles in children.

In fact, suicidality in childhood and adolescence is most commonly preceded by significant losses (Lester, 1994), such as separation from parents, death of a grandparent (Cohen-Sandler, et al., 1982), or loss of a significant family member or friend (Henry et al., 1993). As attachment styles in children are associated with distinct and often dramatic reactions to separation from attachment figures (Ainsworth et al., 1978), perhaps attachment provides the mechanism through which significant losses during adolescence result in suicidality for some adolescents but not for others, with the manifestation of adolescent suicidality in response to a significant loss paralleling the separation reactions of insecure children (Adam, 1994).

ATTACHMENT AND PSYCHOLOGICAL DISTRESS

Not only has a relationship between parenting and attachment styles in children been established, but attachment styles consistently have been related to psychological distress later in life. The following discussion focuses on the adverse effects of insecure attachment styles throughout the lifespan. Specifically, the relationship between attachment styles and general psychological distress during the latter life stages of adolescence and adulthood is discussed in order to provide a foundation from which attachment theory can be applied to the more specific topic of adolescent suicidality.

Although research investigating the relationship between attachment and psychological distress in adolescents and adults is a relatively new area in the attachment literature, associations between insecure attachment styles and problems such as depression, low self-esteem, eating disorders, and suicidality recently have been established (Carnelley et al., 1994; Hammen et al., 1995; Heesacker & Neimeyer, 1990; Jong, 1992; Kobak & Sceery, 1988; Papini & Roggman, 1992). Beginning with the development of the AAI by Main and her colleagues, a means by which attachment could be measured in older individuals became available, and classifications paralleling those identified by the behavior of children in Ainsworth's Strange Situation task were created (Ainsworth et al., 1978; Main et al., 1985). The adult attachment classifications of secure, dismissing, and preoccupied attachments are found in proportions comparable to those found for the corresponding classifications in children (secure, avoidant, and ambivalent, respectively; Main et al., 1985).

Using the AAI, Kobak and Sceery (1988) conducted a pioneering study which

investigated the relationship between attachment classifications, affect regulation, and representations of self and others in late adolescence. This study utilized a sample of first-year college students and provided an important addition to the attachment literature due to both the lack of research on these issues in late adolescence and the saliency of separation-individuation issues during the transition to college. This study did not rely solely on the subject's self-report but also included external sources of information from the subjects' friends.

Kobak and Sceery (1988) found significant relationships between attachment classifications, styles of affect regulation, and representational bias. Those adolescents who were classified as securely attached evidenced the best adjustment on all measures, with peer reports of high ego-resiliency and low levels of hostility and anxiety, as well as self-reports of few symptoms of distress and high levels of social competence and support. Peers evaluated the dismissing group as more hostile than the preoccupied group, with the converse for ratings of anxiety. Furthermore, the dismissing group reported higher levels of loneliness and lower levels of social support than the preoccupied group, along with levels of perceived social competence and distress comparable to the secure group.

However, despite self-reports of low levels of negative affect, peer ratings of the dismissing group revealed low levels of ego-resilience and high levels of anxiety and hostility. Kobak and Sceery (1988) interpret these findings as evidence for different styles of affect regulation resulting from attachment status. They propose that the discrepancy found between peer and self-ratings in the dismissing group could be interpreted as a bias towards avoiding negative affect. The lower levels of perceived

competence and higher levels of anxiety and distress found in the preoccupied group distinguished it from the other groups and were interpreted as tentatively providing support for this group's tendency to form dependent relationships in an unsuccessful attempt to alleviate anxiety (Kobak & Sceery, 1988).

Relationships between attachment and psychological distress similar to those identified by Kobak and Sceery (1988) have been found in samples of 12-year old early adolescents (Papini & Roggman, 1992), as well as in older samples (Carnelley et al., 1994; Hammen et al., 1995). In a sample of women, Carnelley et al. (1994) found that attachment style was the best predictor of relationship functioning and that the insecure attachment characteristics of fearful avoidance and greater preoccupation were associated with depression. They argue that perhaps a sample of individuals exhibiting different symptoms, such as antisocial behavior, might evidence different models of self and others, with a predominantly dismissing (positive view of self and negative view of others) rather than fearful (negative view of self and others) avoidant style (Carnelley et al., 1994).

Hammen et al. (1995) found that interpersonal attachment cognitions in a sample of high school seniors were predictive of depression in addition to general psychological symptomatology. Attachment styles characterized by less trust in other's dependability (depend) and more anxiety resulting from fears of abandonment (anxiety) were significantly related to changes over a one year period in the level of depression and general psychopathology, including disorders such as substance abuse, eating disorders, and antisocial personality disorder. Also, the attachment characteristics of anxiety and comfort with closeness (close) both moderated the effects of interpersonal stress on

29

general psychological outcome, with those individuals characterized by insecure attachment (high anxiety or low close) evidencing the greatest symptomatology upon exposure to stress. Hammen et al. (1995) argue that insecure attachment cognitions are not associated with specific symptomatology but rather with general dysfunction. However, while the authors concluded that there does not exist a relationship between specific attachment cognitions and symptomatology (Hammen et al., 1995), the variables utilized to represent attachment cognitions in this study did not access models of self adequately. In fact, the results of this study seem to lend support to the hypothesis that attachment cognitions characterized by negative views of others are associated with psychopathology as well as to leave open the possibility that the simultaneous consideration of views of self may contribute important additional information.

Not only has an insecure attachment been associated with an increased risk of general psychopathology, but researchers have also hypothesized that a secure attachment can serve a protective function, particularly during exposure to stress (Papini & Roggman, 1992). Papini and Roggman (1992) found that a secure attachment to parents served a protective function in the lives of adolescents, as it was positively correlated with perceptions of competence and negatively related to feelings of depression and anxiety.

The mechanisms by which attachment status may influence levels of psychological distress also have been investigated (e.g., Kenny et al., 1993; Roberts et al., 1996). Kenny et al. (1993) found that self-concept significantly mediated the relationship between attachment and depression in a sample of early adolescents, providing support for the role of Bowlby's internal working models of self in the development of

psychopathology. In addition, significant gender differences were found in the magnitude of the relationship between variables, with parental attachment accounting for 48% of the variance in self concept in boys but only 28% of the variance in this construct for girls.

Similarly, Roberts et al. (1996) investigated the mediating role of self-esteem in the relationship between attachment and depression in a college-age sample. While adult attachment was associated with the severity of depressive symptomatology, the anxious/ambivalent subscale provided the only unique contribution to the prediction of depression, and the attachment measure only explained 12% of the variance in symptomatology. When maladaptive contingencies of worth and low self-esteem were tested as mediators of this relationship, Roberts et al. (1996) found that these self-concept variables almost entirely accounted for the effect of attachment on depression. They report that insecure attachment is related to dysfunctional attitudes (e.g., "If I fail at my work, then I am a failure as a person" and "I do not need the approval of other people in order to be happy" (p. 314) which contribute to low self-esteem and result in depression. However, in light of evidence regarding the relationship between attachment classifications, views of self, and styles of affect regulation (i.e., Kobak & Sceery, 1988), a significant weakness of both Roberts et al.'s (1996) and Kenny et al.'s (1993) studies was that only the mediating role of views of self was investigated, leaving the possible mechanisms of views of others and the resulting dynamic characteristics unexamined.

ATTACHMENT AND SUICIDALITY

Overall, the attachment literature provides an impressive amount of empirical evidence supporting Bowlby's assertion that early parent-child relationships form the basis of internal working models of self and others which impact individual's functioning throughout the lifespan. Insecure attachment styles are related to problems such as depression, low self-esteem, and eating disorders (Carnelley et al., 1994; Hammen et al., 1995; Heesacker & Neimeyer, 1990; Kobak & Sceery, 1988; Papini & Roggman, 1992). In addition, attachment classifications are associated with styles of affect regulation, representational bias, and relationship functioning (Carnelley et al., 1994; Hammen et al., 1995; Kobak & Sceery, 1988).

The attachment literature only recently has begun to address the potential relationship between attachment and suicidality (Adam et al., 1996; Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Jong, 1994; Van der Kolk et al., 1991). However, the results of the few existing studies are promising. Armsden et al. (1990) found significantly less secure attachments to parents in a group of depressed adolescents than in control groups of non-depressed psychiatric adolescents or nonpsychiatric children of mothers with a chronic illness. Both clinical groups evidenced less secure peer attachments than the nonpsychiatric groups, and insecure parental attachments were associated with more maladaptive attributional styles, the presence of separation anxiety disorder, and a history of suicidal ideation.

Jong (1992) more directly investigated the relationship between an insecure attachment style and suicidality and discovered that undergraduates with a history of

32

suicidality exhibited lower levels of attachment security and less individuation from their parents than either a group of depressed undergraduates with no history of suicidality or a control group. This finding is consistent with Blass and Blatt's (1992) proposal that the development of attachment and separateness is intertwined. Furthermore, those students with a history of suicidality rated their parents as significantly more emotionally absent in childhood than the other two groups. Measures of peer attachment and individuation did not differ between the three groups. Similarly, Van der Kolk et al. (1991) also found that adolescent suicidality was associated with a childhood history of trauma, disrupted parental care, and abandonment as well as a lack of secure attachments.

The study that most closely addresses the relationship between attachment classifications and adolescent suicidality was conducted by Adam et al. (1996). Adam (1994) has argued that the attachment paradigm is a useful framework for understanding the apparent relationship between disturbances in the parent-child relationship early in life and the later development of suicidality, as it accounts for the fact that "events are not the same as experiences" (Adam, 1994, p. 288). Adam et al. (1996) found that the most common attachment pattern associated with a history of suicidality was unresolved-disorganized with preoccupied attachment. This attachment style is characterized by an inability to maintain coherent and logical descriptions of past, potentially traumatic experiences, including loss and abuse, indicating that the experience has remained unresolved (Adam et al., 1996). A classification of preoccupied attachment is given when descriptions of relationships with parents reveal overwhelming preoccupation with these relationships or indicate that these relationships are experienced in an angry and unobjective manner or a passive and helpless manner (Adam et al., 1996).

Furthermore, among adolescents receiving psychiatric treatment who did not have a history of suicidality, a dismissing attachment was most characteristic of the male adolescents, and an autonomous attachment was most characteristic of the female adolescents. A dismissing attachment style is one in which the parents are either idealized or referred to in a derogatory manner, while childhood memories are reportedly forgotten and personal normalcy is emphasized (Adam et al., 1996). An autonomous attachment is a secure attachment in which coherent, logical descriptions of early childhood memories are given regarding relationships with parents and potential traumas (Adam et al., 1996).

The demographic variables of age and sex significantly interacted with the attachment classifications of unresolved-disorganized and preoccupied attachment (Adam et al., 1996). Adolescent females over the age of 15 who were characterized by an unresolved-disorganized attachment were significantly more likely to have a history of suicidality than were adolescents with other demographic or attachment characteristics (Adam et al., 1996). In addition, an attachment style characterized by a combination of unresolved-disorganized attachment and preoccupied attachment significantly increased the likelihood of having a history of suicidality, while a dismissing attachment style significantly decreased the likelihood of having a history of suicidality (Adam et al., 1996).

Although those adolescents in the case group did report more symptomatology than did those in the comparison group, a specific association between suicidality and either externalizing or internalizing symptoms did not exist (Adam et al., 1996). It appears that specific attachment styles may be more characteristic of suicidal adolescents

34

than are specific psychopathologies, such as depression. As stated earlier, previous research has found that while depression is commonly associated with adolescent suicidality, many depressed adolescents do not experience suicidality, and many suicidal adolescents are characterized by externalizing rather than internalizing symptomatology (Feldman & Wilson, 1997; Khan, 1987; Spirito, 1989; Taylor & Stansfeld, 1984).

Perhaps of greatest significance is the finding by Adam et al. (1996) that no significant difference in the occurrence of attachment-related trauma, such as loss, abuse, and separations, existed based upon a history of suicidality. This seems to provide empirical evidence to support Adam's (1994) statement that "events are not the same as experiences" (p. 288). It seems that individual differences in the way in which events occurring in the environment are understood or conceptualized may be particularly influential in the etiology of suicidality. Adam et al. (1996) argue that a model which accounts for the way in which traumatic events have been understood and resolved will provide more specific information regarding the relationship between trauma and psychopathology than can be accounted for in a direct effects model which merely documents the occurrence of a traumatic event.

While this study was an important first step towards establishing the existence of a relationship between attachment and adolescent suicidality, it is not surprising that attachment classifications alone did not account entirely for the development of suicidality (i.e., Kazdin & Kagan, 1994). Adam et al. (1996) found that an unresolved-disorganized, preoccupied attachment was strongly associated with suicidality, with 77% of all adolescents with this attachment style having a history of suicidality. However, this attachment style was neither necessary nor sufficient for the presence of suicidality, as

59% of suicidal males and 70% of suicidal females were not characterized by an unresolved-disorganized, preoccupied attachment, and 33% of adolescent subjects with this attachment style did not have a history of suicidality. It can be seen that a model of the etiology of adolescent suicidality needs to consider additional factors in order to account for this phenomenon more accurately.

Factors Neglected by Past Studies Investigating Attachment and Suicidality

Although the results of the few studies investigating the relationship between attachment and suicidality are encouraging regarding the importance of this relationship, these studies not only fail to account for the internal working models hypothesized by attachment theory but also continue to suffer from many of the previously discussed methodological weaknesses, including insufficient consideration of age-salient developmental tasks (See Figure 3 for a sample model). The current investigation proposes that constructs in addition to attachment classifications need to be considered when addressing the etiology of suicidality during the developmental stage of adolescence.

Role of Internal Models and Resulting Dynamic Constructs

The review of the literature regarding the relationship between attachment and psychopathology revealed that internal working models of self and others play an important role in the relationship between attachment status and outcomes (e.g., Kenny et al., 1993). However, despite evidence suggesting that internal working models may provide the mechanisms by which attachment status influences levels of psychological distress (e.g., Kenny et al., 1993; Roberts et al., 1996), studies that have investigated adolescent suicidality from an attachment theory perspective have not adequately

incorporated views of self and others (e.g., Adam et al., 1996). Although avoidant attachment must be broken down into two distinct categories in order to account for internal working models of self and others (Bartholomew, 1990; Carnelley et al., 1994), this attachment classification typically has been treated as one construct in the adolescent suicide literature.

Similarly, studies which do not account for internal working models of self and others preclude an adequate investigation of the potential mediating role of interpersonal anxiety and avoidance or negative affect. Although levels of either anxiety or avoidance have been related to general symptomatology (e.g., Hammen et al., 1995; Kobak & Sceery, 1988; Pappini & Roggman, 1992), the relationship between the combined effect of these constructs and symptomatology such as suicidality has not been thoroughly investigated. For example, Pappini and Roggman (1992) found that a secure attachment was negatively related to anxiety, but this study did not assess avoidance. While Kobak and Sceery (1988) not only found that different styles of affect regulation resulted from attachment status but also identified a seemingly unconscious bias toward avoiding negative affect, this study did not directly assess avoidance of negative affect but rather inferred the existence of these characteristic from discrepancies found between peer and self-ratings.

Furthermore, the two-axis model has not been applied directly to the problem of suicidality in an empirical study, although it has been proposed as a useful framework for conceptualizing suicidality (Kaplan & Worth, 1993; see Figure 4). While it appears that suicidality may be related to certain quadrants of this model but not to others, this has not been directly investigated. However, the few existing studies that have explored the

relationship between suicidality and attachment status in adolescents are consistent with this hypothesis (e.g., Jong, 1992). Suicidal behavior in adolescents has been associated with a preoccupied attachment (quadrant 2); a dismissing attachment (quadrant 3) has been associated with an inpatient comparison group who did not have a history of suicidality, but were likely exhibiting significant externalizing behavior problems (Adam et al., 1996).

Additionally, different quadrants of this model may account for different subgroups of suicidal adolescents. As mentioned previously, Feldman and Wilson (1997) suggest that instead of using specific risk factors, such as depression, structural personality variables should be utilized to identify adolescents who are at-risk for suicidality. Subgroups of suicidal adolescents have been identified based upon characteristics such as reactivity to separation experiences (Feldman & Wilson, 1997), personality disorders (Brent et al., 1994), and coping styles (Khan, 1987), as well as personality structure and the resulting symptomatology exhibited in addition to suicidality (Borst & Noam, 1993; Feldman & Wilson, 1997; Spirito et al., 1989). For example, Van der Kolk (1991) found that self-destructive behavior has been related to two psychological conflicts, "one centering on separation-abandonment and the other on experiencing and expressing anger and emotional needs" (p. 1670). Similarly, two distinct groups of suicidal inpatient adolescent females were identified by Borst and Noam (1993). The "angry-defiant" group presented with depression, aggression, and externalizing defense mechanisms, as well as a lower level of ego development. The other group, labeled "self-blaming," presented with depression and internalizing defense mechanisms and were characterized by a higher level of ego development (Borst &

Noam, 1993).

Overall, studies investigating the relationship between attachment and suicidality have not adequately accounted for the potential role either of internal working models of self and others or of the resulting dynamic characteristics of avoidance of negative affect and interpersonal anxiety. The current investigation proposes that additional predictive ability would have been provided by further differentiating those individuals within the avoidant attachment category based upon positive and negative models of self and others, as well as by accounting for the role of internal working models and the resulting levels of avoidance and anxiety.

Developmental Task of Separation/Individuation

Differences in precipitating events for suicide exist for different age groups, perhaps resulting from the developmental stages characteristic of different ages (Lester, 1994). Because important differences exist between adolescents and adults, the variables that distinguish a suicidal adolescent, in particular, must be investigated (Rotheram-Borus & Trautman, 1988). However, while the literature suggests that suicidality during the developmental stage of adolescence should be treated as a somewhat distinct phenomenon, this problem typically has not been considered within a developmental context.

Adolescence is the developmental period during which the second separation-individuation process occurs (Bloom, 1980; Blos, 1979; Hoffman, 1984; Meeus, Helsen & Vollebergh, 1996). This phase of life is a time of "radical disengagement" (Meeus et al., 1996, p. 103), as adolescents strive for autonomy from parents. Developmental theory has long considered adolescence to be one of the major stages in psychosocial

development, involving the struggle for identity versus identify diffusion (Erikson, 1959). The successful achievement of a sense of ego identity is essential to healthy development. In fact, Erikson (1959) considered a sense of ego identity to be necessary in order for human beings to feel alive.

The struggle for individuality and self-identity during adolescence occurs within an interpersonal context, and identity and intimacy are unavoidably intertwined (Damon, 1983). This period of life is a time when a radical new understanding of self is formed; the self is separated from others while a connection to them is maintained, with the identity crisis typically being solved in our culture between 18 and 22 years of age (Damon, 1983). More recently, the task of separation/individuation has been conceptualized as a multidimensional construct (Hoffman, 1984; Hoffman & Weiss, 1987; Lopez, Campbell, & Watkins, 1986). Hoffman (1984) argues that adolescent separation/individuation consists of four components of independence from parents: functional, attitudinal, emotional, and conflictual.

Although at first glance, attachment and separation/individuation seem to embody contradictory goals, models addressing the importance of both attachment and separation have been discussed by several theorists (e.g., Blass & Blatt, 1992; Bowlby, 1988; Lester, 1991; Schultheiss & Blustein, 1994). Overall, the aims of attachment and separateness are considered to be equally important and compatible goals. In fact, the second separation-individuation process that occurs during adolescence has been reformulated to address the dynamic interplay between attachment and separation/individuation (e.g., Grotevant & Cooper, 1985, 1986; Meeus et al., 1996). Not only does attachment to the primary caregiver from childhood remain important into adolescence, but the sense of

self at this stage in development is tied to attachment security (Salzman, 1996). Children who have connected well with their parents are "most able to disengage from the parents and most able to develop into independent individuals (individuation)" (Meeus et al., 1996, p. 104). The rebellion that is characteristic of adolescence results from the necessary process of detaching from parents, and a context of closeness to parents allows this rebellious behavior and the resulting "growth toward personal independence and autonomy" (Damon, 1983, p. 310).

Preliminary empirical evidence exists supporting the presumed relationship between attachment and resolution of the task of separation/individuation during adolescence (Allen et al., 1994; Kroger & Haslett, 1988; Salzman, 1996). Separation/individuation during adolescence is significantly related to security of attachment to the primary caregiver from childhood (Salzman, 1996), and researchers have concluded that "structuralization of the ego evolves through the process of attachment" (Kroger & Haslett, 1988, p. 76).

A more direct investigation of the relationship between attachment and separation during adolescence was conducted by Allen et al. (1994), who asserted that the most important and salient developmental task during this stage is the achievement of separation and identity formation while simultaneously remaining positively connected to parents. This study revealed the following:

> "The exhibition of autonomous-relatedness in family interactions was strongly related to both concurrent ego development and self-esteem in adolescence...These findings are consistent with predictions made by attachment theory for other stages of development in that they suggest that, in optimal

interactions, the parent facilitates the adolescent's exploration of differences with the parent (e.g., autonomy) from the secure base of a positive relationship" (p. 190).

Allen et al. (1994) also report that the degree of autonomy and relatedness present in the parent-child relationship appears to be related to the models of self and other which adolescents develop as well as to the task of identity exploration. In this way, the views of self and others which result from early attachment relationships are related to the degree to which separation/individuation is achieved later in life. Despite a history of having been placed at the opposite ends of a continuum, it appears that a "state of 'autonomous-relatedness,' a term coined by John Bowlby, is an optimal outcome for the adolescent-parent relationship" (Allen et al., 1994, p. 179).

In addition, the adolescent's resolution of the task of separation from parents has important psychosocial consequences. Erikson (1968) argued that when the crisis of identify formation results in identity confusion, psychopathological symptoms often result. In fact, resolution of the task of separation/individuation is related to self-esteem, emotional outlook on life, and personal and academic adjustment (e.g., Damon, 1983; Hoffman, 1984). Conflictual independence from parents, defined as "freedom from excessive guilt, anxiety, mistrust, responsibility, inhibition, resentment, and anger in relation to the mother and father," has been related to adolescent psychological health (Hoffman, 1984, p. 171-172; Hoffman & Weiss, 1987). Those adolescents who have not yet achieved self and object constancy by working through the task of separation/individuation often find college to be a significant and difficult transitional life task (Edward, Ruskin, & Turrini, 1991).

42

Furthermore, inadequate resolution of the task of separation/individuation has been associated with suicidality, although this relationship remains virtually unexamined empirically. Erikson (1968) argued that identity confusion produces an inability to see that time and activity can result in changes in one's life, leading adolescents to give up due to "despair...on the part of the ego to let itself die" (p. 151). Psychoanalytic theorists have identified aspects of both the psychology of adolescence and the psychology of suicide which coincide, namely the experiences of object loss, loneliness, hopelessness, and helplessness (Kienhorst, de Wilde, & Diekstra, 1996). However, despite theoretical arguments supporting the potential influence of the developmental challenge of separation/individuation on suicidality during adolescence, there only exists one study that has investigated this relationship. Meyer and Phillips (1990) found that parental alcoholism influenced the development of adolescent suicidality by impeding separation/individuation. The current investigation proposes that inadequate resolution of the task of separation/individuation can be a stressor for adolescents and that the inclusion of this developmental task in models of adolescent suicidality will provide important additional information.

Interpersonal Stressors

As mentioned previously, the most common precipitants associated with suicide during adolescence are interpersonal conflict and loss, such as the loss of a significant family member or friend (Henry et al., 1993; Lester, 1994). However, models of adolescent suicidality often fail to incorporate the impact of this factor (e.g., Adam et al., 1996; Jong, 1992). The current investigation proposes that the inclusion of interpersonal stressors in a model of adolescent suicidality will provide important additional

information.

Depression

As mentioned previously, depression is associated with an increased risk for adolescent suicidality, although it is neither necessary nor sufficient for the development of adolescent suicidality. Of particular interest to the current discussion is that in addition to the relationship between depression and suicidality which has been established, the development of depression seems to follow many of the same pathways outlined above regarding the development of suicidality (e.g., Carnelley et al., 1994; Hammen et al., 1995). These relationships have been addressed by much empirical research, and an extensive review of this literature is beyond the scope of the current investigation. However, the relationship between these constructs and adolescent depression will be discussed briefly.

A substantial body of empirical evidence exists supporting a relationship between family-related risk factors and adolescent depression (e.g., Kaufman, 1991; McCauley & Meyers). Birmaher, Ryan, Williamson, & Brent (1996) conducted a thorough review of the literature regarding childhood and adolescent depression and reported that familial factors, such as parental psychopathology, poor maternal functioning, and family conflict, are associated with adolescent depression. Adolescent depression also is associated with a negative cognitive style, including negative views of self and negative attributions (Birmaher et al., 1996). However, similar to the adolescent suicide literature, the mechanisms underlying these relationships remain unclear (Birmaher et al., 1996).

Similar to what has been addressed above regarding adolescent suicidality, evidence also exists supporting relationships between attachment, views of self and

others, and depression. As mentioned previously, there exists an association between insecure attachment styles and depression (e.g., Carnelley et al., 1994; Hammen et al., 1995; Pappini & Roggman, 1992). Similarly, inadequate resolution of the task of separation/individuation is related to aspects of adolescent psychological health, including depression (e.g., Allen et al., 1994; Hoffman & Weiss, 1987).

Furthermore, the two-axis model of attachment and individuation proposed by Kaplan (1988), as well as the resulting dynamic characteristics discussed above, also are consistent with the development of depression. For example, the characteristics of less trust in other's dependability and more anxiety resulting from fears of abandonment, have been related to depression (e.g., Hammen et al., 1995). Blass and Blatt (1992) have proposed two subtypes of depression: anaclitic depression, where depressed individuals primarily focus on issues of relatedness and dependency; and introjective depression, where depressed individuals are self-critical and primarily focus on issues of self-definition. They argue that a primary focus on either relatedness or self-definition may also result in "different coping or defensive styles" (Blass & Blatt, 1992, p. 421), such as different levels of avoidance in response to negative affect. Blass and Blatt (1992) report that a significant amount of empirical research has supported the distinction between these two subtypes of depression.

Overall, it is anticipated that depression will be related to suicidality as the result of similar developmental pathways. It is also anticipated that greater explanatory power for the prediction of suicidality will be provided by a model which does not simply rely upon associated factors, such as depression or family characteristics, but rather incorporates developmental and dynamic constructs in order to address the mechanisms

underlying the development of both depression and suicidality during adolescence.

RATIONALE

The application of attachment theory to the problem of adolescent suicidality

addresses many of the weaknesses of prior research by providing potential mechanisms

by which associated family-related risk factors may impact the development of

adolescent suicidality. Although evidence exists supporting a relationship between

insecure attachment styles and psychological distress later in life (e.g., Carnelley et al.,

1994; Kobak & Sceery, 1988), few studies have investigated the relationship between

attachment and suicidality. Furthermore, while the results of the few existing studies

provide preliminary support for a relationship between attachment and suicidality, these

studies not only fail to account for the internal working models hypothesized by

attachment theory but also continue to suffer from many of the previously discussed

weaknesses of developmental psychopathology research.

The current investigation proposes that constructs in addition to attachment

classifications need to be considered when addressing the etiology of suicidality during

the developmental stage of adolescence and that incorporation of views of self and others,

the dynamic characteristics of interpersonal anxiety and avoidance of negative affect, and

the developmental task of separation/individuation will provide a more comprehensive

model of adolescent suicidality. In addition, the current investigation utilizes a two-axis

model of human development proposed by Kaplan (1988) as a heuristic for understanding

the levels of interpersonal anxiety and avoidance of negative affect which result from

combinations of positive/negative views of self/others (Shaver & Clark, 1996). It is

proposed that a model incorporating underlying mechanisms as well as the salient

47

developmental task of separation/individuation will more accurately account for the

development of adolescent suicidality than have previous models.

HYPOTHESES

The overall model proposed in Figure 1 is founded in attachment theory and incorporates potential mechanisms, as well as the developmental task of separation/individuation, in order to account for adolescent suicidality. This model proposes that early family risk factors directly impact the formation of an early insecure attachment style (Path A), which is related to views of self and others as delineated by Bartholomew (1990) (Paths B and C).

The views of self and others that result directly affect the dynamic characteristics of avoidance of negative affect (Paths F and H) and interpersonal anxiety (Paths G and I; Shaver & Clark, 1996; see Figure 4), as well as resolution of the stage salient task of separation/individuation (Paths D and E; e.g., Allen et al., 1994; Kroger & Haslett, 1988; Salzman, 1996). Resolution of the task of separation/individuation is then directly related to both depression (Path J) and suicidality (Path K), with inadequate resolution functioning as a stressor during adolescence. Similarly, levels of avoidance and anxiety are directly related to both depression (Paths L and N) and suicidality (Paths M and O; e.g., Borst & Noam, 1993; Van der Kolk et al., 1991).

In addition, depression is directly related to suicidality (Path P). Interpersonal stressors are also directly related to suicidality (Path Q). The following hypotheses more specifically delineate the individual relationships among variables which will be tested.

Hypothesis 1

A direct, significant positive relationship is expected between early family risk factors and insecure attachment (Path A).

Hypothesis 2

Attachment style is hypothesized to have direct, significant associations with views of self, as delineated by Bartholomew (1990; Path B). More specifically, a direct, significant positive relationship is predicted between both secure and dismissing attachment styles and positive views of self. A direct, significant negative relationship is predicted between both preoccupied and fearful attachment styles and positive views of self (See Figure 4).

Hypothesis 3

Attachment style is hypothesized to have direct, significant associations with views of others, as delineated by Bartholomew (1990; Path C). More specifically, a direct, significant positive relationship is predicted between both secure and preoccupied attachment styles and positive views of others. A direct, significant negative relationship is predicted between both dismissing and fearful attachment styles and positive views of others (See Figure 4).

Hypothesis 4

A direct, significant positive relationship is hypothesized between positive views of self and separation/individuation (Path D).

Hypothesis 5

A direct, significant positive relationship is hypothesized between positive views of others and separation/individuation (Path E).

Hypothesis 6

Positive views of self and others are hypothesized to have direct, significant negative relationships with avoidance of negative affect (Paths F and H, respectively).

50

<u>Hypothesis 7</u>

Positive views of self and others are hypothesized to have direct, significant

negative relationships with interpersonal anxiety (Paths G and I, respectively).

<u>Hypothesis 8</u>

A direct, significant negative relationship is expected between

separation/individuation and depression (Path J).

<u>Hypothesis 9</u>

A direct, significant negative relationship is expected between

separation/individuation and suicidality (Path K).

<u>Hypothesis 10</u>

Avoidance of negative affect is predicted to have a direct, significant negative

association with depression (Path L).

<u>Hypothesis 11</u>

Interpersonal anxiety is predicted to have a direct, significant positive association

with depression (Path N).

<u>Hypothesis 12</u>

A direct, significant positive relationship is predicted between avoidance of

negative affect and suicidality (Path M).

<u>Hypothesis 13</u>

A direct, significant positive relationship is predicted between interpersonal

anxiety and suicidality (Path O).

<u>Hypothesis 14</u>

Depression is hypothesized to have a direct, significant positive relationship with

suicidality (Path P).

Hypothesis 15

A direct, significant positive relationship is predicted between interpersonal

stressors and suicidality (Path Q).

Hypothesis 16

The model proposed in Figure 1 is hypothesized to be a better fit than the model

previously utilized to explain adolescent suicidality represented by Figure 2.

Hypothesis 17

The model proposed in Figure 1 is hypothesized to be a better fit than the

attachment theory model previously utilized to explain adolescent suicidality represented

by Figure 3.

METHODS

Participants

Subjects in the current investigation were undergraduate students at a large midwestern university. With a final sample size of 354, adequate power was achieved to investigate the model proposed in Figure 1 (Schumacker & Lomax, 1996). Students were recruited from undergraduate psychology courses in which they received class credit for completing the questionnaires for this study.

Measures

The following measures were administered to undergraduate participants (See Appendix C for copies of all measures).

Demographic Information

Brief Demographic Questionnaire. A brief demographic questionnaire designed by the investigator was utilized to obtain information regarding the undergraduate's age, gender, year in college, racial/ethnic background, parents' marital status, parents' educational background, and parents' occupations.

Early Risk Factors

Family History Questionnaire. A brief family history questionnaire designed by the investigator was utilized to obtain information regarding family-related risk factors, such as history of parental psychopathology and physical abuse. This questionnaire was based on aspects of the family environment which the literature consistently has revealed can adversely affect attachment (e.g., Cassidy & Berlin, 1994). This measure was utilized to assess family risk. A total score was obtained for each of the following

subscales by summing the subscale items: parental psychopathology, absence of parental warmth, and family violence.

Perception of Adult Attachment Questionnaire (PAAQ; Lichenstein & Cassidy, 1991). This questionnaire obtains information regarding participants' early childhood relationships with the primary caregiver. Two subscales from this measure, "rejected" and "loved," were utilized. These subscales have been found to have adequate reliability and validity (Lichtenstein & Cassidy, 1991). Internal consistency coefficient alphas of .87 have been reported for both subscales. In addition, test-retest correlations of .81 for the "rejected" subscale and .86 for "loved" subscale have been found over a three week period (Lichtenstein & Cassidy, 1991). This questionnaire contains sixty items that are rated on a five-point Likert scale (1=strongly disagree; 5=strongly agree). Specified items are reverse scored, and the subscale items are summed to obtain subscale scores. Examples of items from the "rejected" subscale of this measure include: "When I was a child my mother sometimes told me that if I was not good she would stop loving me" and " In childhood I knew I was low on my mother's priority list." Examples of items from the "loved" subscale of this measure include: "In childhood I felt like I was really treasured by my mother" and "I remember when I was frightened as a child my mother holding me close."

Attachment Status

Close Relationships Questionnaire (Bartholomew, 1990; Bartholomew & Horowitz, 1991). This questionnaire assesses attachment style utilizing Bartholomew's (1990) four attachment categories, which have been discussed above: secure, fearful, preoccupied, and dismissing. This questionnaire is comprised of two parts. In the first

part, four brief paragraph descriptions are provided describing different approaches to relationships; the participants choose which paragraph best describes their general approach to relationships. For example, the paragraph describing a fearful attachment style read as follows: "I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them." In the second part, the participants indicate, using a seven-point Likert scale (1=not at all like me; 7= very much like me), the degree to which they agree with each of four descriptions. This questionnaire is highly related to another commonly utilized scale of attachment, Hazan and Shaver's (1987) scale (Brennan, Shaver, & Tobey, 1991), and has good test-retest reliability of specific styles in samples of college students.

Views of Self and Other

Attachment Style Questionnaire (ASQ) (Feeney, Noller, & Hanrahan, 1994). This questionnaire contains forty items which describe thoughts, emotions, and behaviors relevant to relationships. Participants rate the degree to which they agree with items on a six-point Likert scale, ranging from totally disagree (1) to totally agree (6). Examples of items on this measure include: "I feel confident that other people will be there for me when I need them" and "Other people often disappoint me." This measure provides information regarding both the three and four categories of adult attachment proposed by researchers such as Hazan and Shaver (1987) and Bartholomew (1990) as well as "the basic themes of infant attachment theory" (Feeney et al., 1994, p. 133). In addition, the ASQ was designed to be used with adolescent and young adult samples and therefore

does not rely on romantic relationships to assess attachment characteristics. Factor analysis has revealed the following dimensions of the ASQ: confidence (in others; models of self and others), discomfort with closeness (model of others), need for approval (model of self), preoccupation with relationships (model of self), and relationships as secondary (model of others) (Feeney et al., 1994). Internal reliabilities ranging from .76 to .84 have been reported for the individual scales, and good test-retest reliabilities have been reported (.67 to .78) with samples of undergraduate students (Feeney et al., 1994). In addition, Feeney et al. (1994) report that the subscales of this measure are significantly related to the theoretically equivalent attachment category specified by other attachment measures as well as to family functioning and personality variables.

Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965). This measure of self-esteem was used as an indicator of participant's views of self. This measure is a global measure of self-esteem for which adequate reliability and validity have been documented. Internal consistency coefficient alphas ranging from .77 to .88 have been reported. This questionnaire contains ten items which are rated on a five-point Likert scale (1=strongly disagree; 5=strongly agree). Specified items are reverse scored, and the items are summed to obtain a total score. Examples of items from this measure include: "I feel I do not have much to be proud of" and " I certainly feel useless at times."

Separation/Individuation

Psychological Separation Inventory (PSI) (Hoffman, 1984). The PSI is a 138-item questionnaire which assesses participants' ability to separate from their parents psychologically. This measure utilizes a five-point Likert scale to rate aspects of relationships to parents (1=not at all true of me; 5=very true of me), with half of the items

pertaining to the relationship with the mother and half pertaining to the relationship with the father. This study utilized the conflictual independence subscale of this measure pertaining to the mother to assess an aspect of separation/individuation that has been associated with adolescent psychological health. Conflictual independence pertains to "freedom from excessive guilt, anxiety, mistrust, responsibility, inhibition, resentment, and anger in relation to the mother and father" (i.e., Hoffman, 1984, p. 171-172; Hoffman & Weiss, 1987). Examples of items from this subscale include: "When I don't write my mother often enough I feel guilty" and "I feel like I am constantly at war with my mother." Good test-retest reliability (.96) as well as good internal consistency (reliability alpha coefficient = .92) have been found for the conflictual independence subscale of this measure. In order to score this measure, the total for each subscale is summed and this number is subtracted from the total possible score for this subscale. Higher scores correspond to lower levels of independence.

<u>Avoidance of Negative Affect</u>

<u>Defense Mechanisms Inventory (DMI) (Ihilevich & Gleser, 1986).</u> The DMI assesses the adaptiveness of defensive structures in nonclinical populations. This measure consists of ten vignettes which require participants to imagine themselves in difficult and frustrating situations. The following is an example vignette: "You are waiting for the bus at the edge of the road. The streets are wet and muddy after the previous night's rain. A motorcycle sweeps through a puddle in front of you, splashing your clothing with mud." After each vignette, there are four subsections for which participants indicate how they would react: their actual reaction, the nature of their impulsive reaction or behavioral fantasy to the situation, their thoughts in regard to the

situation, and their affective experience/rationale for their feelings. For each of these subsections, subjects select from five possible solutions (representing five major clusters of defense mechanisms) the statement which is most representative (scored a 2) and least representative (scored a 0) of how they would react. A score of one is assigned to the remaining three responses in each subsection. Examples of possible solutions for the example vignette provided above include: "I wonder if that biker splashed me on purpose" (thought) and "Wipe that biker's face in the mud" (impulsive reaction/behavioral fantasy). The scores for the five defense mechanisms then are summed for the ten vignettes, resulting in a score ranging from 0 to 20 for each of the five defense mechanisms subscales (Cramer, 1988).

Although the DMI assesses five clusters of defense mechanisms, this study utilized two subscales to assess avoidance of negative affect: reversal, which pertains to the production of internal responses to the perception of the threat of internal conflict in order to avoid experiencing anxiety, including denial, repression, and reaction formation; and turning against the object, which pertains to the experience and/or expression of aggression towards others in order to protect the self from consciously experiencing the pain of either external threats or inner conflicts.

Adequate reliability and validity have been reported for the DMI (Cramer, 1988). Test-retest and inter-item reliability coefficients of about .78 are reported for this measure (Cramer, 1988). In addition, various subscales of the DMI are significantly related to psychiatric symptomatology, physical distress, and to defensive scales on other measures, such as the Minnesota Multiphasic Personality Inventory (See Cramer, 1988 for a more extensive review of the DMI research). The DMI was utilized as one assessment of

avoidance of negative affect.

Ways of Coping Checklist (WCCL) (Folkman & Lazarus, 1980; Vitaliano, Russo, Carr, Maiuro, & Becker, 1985). This 42-item measure assesses the ways in which participants cope with stressful situations. Vitaliano et al. (1985) revised the original questionnaire designed by Folkman and Lazarus (1980), resulting in a version of this questionnaire which contains a smaller number of items and scales which are more stable, overlap less, and have higher internal consistency. The WCCL utilizes a four-point Likert scale to assess the degree to which participants would use a range of cognitive and behavioral strategies to cope with stressful situations (1= would not use; 4=would use a great deal). The following scales were identified by Vitaliano et al. (1985): problem focused, seeks social support, blamed self, wishful thinking, and avoidance. Good internal consistencies are reported (ranging from .73 to .88) for the WCCL. In the present investigation, the avoidance subscale was utilized. Examples of avoidant coping responses include: "Tried to forget the whole thing" and "I refused to believe it had happened."

Anxiety

State-Trait Anxiety Inventory, Form Y (STAI) (Spielberger, 1983). The STAI (Form Y) is a 40-item questionnaire which utilizes a four-point Likert scale (1=almost never; 4=almost always) to assess the degree to which participants feel that descriptions of anxiety symptoms pertain to them both at the present moment (state anxiety) and in general (trait anxiety). Trait anxiety as conceptualized by the STAI pertains to "relatively stable individual differences in anxiety-proneness," and the trait anxiety scale accesses "differences between people in the tendency to perceive a stressful situation as dangerous

or threatening and to respond to such situations with elevations in the intensity of their state anxiety reactions" (Spielberger, 1983, p. 5). State anxiety is conceptualized by the STAI as current feelings of apprehension, tension, nervousness, and worry. Spielberger (1983) argues that stronger levels of trait anxiety increase the likelihood of greater state anxiety in response to a threatening situation. Examples of items include: "I feel strained" (assessing state anxiety) and "I worry too much over something that really doesn't matter" (assessing trait anxiety).

The STAI was developed for use with high school and college undergraduate students (Spielberger, 1983) but has also been utilized extensively with clinical samples in both research and clinical practice (Spielberger, 1983). Good test-retest reliability coefficients for the trait anxiety subscales are reported for college student samples, ranging from .73 to .86, with a mean reliability of .77. As the state anxiety subscale was designed to assess anxiety at particular moments in time, relatively low stability coefficients for this subscale were both expected and observed, ranging from .16 to .62, with a mean reliability of .33. Due to the transitory nature of state anxiety, alpha coefficients of internal consistency provide more meaningful information regarding reliability, and good Cronbach alpha coefficients are reported for both the state (ranging from .86 to .95) and trait (ranging from .89 to .91) anxiety subscales of the STAI (Spielberger, 1983). The STAI correlates highly with other anxiety measures (ranging from .73 to .85), and scores on the state anxiety subscale are sensitive to "different degrees and kinds of stress" (Spielberger, 1983, p. 44). The STAI was utilized as one assessment of participants' anxiety. Specified items are reverse scored, and the items in the state and trait subsections are summed to obtain total state and trait anxiety scores,

60

respectively.

Beck Anxiety Inventory (BAI) (Beck, Epstein, Brown, & Steer, 1988). The BAI contains twenty-one items pertaining to a variety of anxiety symptoms, and participants utilize a four-point Likert scale (0=not at all; 3=severely) to rate the degree to which they have been bothered by each of these symptoms during the past week. The items on this measure reflect a range of cognitive, somatic, and affective symptoms of anxiety and were chosen in order to reduce overlap with symptoms of depression (Beck et al., 1988). Examples of symptoms assessed by the BAI include: "Fear of the worst happening" and "Feeling hot." All items are then summed to obtain a score representing the intensity of self-reported anxiety.

This measure has been normed on both clinical and nonclinical samples, including a sample of undergraduate students, and good internal consistency reliabilities (ranging from an alpha of .92 to .94) have been reported (Beck & Steer, 1993). Studies have also revealed that the BAI correlates more highly with other measures of anxiety ($r=.51$) than measures of depression ($r=.25$) (Beck et al., 1988).

Depression

Beck Depression Inventory (BDI) (Beck, 1978). This self-report questionnaire consists of twenty-one items that ask respondents to indicate the degree to which they are currently experiencing a variety of cognitive, somatic, motivational, and behavioral symptoms of depression, including crying easily, appetite disturbances, and sleep disturbances (Beck & Steer, 1984). Example items include: "I cry more now than I used to" and "I feel I have nothing to look forward to." Four statements, representing a range of symptom severity, are then presented in a Likert scale fashion for each item, and

participants indicate the degree to which each symptom has been experienced during the past week (0=do not feel this way; 3=strongly feel this way). For example, the choices for the first example item presented above are as follows: "0=I don't cry any more than usual, 1=I cry more now than I used to, 2=I cry all the time now, 3=I used to be able to cry, but now I can't cry even though I want to."

The BDI is a valid and reliable test for depression, with a reported mean coefficient alpha of .86 (Beck & Steer, 1984; see Beck, Steer, & Garbin, 1988 for a review). In addition, the BDI is highly related to clinical ratings of depression. Specified items are reverse scored, and the items are summed to obtain a total score.

Suicidality

Adult Suicidal Ideation Questionnaire (ASIQ) (Reynolds, 1991). The ASIQ contains twenty-five items pertaining to a variety of symptoms of suicidal ideation, and participants utilize a seven-point Likert scale (0=I never had this thought; 6=Almost every day) to rate the degree to which they have been bothered by each of these symptoms during the past month. Example items include: "I wished that I had never been born" and "I thought about what to write in a suicide note." This measure has been normed on a sample of 2,000 adults, including psychiatric outpatients, normal adults, and college students. The ASIQ is a valid measure of suicidal ideation and correlates significantly with other measures of psychological distress as well as a history of past suicide attempts (Reynolds, 1991). In addition, good internal consistency and test-retest reliability coefficients have been reported (ranging from .85 to .97). The items on the ASIQ are summed to obtain a total score.

Suicide Ideation Scale (SIS) (Rudd, 1989). This 10-item questionnaire includes

questions regarding the continuum of suicidality over the past year, including past thoughts, plans, and attempts. A five-point Likert scale is utilized to rate "how often the subject has felt or behaved that way during the past year" (1=never or none of the time; 5=always or a great many times." Example items include: "I have told someone I want to kill myself" and "I have come close to taking my own life." Rudd (1989) reports that the SIS was designed for use with undergraduate students and is a valid and reliable self-report measure of suicidal ideation. Internal consistency alpha coefficients ranging from .86 to .90 have been found for this measure. Items on the SIS are summed to obtain a total score. In addition, the items on this questionnaire were reworded to assess the degree to which participants have "felt or behaved that way" during their lifetime. In this way, two scores were obtained, one assessing recent suicidal behavior (within the past year; "SUICYR") and one assessing past suicidal behavior (prior to the last year; "SUICLIFE").

Interpersonal Stressors

The Inventory of College Students' Recent Life Experiences (ICSRLE) (Kohn, Lafreniere, & Gurevich, 1990). This measure contains thirty-five descriptions of potentially stressful events. Participants rate the degree to which they have been affected by each of these items during the past month on a five-point Likert scale (1=not at all part of your life; 4=very much part of your life). Examples of items include: "Conflicts with boyfriend/girlfriend/spouse" and "Loneliness." This measure was designed specifically for use with an undergraduate student population and attempts to address weaknesses of other hassles scales.

Good internal reliability (α=.89) is reported, and the ICSRLE is significantly correlated with other measures of stress such as the Perceived Stress Scale (r=.65). Seven subscales with adequate alpha coefficients (ranging from .47 to .80) and acceptable intercorrelations (ranging from .17 to .49) have been identified by factor analysis: Developmental Challenge, Time Pressure, Academic Alienation, Romantic Problems, Assorted Annoyances, General Social Mistreatment, and Friendship Problems (Kohn et al., 1990). Items are summed to obtain a total hassles score, and subscale scores are obtained by summing the items corresponding to each subscale. This study utilized three subscales of this measure to assess interpersonal stressors: Romantic Problems, General Social Mistreatment, and Friendship Problems.

Norbeck Social Support Questionnaire (NSSQ) (Norbeck, Lindsey, & Carrieri, 1981, 1983). This questionnaire assesses the social support network of individuals. Only the section of the NSSQ which obtains information regarding the recent loss of important relationships, including the number of persons lost and how much support was provided by the people lost, will be utilized in the current investigation. The following variables are computed from the participant's responses regarding loss: recent losses, loss quantity, loss quality, and total loss quality variable. The questions regarding loss of support have demonstrated adequate test-retest reliability (ranging from .71 to .83), and internal consistency intercorrelations between similar constructs have ranged from .89 to .98. The subset of questions regarding loss from the NSSQ was utilized to assess recent stress related to the loss of significant others.

Procedures

Participants completed all instruments in a single group session lasting approximately two hours. The author and/or a trained research assistant administered the measures to the participants. All participants provided informed consent by signing and returning an informed consent form prior to the completion of the questionnaire packet. The answers to all questionnaires were placed on a computer scoring sheet identifiable only by a subject code in order to protect student anonymity. Following the collection of all measures, subjects were given an information sheet debriefing them regarding the general purpose of this study, as well as a referral sheet with the phone numbers of local mental health agencies and suicide hotlines.

The hypothesized relationships proposed in the model of the etiology of

adolescent suicidality (Figure 1) were examined through structural equation modeling

(SEM). SEM is a confirmatory statistical technique that is utilized to test a theory

(Tabachnick & Fidell, 1996). Tabachnick and Fidell (1996) argue that there are a number

of advantages to utilizing SEM for hypothesis testing, including the estimation and

elimination of measurement error as well as the complete and simultaneous testing of

complex variable and factor relationships.

Data Screening and Preparation

Less than two percent of the values for any variable were initially missing. A

function available through the statistical program AMOS that allows for the computation

of full information maximum likelihood estimates in the presence of missing data was

utilized to complete the analyses; maximum likelihood estimation utilizes the covariance

matrix in all analyses with computation of full information maximum likelihood

estimates (even in the presence of missing data) through the estimation of means and

intercepts (Arbuckle, 1997).

Prior to the analyses of the hypothesized relationships among variables, the

assumptions of multivariate normality and linearity were evaluated per the steps

suggested by Tabachnick and Fidell (1996). The data was scanned for univaraite and

multivariate outliers, as well as kurtosis and skewness distribution qualities (Tabachnick

& Fidell, 1996). More specifically, standardized scores were computed and examined to

identify potential univariate outliers. Cases with z-scores greater than 3.29 were

considered potential outliers and were examined more closely (Tabachnick & Fidell, 1996). Outliers were identified among the distributions of five variables. Values adjacent to the closest non-outlier value were assigned for each outlier in the order of original ranking, therefore maintaining the rank order of subjects for each variable (Kline, 1998; Tachnick & Fidell, 1996). Less than two percent of values were altered for any variable (mompsi- 2 variables, depress- 2 variables, famviol- 2 variables, asiqtotl- 5 variables, and suicyr- 6 variables).

In addition, Mahalanobis distance was utilized to detect potential multivariate outliers (Tabachnick & Fidell, 1996). A regression analysis was run utilizing subject ID as the dummy dependent variable, as Tabachnick and Fidell (1996) point out that multivariate outliers among independent variables are unaffected by the dependent variable. The criterion utilized for multivariate outliers was Mahalanobis distance at $p<.001$, utilizing Chi-square with 19 degrees of freedom (19 total variables). Six cases that were identified as multivariate outliers were deleted from the data set, as Kline (1998) argues that such a small percentage of the total sample can be dropped with "little concern about loss of information" (p. 88).

Furthermore, the normality of the variables were examined through investigation of kurtosis and skewness. All variables displayed adequate kurtosis and skewness as per the guidelines specified by Kline (1998) and therefore appeared to represent adequately normal distributions. The final sample size utilized for the analyses was 354. Table 1 provides the descriptive statistics for the study variables as well as the variable names utilized in the model and the directionality of the constructs.

Measurement Model Modifications

Prior to investigation of the structural model presented in Figure 1, improvements in the measurement model resulted from modifications based upon confirmatory factor analysis (CFA). The standardized maximum likelihood estimates of the measurement model parameters are represented in Table 2. The modifications made to the originally proposed measurement model are discussed below.

The latent construct of Family Characteristics was designed to capture characteristics of the early family environment that the literature suggests are related to attachment (e.g., Brent et al., 1990; Cassidy & Berlin, 1994). The original CFA revealed that one observed variable, parental psychopathology, had a particularly large standard error, and this variable was eliminated, resulting in a latent construct comprised of four observed variables: family violence and absence of parental warmth from the Family History Questionnaire and parental rejection and parental love from the PAAQ (Lichtenstein & Cassidy, 1991). Due to the scaling on the absence of parental warmth variable, high scores on this variable indicate low parental warmth whereas low scores indicate greater perceived parental warmth.

The CFA conducted on the four attachment variables from Bartholomew's (1990) Close Relationships Questionnaire resulted in a negative error variance, which is an impossible solution, and revealed two distinct underlying factors that appeared to correspond to models of self versus models of others, per Figure 4. The results of the CFA suggested that a separate latent construct representing attachment style did not exist among the measures collected but rather that these measures assessed the models of self and others that the literature argues constitute attachment style (e.g., Bartholomew, 1990;

Bowlby, 1977; Bretherton, 1985). CFAs were conducted separately for two separate latent constructs, model of self and model of others, that also included the observed variables assessing views of self and others from the Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994) as well as a measure of self-esteem (Rosenberg Self-Esteem Scale; Rosenberg, 1965). Bartholomew's fourth category assessing a dismissing attachment style did not load significantly and was eliminated from the analyses. High scores on models of self indicate negative views of self whereas low scores on this construct indicate positive views of self. High scores on models of others indicate positive views of others whereas low scores on this construct indicate negative views of others.

The CFA investigating the hypothesized measurement model for the latent construct of avoidance of negative affect resulted in a negative error variance, which is an impossible solution, and indicated that the observed variables did not assess a similar construct. Due to the poor fit of the data to a single underlying latent construct, the avoidance coping subscale of the WCCL, which appeared to have the greatest degree of both face validity and empirical support, was utilized in the structural model to assess avoidance of negative affect. Higher scores on this construct indicate greater use of an avoidant coping style.

Evaluation of Overall Model Fit

The following overall fit indices were examined to determine whether the observed data adequately fit the hypothesized model: Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Bentler-Bonett Normed Fit Index (NFI), and Root Mean Square Error of Approximation (RMSEA). The following guidelines were utilized to

evaluate overall goodness of fit: CFI, TLI, and NFI values greater than 0.90 indicating a good-fitting model, with a value of 1.00 indicating an ideal fit; RMSEA value less than 0.10 indicating an acceptable fit, with a value of 0.00 indicating an ideal fit (Tabachnick & Fidell, 1996). Smaller chi-square statistics indicate a better fit, with significant chi-square values indicating a poor fitting model. However, the chi-square statistic is sensitive to sample size, and inaccurate probability levels can result from a computed chi-square that is not actually distributed as chi-square due to a small sample size (Tabachnick & Fidell, 1996).

Marginal support was found for the overall model fit, with CFI=.963, NFI=.951, TLI=.954, and RMSEA=.093. The Chi-square was significant (1164; df= 286; p<.000), which does not support the overall model fit. The squared multiple correlation obtained for the primary variable of interest, suicidality, was 0.341, indicating that the model accounted for 34% of the variance in the suicidality factor. See Figure 5 and Table 3 for the standardized parameter estimates as well as squared multiple correlations for the structural model.

Post Hoc Model Modifications

Post hoc modifications were performed in an attempt to develop a more parsimonious model with a better fit (Tabachnick & Fidell, 1996). See Table 4 for the models evaluated, Chi-square value, RMSEA, CFI, and Chi-square difference tests. Based upon modification indices obtained through the AMOS software as well as theoretical relevance, two paths were added (from avoidance and anxiety) to predict interpersonal stress. Although these pathways were not originally hypothesized, a relationship between these constructs is consistent with the literature, as perceptions of

70

interpersonal stress may be influenced by the dynamic constructs of avoidance and anxiety. These additional pathways resulted in an improved model fit.

Next, the variable representing separation/individuation and all corresponding pathways were deleted, as this variable was not significantly predictive of any variable. This revision towards a more parsimonious model resulted in a better fitting model. Similarly, an improvement in the overall model fit resulted from the deletion of the interpersonal stress variable and all corresponding pathways, as interpersonal stress was not significantly predictive of any variable. An improved model fit did not result from the deletion of an additional nonsignificant parameter (avoidance predicting suicidality), and therefore, this parameter was retained.

The final model is represented in Figure 8 and represents a more parsimonious, better fitting model than the one originally hypothesized. Adequate support was found for overall model fit (CFI=.979, NFI=.970, TLI=.973, RMSEA=.079), and the model accounted for 35% of the variance in self-reported suicidality. The relationships among variables are addressed in more detail below within the discussion of specific hypotheses.

<u>Evaluation of Specific Hypotheses</u>

<u>Hypothesis 1</u>

A direct, significant positive relationship was expected between early family risk factors and insecure attachment (Path A, Figure 1). However, as discovered during the investigation of the measurement model, there did not exist a unitary construct of "attachment," but rather the observed variables appeared to capture the underlying components of "models of self" and "models of others." As a result, this hypothesized relationship could not be investigated directly.

71

However, as the literature suggests that family risk would be negatively related to the positive models of self and others characteristic of a secure attachment style (e.g., Bartholomew, 1990; Bretherton, 1992), this post-hoc hypothesis was investigated. In fact, family risk was significantly negatively related to positive models of others (standardized regression weight=-.454, $p<.000$) and significantly related to negative views of self (standardized regression weight=.435, $z=$, $p<.000$). This indicates that high levels of family risk, including family violence and parental rejection, were more likely to be associated with negative views of self and negative views of others, models that are characteristic of insecure attachment styles.

Hypotheses 2 and 3

Attachment style was hypothesized to have direct, significant associations with views of self, as delineated by Bartholomew (1990; Path B). In addition, attachment style also was hypothesized to have direct, significant associations with views of others, as delineated by Bartholomew (1990; Path C). However, as discussed above, the investigation of the measurement model revealed that there did not exist a unitary factor of "attachment," but rather the observed variables appeared to capture the underlying factors of "models of self" and "models of others." As a result, these hypotheses could not be investigated.

Hypothesis 4

As hypothesized, a direct, significant positive relationship was identified between positive views of self and good separation/individuation (Path D; standardized regression weight=-.437, $p<.000$). High scores on the variable representing separation/individual indicate better separation/individuation while high scores on views of self indicate

negative self models. Therefore, the identified significant, negative relationship indicates that respondents who had negative models of self were more likely to have poor separation/individuation.

Hypothesis 5

As hypothesized, a direct, significant positive relationship was identified between positive views of others and separation/individuation (Path E; standardized regression weight=.137; p<.011). This indicates that subjects who were characterized by positive views of others were more likely to have achieved good separation/individuation from mother.

Hypothesis 6

As hypothesized, a direct positive relationship was identified between negative views of self and avoidance of negative affect (Path F; standardized regression weight=.56; p<.000). This indicates that subjects who were characterized by greater levels of avoidance of negative affect were more likely to be characterized by negative views of self. However, the direct negative relationship hypothesized to exist between positive views of others and avoidance of negative affect was not supported (Path H; standardized regression weight=-.099; p<.053). This indicates that avoidance of negative affect was not significantly predicted by views of others.

Hypothesis 7

As hypothesized, a direct, negative relationship was found between positive views of self and anxiety (Path G; standardized regression weight=.808; p<.000). High scores on views of self reflect negative self models and high scores on the anxiety measure reflect great levels of experienced anxiety. This indicates that respondents that identified

negative views of self were more likely to experience anxiety. Similarly, a direct, negative relationship was identified between positive views of others and anxiety (Path I; standardized regression weight=-.18; $p<.000$), indicating that respondents that identified negative views of others were more likely to experience anxiety.

Hypothesis 8

The direct, negative relationship hypothesized to exist between separation/individuation and depression was not supported (Path J; standardized regression weight=-.061; $p<.101$). This indicates that the degree to which separation/individuation was achieved was not related to depression.

Hypothesis 9

Similarly, the direct, negative relationship hypothesized to exist between separation/individuation and suicidality was not supported (Path K; standardized regression weight=-.075; $p<.159$). This indicates that the degree to which separation/individuation was achieved was not related to suicidality. Elimination of the variable separation/individuation and all corresponding pathways led to a more parsimonious, better fitting post hoc model.

Hypothesis 10

Although a significant relationship was identified between avoidance of negative affect and depression (Path L; standardized regression weight=.141; $p<.000$), this relationship was not in the direction hypothesized. These results indicate that those respondents who reported high levels of avoidance were more likely to report depression.

Hypothesis 11

As hypothesized, a direct, positive relationship was found between anxiety and

depression (Path N; standardized regression weight=.720; p<.000). This indicates that those respondents who reported high levels of anxiety were more likely to report depression.

Hypothesis 12

The direct, positive relationship hypothesized to exist between avoidance of negative affect and suicidality was not supported (Path M; standardized regression weight=.063; p<.271). This indicates that those individuals who reported greater levels of avoidance were not more likely to report suicidality.

Hypothesis 13

As hypothesized, a direct, positive relationship was found between anxiety and suicidality (Path O; standardized regression weight=.247; p<.013). This indicates that respondents who reported more anxiety were also more likely to report greater suicidality.

Hypothesis 14

As hypothesized, a direct, positive relationship was found between depression and suicidality (Path P; standardized regression weight=.289; p<.002). This indicates that respondents who reported more depression were also more likely to report greater suicidality.

Hypothesis 15

The direct, positive relationship hypothesized to exist between interpersonal stressors and suicidality was not supported (Path Q; standardized regression weight=.038; p<.469). This indicates that those greater levels of interpersonal stress were not associated with suicidality. Elimination of the latent construct interpersonal stressors led

to a more parsimonious, better fitting post hoc model.

Hypothesis 16

Although the two models could not be directly compared, the fit indices for the

post hoc modified model represented in Figure 8 appear to indicate a better fit than the

model previously utilized in the literature to explain adolescent suicidality represented by

Figure 2 (CFI=.946; NFI=.943; TLI=.874; Chi-square=168.54, df= 9, p<.000;

RMSEA=.224) which appears to fit poorly. In addition, the model accounted for a

slightly smaller proportion of the variance in suicidality (33%) than did the post hoc

model represented in Figure 8. See Figure 6 for the standardized parameter estimates and

squared multiple correlations for this model.

Hypothesis 17

Although the two models could not be directly compared, the fit indices for the

post hoc modified model represented in Figure 8 appear to indicate a better fit than the

model previously utilized in the literature to explain adolescent suicidality represented by

Figure 3 (CFI=.985; NFI=982; TLI=.968; Chi-square=73.751, df= 13, p<.000;

RMSEA=.115). Furthermore, the model represented in Figure 3 only accounted for 5%

of the variance in suicidality. See Figure 7 for the standardized parameter estimates and

squared multiple correlations for this model.

DISCUSSION

The present investigation presented a theoretical model of adolescent suicidality based on attachment theory that offers a valuable alternative to models previously utilized in the literature, which frequently have relied upon main effects between variables such as risk factors and outcomes. The findings are consistent with the role of attachment cognitions as mechanisms by which previously associated family-related risk factors may impact the development of suicidality.

Consistent with prior research, the present investigation found that no risk factor was necessary or sufficient for the development of suicidality. Rather, as hypothesized, the results of this study are consistent with a "common developmental pathway" (Adam, 1994, p. 276) by which familial risk factors, such as family violence and parental rejection, may produce insecure attachment patterns and their associated internal working models and dynamic characteristics. In fact, the present investigation addresses a significant weakness of prior research by offering the internal working models of attachment theory as potential mechanisms by which environmental events can affect outcomes, such as suicidality.

The present investigation found that the post hoc modified model, which accounted for internal representations and dynamic responses, successfully accounted for 35% of the variance in adolescent suicidality and adequately fit the observed data. Overall, the results of this study suggest that attachment theory provides an important framework from which to address the etiology of suicidality. The results regarding individual constructs and pathways (Figure 1), as well as alternative models (Figures 2

and 3), are discussed in more detail below. For those constructs that are not discussed in the following section, the observed variables adequately loaded on the hypothesized latent construct, and the proposed measurement model did not require modification.

<div align="center">Proposed Constructs</div>

Family Characteristics

The construct "family characteristics" was designed to capture attributes of the family environment that the literature has associated with the development of child attachment to the caregiver (e.g., Ainsworth, et al., 1978; Cassidy & Berlin, 1994). This construct initially included five aspects of the family environment: parental psychopathology, family violence, absence of parental warmth, parental rejection, and parental love. However, CFA revealed that parental psychopathology may not be accessing a similar underlying construct, as the other variables appeared to be measuring perceived parental love/warmth versus rejection. Although the literature suggests that parental psychopathology can significantly impact parental responsiveness, availability, and warmth (e.g., Cassidy & Berlin, 1994), the statistically significant but low order correlation found in the present investigation between parental psychopathology and the variable parental warmth (r=.2979; p<.000) suggests that there does exist some variability in this relationship. As a result, parental psychopathology was excluded from the construct "family characteristics."

Attachment, Models of Self and Models of Others

Rather than capturing a single "attachment" construct, the results of the analyses revealed two latent constructs that appeared to represent the underlying models of self and others that the literature suggests constitute attachment style (e.g., Bartholomew,

1990; Bowlby, 1977, Bretherton, 1985). Attachment theory proposes that an attachment style results from the formation of internal working models of the self and of attachment figures, which are constructed from past experiences and serve the function of guiding future behavior in response to predictions of the behavior of others (Bowlby, 1988; Bretherton, 1985).

Given the present investigation's reliance upon self-report measures, it may not have been possible to access "attachment" independent of the underlying models of self and other. In fact, an extensive literature relies upon interview data to classify individuals into attachment categories (e.g., Main et al., 1985), with the quality of the responses regarding early relationships providing invaluable information that cannot be obtained merely from the content of the responses. The attachment literature also suggests that models of self and others provide the mechanisms by which attachment status influences levels of psychological distress (e.g., Kenny et al., 1993; Roberts et al., 1996). For example, Roberts et al. (1996) found that self-concept variables primarily accounted for the effect of attachment on depression. It therefore appears that the underlying models of self and others provide important information regarding the impact of attachment.

Although the attachment literature historically has relied upon three attachment categories (e.g., Ainsworth, et al., 1978), Bartholomew (1990) argues that the consideration of positive and negative views of self and others results in two subclassifications of avoidant attachment, dismissing and fearful. Sufficient statistical support for inclusion of Bartholomew's fourth attachment category, a dismissing avoidant attachment style, was not found, and this variable was eliminated from the present analyses.

Avoidance of Negative Affect

Investigation of the hypothesized four-factor model of "avoidance of negative affect" that incorporated variables from both the Defense Mechanisms Inventory (DMI; Ihilevich & Gleser, 1986) and the Ways of Coping Checklist (WCCL; Vitaliano, et al., 1985) revealed that the observed variables in the present investigation did not assess a similar construct. As a result, the avoidance coping subscale of the WCCL, which appeared to have the greatest degree of both face validity (e.g., "Tried to forget the whole thing" and "I refused to believe it had happened") and empirical support regarding the intended construct (e.g., Vitaliano et al., 1985), was utilized in the structural model to assess avoidance of negative affect. However, it remains unclear whether self-report measures can sufficiently access avoidance of negative affect, as this construct is intended to measure an unconscious coping style, and external sources of information may be necessary (e.g., Kobak & Sceery, 1988).

Proposed and Post Hoc Models

The construct modifications discussed above were incorporated into the model proposed in Figure 1, and SEM was utilized to investigate the overall fit of the hypothesized model. Marginal support was found for the overall model fit, and the model accounted for 34% of the variance in the primary variable of interest, suicidality.

Post hoc modifications of the original model (Figure 1) resulted in a more parsimonious model with adequate fit (Figure 8). Although two paths initially were added (from avoidance and anxiety) to predict interpersonal stress, these paths ultimately were eliminated when the non-significant pathway from interpersonal stress to suicidality was deleted. In addition, the variable separation/individuation and the corresponding

pathways were deleted due to this construct's lack of predictive value. This post hoc

model accounted for 35% of the variance in the primary variable of interest, suicidality

(see Figure 8).

Overall, these results provide support for the attachment paradigm as a useful

framework for understanding the relationship between disturbances in the parent-child

relationship and the development of suicidality (Adam, 1994). Furthermore, these

findings are consistent with a "common developmental pathway" (Adam, 1994, p. 276)

through which familial risk factors, such as those previously associated with adolescent

suicidality, may produce similar insecure attachment patterns.

<div align="center">Proposed Pathways</div>

The hypothesized relationship between family risk and attachment style could not

be investigated directly in the current study due to the lack of a unitary "attachment"

construct discussed above. However, based upon the literature (e.g., Bartholomew, 1990;

Bretherton, 1992), the relationship between family risk and negative models of self/others

was investigated post-hoc. The results of this analysis confirmed that negative models of

self and others, which are characteristic of insecure attachment styles, are more likely to

be associated with family risk factors, such as family violence and parental rejection.

This finding is consistent with the attachment literature, which finds that a lack of

parental availability and responsiveness is related to the development of insecure

attachment styles (e.g., Cassidy & Berlin, 1994). In addition, the present study

established the importance of incorporating models of self and others rather than relying

exclusively upon one or the other (e.g., Hammen et al., 1995; Kenny et al., 1993; Roberts

et al., 1996).

Furthermore, the identified relationship between family risk and models of self/others provided important information regarding potential mechanisms underlying previously identified relationships between risk factors, such as perceived family stress and lack of support, and suicidality (e.g., Asarnow, 1992; Marttunen et al., 1993; Nielsen et al., 1991). Additionally, internal models of self/others take into consideration differences in the way that events are understood. In this way, the present investigation's use of attachment cognitions to account for the way that traumatic events have been understood and resolved appears to have successfully provided important information regarding the relationship between family risk and psychopathology that could not be provided by recording the mere occurrence of an event (Adam et al., 1996).

Although internal models of self/others provided important information regarding mechanisms by which family risk factors may impact the development of adolescent suicidality and depression, one weakness of the present investigation is that it is not clear what protects some individuals from developing negative models of self or other, despite being placed at risk. The inclusion of additional potential risk and protective factors may provide important information regarding the relationship between family risk and the resulting internal models of self and others. In addition, investigation of the impact of gender on the relationship between risk and specific combinations of positive/negative models of self/others may provide important additional information (Adam et al., 1996). Furthermore, a longitudinal study beginning prenatally could provide important information regarding these developmental pathways that could not be provided by this cross-sectional study.

As hypothesized, significant relationships were found between good separation/individuation and positive models of both self and others. This finding suggests that attachment theory may be a useful framework from which to consider previously identified relationships between separation/individuation and other factors, such as self-esteem, emotional outlook on life, and personal and academic adjustment (e.g., Damon, 1983; Hoffman, 1984). However, no support was found regarding the hypothesized role of poor separation/individuation as a stressor for adolescents, as separation/individuation was not significantly related to depression or suicidality. In addition, the elimination of this variable led to a more parsimonious, better fitting model.

This finding is inconsistent with prior research that found a relationship between poor separation/individuation and adolescent suicidality (e.g., Meyer & Phillips, 1990). It may be that the present investigation did not sufficiently assess this developmental task. Hoffman (1984) argues that adolescent separation/individuation consists of four components of independence from parents: functional, attitudinal, emotional, and conflictual; however, the current study only utilized a single aspect of separation/individuation, conflictual independence. Another possibility is that, for this college-age sample of adolescents, the task of separation/individuation was no longer salient enough to significantly impact the development of psychopathology. Perhaps a study that investigates the impact of separation/individuation in a younger sample of adolescents may find that difficulty with resolution of this developmental task is more strongly related to suicidality.

The current investigation also proposed that views of self and others were related to avoidance of negative affect and interpersonal anxiety (Shaver & Clark, 1996) and that

these dynamic characteristics would influence the manifestation of both suicidality and depression (e.g., Borst & Noam, 1993; Van der Kolk et al., 1991). The results revealed that negative views of self were strongly related to higher levels of anxiety (standardized regression weight= .81). This finding is consistent with attachment theory and Figure 4, as individuals characterized by a secure attachment (positive views of self/others) frequently are described as having high self-esteem and low levels of interpersonal anxiety (e.g., Shaver & Clark, 1996), whereas individuals characterized by preoccupied/anxious ambivalent (negative views of self/positive views of others) or fearful avoidant (negative views of self/others) insecure attachment styles are described as having low self-esteem and high levels of interpersonal anxiety (Bartholomew, 1990; Feeney et al., 1994; Shaver & Clark, 1996). Similarly, a negative view of self was moderately related to avoidance (standardized regression weight= .56), which also is consistent with Figure 4; although negative views of self are characteristic of both preoccupied/anxious ambivalent and fearful avoidant insecure attachment styles, avoidance of negative affect is hypothesized to vary from low to high with these attachment categories, respectively (e.g., Shaver & Clark, 1996; see Figure 4).

In addition, as hypothesized, anxiety was strongly predictive of both depression and suicidality. This finding is consistent with previous research that has identified strong rates of comorbidity between disorders such as depression and anxiety (e.g., Goodyer, Herbert, Secher, & Pearson, 1997; Kendall, Brady, & Verduin, 2001). Furthermore, this suggests that those attachment categories characterized by high levels of anxiety (i.e., anxious ambivalent and fearful avoidant attachment) are more likely to experience both depression and suicidality (e.g., Shaver & Clark, 1996; see Figure 4).

Overall, these findings are consistent with the hypothesized role of attachment cognitions in the etiology of anxiety, depression, and suicidality. However, the cross-sectional design of the present investigation, as well as the use of SEM, precluded any definitive conclusions regarding developmental processes as well as causal relationships among variables.

Negative views of others were mildly related to anxiety (standardized regression weight=.18), a finding that also is consistent with Figure 4; although negative views of other are characteristic of both dismissing avoidant and fearful avoidant insecure attachment styles, interpersonal anxiety is hypothesized to vary from low to high with these attachment categories, respectively (e.g., Shaver & Clark, 1996; see Figure 4). However, the results of the present investigation did not support a relationship between negative views of others and avoidance of negative affect, a finding that is not consistent with the hypothesized relationships represented in Figure 4. In addition, not only was the statistically significant relationship found between avoidance of negative affect and depression (standardized regression weight=.14) not in the direction hypothesized, with those subjects who reported avoidance of negative affect being more likely to report greater levels of depression, but avoidance of negative affect was not related to suicidality.

One possible explanation for the lack of predictive value of the construct "avoidance of negative affect" in the present investigation may be the previously discussed measurement model difficulties experienced with this construct. In fact, it may be that the hypothesized unconscious coping mechanism of "avoidance" can not be accessed with self-report instruments (e.g., Kobak & Sceery, 1988). Another possibility

85

is that models of others and the hypothesized resulting levels of avoidance of negative affect (see Figure 4) may be more strongly related to externalizing behavior problems while models of self and the associated levels of anxiety may be more strongly related to internalizing behavior problems such as those discussed in the present investigation. This would be consistent with Kobak and Sceery's (1988) argument that different styles of affect regulation result from attachment status as well as with several previous studies that have found depression and suicidality to be associated specifically with anxious/ambivalent and fearful avoidant attachment styles (e.g., Adam et al., 1996; Carnelley et al., 1994; Kobak & Sceery, 1988).

Furthermore, Carnelley et al.(1994) proposed that specific attachment patterns may be related to specific psychopathologies, with a sample of individuals exhibiting symptoms other than depression, such as antisocial behavior, perhaps evidencing a predominantly dismissing, rather than fearful, avoidant attachment style. In fact, Adam et al. (1996) found that a dismissing attachment style was most characteristic of male adolescents and a secure attachment was most characteristic of female adolescents who were receiving psychiatric treatment but did not have a history of suicidality. Perhaps important information regarding the mechanisms underlying the well-established relationship between attributions of hostile intent to others and children's engagement in aggressive behavior towards others (e.g., Dodge, Price, Bachorowski, & Newman, 1990) can be obtained through the application of attachment theory and the associated models of others to the etiology of externalizing behavior problems.

The results of the current study revealed, as predicted, that the presence of depression was neither a necessary nor sufficient condition for the presence of suicidality

(standardized regression weight=.29). This is consistent with Adam et al.'s (1996) argument that attachment classifications provide more predictive information regarding suicidality than does a single form of psychopathology, such as depression. As hypothesized, it appears that depression may be associated with suicidality due to similar developmental influences, with the development of depression following many of the same pathways as the development of suicidality.

Although the most common precipitants associated with suicide during adolescence are interpersonal conflict and loss (e.g., Henry et al., 1993; Lester, 1994), the inclusion of interpersonal stressors in this model of adolescent suicidality did not provide significant additional information, and elimination of this variable resulted in a more parsimonious, better fitting model. It may be that the construct of "stressors" was represented inadequately in the current investigation; not only did the cross sectional design of the present study preclude the investigation of the impact of stress over time, but numerous potential stressors, such as sexual identity and religiosity issues, were not included in the model.

In addition, it may be that the model utilized in the present investigation did not adequately represent the relationship between interpersonal loss and suicidality. As it had been proposed that the manifestation of adolescent suicidality in response to a significant loss parallels the separation reactions of insecure children, perhaps a model incorporating the interaction between models of self/others and interpersonal stress would have more accurately represented the mechanisms by which significant losses during adolescence result in suicidality for some adolescents but not for others. This would be consistent with the hypothesized role of internal working models as the mechanism by which

qualitatively different internal experiences of the same external events are generated for different individuals. In fact, attachment characteristics have been found to moderate the effects of interpersonal stress on general psychological outcome, with those individuals characterized by insecure attachment evidencing the greatest symptomatology upon exposure to stress (Hammen et al., 1995).

Alternative models

Although the post hoc model could not be directly compared to the alternative models, the fit indices for the post hoc modified model (Figure 8) indicate an adequate fit while the fit indices for the models previously utilized in the literature to explain adolescent suicidality (see Figures 6 and 7) reveal relatively poor fit. In addition, the present investigation's model accounted for a greater proportion of the variance in suicidality than did the models represented in Figure 2 (33%) or Figure 3 (5%) (see also Figures 6 and 7).

As hypothesized, greater explanatory power for the prediction of suicidality appears to be provided by a model that does not simply rely upon associated factors, such as depression or family characteristics, but rather incorporates developmental and dynamic constructs to address the mechanisms underlying the development of depression and suicidality during adolescence. It appears that a model which accounts for the way in which events have been understood and resolved more accurately represents the relationship between family risk factors and adolescent suicidality than do models which merely document the occurrence of risk factors or the presence of associated factors, such as depression (e.g., Adam et al., 1996).

Limitations of the Current Study and Directions for Future Research

As the current study relied upon measures of suicidal thoughts, it remains unclear the extent to which the identified significant relationships among variables remain meaningful when suicidal behavior is utilized as the primary variable of interest. Similarly, the use of a sample comprised entirely of college students necessarily limited the generalizability of these findings to more severely impaired, psychiatric populations of suicidal adolescents. Future studies that utilize samples more representative of the spectrum of potential suicidality, including psychiatric inpatient subjects hospitalized for suicidal behavior, will provide further information regarding the degree to which similar mechanisms operate with regard to suicidal behavior.

In addition, the sample utilized in the present investigation, which disproportionately consisted of women (78%) and Caucasians (85%) between the ages of eighteen and twenty-five, potentially limits the generalizability of these findings to males and other age-groups, as well as to the ethnic/racial backgrounds that were inadequately represented in this sample (8% African-American; 3% Asian American; 3% Hispanic/Latino; 0.5% American Indian; 2% Multiracial). Future studies that investigate these relationships in more diverse populations not only will provide important information regarding the role of attachment in the etiology of suicidality in the general population but also may reveal differential relationships among these variables in various populations (e.g., Adam et al., 1996; Shaver & Clark, 1996).

For example, despite a disproportionately small sample of male subjects (n=77; 22%), post-hoc investigation of the relationship between attachment and gender revealed that a dismissing avoidant attachment style (attachs4) was significantly correlated with

male gender (r=.129; p<.016), a finding that is consistent with prior research (e.g., Shaver & Clark, 1996). It remains unclear whether the measure of a dismissing avoidant attachment style (attachs4), which did not load significantly during the investigation of the measurement model within this largely female (78%) sample, would have in fact contributed significant information in a more representative sample or during separate analyses of the model for males and females. In addition, ratings indicating that interpersonal relationships and approval from others are not of primary importance were significantly related to male gender (relat2nd: r=.186, p<.000; approval: r=-.139, p<.012), as was better separation/individuation (mompsi: r=.126, p<.019). Furthermore, post-hoc analyses revealed that the dynamic characteristics of anxiety and avoidance were significantly related to gender, with higher levels of these characteristics associated with female gender (bsianx: r=.-.130, p<.016; avoidanc: r= -.111, p<.038). These results further suggest that separate models for males and females may be necessary to more accurately capture salient stressors and developmental pathways.

As discussed previously, the cross-sectional design of the current investigation, as well as the use of SEM, precluded an investigation of the development of internal working models of self and others as well as the drawing of definitive conclusions regarding causal relationships among variables. A longitudinal investigation, beginning prenatally, would provide important information regarding developmental processes. Additionally, this would allow for the investigation of the impact of additional risk and protective factors as well as the potential protective function of a secure attachment given exposure to risk over time (e.g., Papini & Roggman, 1992). However, it should be noted that SEM, while valuable for simultaneously investigating complex variable and factor

relationships, can only indicate whether the hypothesized model is compatible with the observed data and can not eliminate the possibility of alternative models, the existence of which must always be considered (Tabachnick & Fidell, 1996).

Throughout the previous discussion of several hypothesized constructs, it was noted that the present investigation's exclusive reliance upon self-report data may have limited this study's ability to accurately capture various theoretical constructs. For example, investigation of the proposed measurement model for the construct "avoidance of negative affect" revealed that the various variables that had been utilized in an attempt to capture this underlying construct did not appear to be accessing similar constructs. As a result, it remained unclear whether the construct of avoidance utilized in the investigation of the structural model adequately captured the intended dynamic characteristic of "avoidance of negative affect," which necessarily limited the extent to which conclusions could be drawn regarding the model parameters related to this variable. It will be important for future studies to utilize additional sources of information, including interview data (e.g., AAI; Main et al., 1985) and external sources of information (such as peer ratings; e.g., Kobak & Sceery, 1988), to gain better access to hypothesized, unconscious mechanisms.

Overall, the results of this study support the usefulness of attachment theory as a heuristic with which to understand the etiology of suicidality in adolescents. In addition, the developmental pathways represented in the proposed model accounted for a significant amount of the variance in measures of both anxiety (76%) and depression (68%), suggesting that the etiology of these internalizing symptoms may share similar developmental pathways. Furthermore, as discussed more extensively above, the

application of attachment theory to other problem behaviors and manifestations of

psychological distress, such as externalizing behavior disorders, also may provide

important information regarding the mechanisms underlying previously identified

relationships between variables, such as attributions of hostile intent to others and

children's engagement in aggressive behavior towards others (e.g., Dodge et al., 1990).

Future studies based in attachment theory that investigate "common developmental

pathways" (Adam, 1994, p. 276) leading to a variety of psychopathologies not only may

provide important information regarding the etiology of these disorders but also may

assist in prevention and intervention efforts.

APPENDICES

APPENDIX A

TABLES

Table 1: Descriptive Statistics for Model Variables (n=354)

Latent Construct	Observed Variables (variable name)	M	SD	Min	Max
Family Risk	*High scores = greater familial risk/rejection*				
	Absence of parental warmth (parwarm)	12.2	4.5	6	30
	Family violence (famviol)	1.5	2.0	0	11
	Parental love (lovedpa)	25.1	4.7	9	30
	Parental rejection (rejectpa)	183	6.9	11	42
Models of Others	*High scores = positive view of others*				
	Secure attachment (attachs1)	4.8	1.7	1	7
	Avoidant attachment (attachs2)	4.3	2.0	1	7
	Discomfort with closeness (discomft)	32.8	9.0	11	58
	Confidence in other (confiden)	35.1	5.7	14	48
	Relationships as secondary (relat2nd)	15.8	4.4	7	27
Models of Self	*High scores = negative view of self*				
	Anxious/ambivalent attachment (attachs3)	3.2	1.8	1	7
	Low self-esteem (esteem)	17.9	5.9	10	40
	Need for approval (approval)	21.8	6.1	7	39
	Preoccupation with relationships (preoccup)	28.4	6.8	12	46
Anxiety	*High scores = greater anxiety*				
	Trait anxiety (traitanx)	40.1	11.1	20	77
	State anxiety (stateanx)	36.4	11.3	20	73
	Anxiety symptoms (bsianx)	.73	.76	0	4.33
Avoidance of Negative Affect	*High scores = greater avoidance*				
	Avoidant coping style (avoidanc)	14.5	6.7	0	33
Separation/ Individuation	*High scores=better separation/individuation*				
	Conflictual independence (mompsi)	78.2	16.4	26	100
Depression	*High scores = greater depression*				
	Depression (depress)	8.5	6.6	0	33
Interpersonal Stress	*High scores = greater stress*				
	General social mistreatment stress (stressmt)	11.0	3.7	6	23
	Total loss of support past year (totlloss)	4.1	3.3	0	13
	Friendship problems stress (stressfp)	5.8	2.1	3	12
	Romantic problems stress (stressrm)	6.5	2.7	3	12
Suicidality	*High scores = greater suicidality*				
	Total suicidality during past month (asiqtotl)	12.6	14.8	0	72
	Suicidality during past year (suicyr)	12.1	4.5	10	33
	Suicidality during the lifetime (suiclife)	15.5	7.7	10	47

Table 2

Standardized Maximum Likelihood Estimates of Measurement Model Parameters

Latent Construct	Observed Variables (variable name)	Standardized parameter estimate	p	Squared Multiple Correlation
Family Risk	*High scores=greater familial risk/rejection*			
	Absence of parental warmth (parwarm)	.80	.000	.64
	Family violence (famviol)	.49	.000	.24
	Parental love (lovedpa)	-.89	.000	.78
	Parental rejection (rejectpa)	.86	.000	.73
Models of Others	*High scores = positive view of others*			
	Secure attachment (attachs1)	.69	.000	.48
	Avoidant attachment (attachs2)	-.62	.000	.39
	Discomfort with closeness (discomft)	-.86	.000	.73
	Confidence in other (confiden)	.74	.000	.55
	Relationships as secondary (relat2nd)	-.48	.000	.23
Models of Self	*High scores = negative view of self*			
	Anxious/ambivalent attachment (attachs3)	.46	.000	.22
	Low self-esteem (esteem)	.71	.000	.50
	Need for approval (approval)	.78	.000	.60
	Preoccupation with relationships (preoccup)	.71	.000	.51
Anxiety	*High scores = greater anxiety*			
	Trait anxiety (traitanx)	.93	.000	.86
	State anxiety (stateanx)	.74	.000	.54
	Anxiety symptoms (bsianx)	.63	.000	.40
Interpersonal Stress	*High scores = greater stress*			
	General social mistreatment stress (stressmt)	.72	.000	.52
	Total loss of support past year (totlloss)	.43	.000	.19
	Friendship problems stress (stressfp)	.83	.000	.70
	Romantic problems stress (stressrm)	.51	.000	.26
Suicidality	*High scores = greater suicidality*			
	Total suicidality during past month (asiqtotl)	.90	.000	.82
	Suicidality during past year (suicyr)	.84	.000	.71
	Suicidality during the lifetime (suiclife)	.75	.000	.56

Table 3
Standardized Maximum Likelihood Estimates of Structural Model Parameters

Variable Pathway		Standardized parameter estimate	p	Squared Multiple Correlation
From	To			
Family Risk				
	Models of others	-.454	.000	
	Models of self	.435	.000	
Models of Others				.207
	Anxiety	-.176	.000	
	Avoidance	-.099	.053	
	Separation/Individuation	.137	.011	
Models of Self				.189
	Anxiety	.808	.000	
	Avoidance	.557	.000	
	Separation/Individuation	-.437	.000	
Avoidance	.			.342
	Depression	.141	.000	
	Suicidality	.063	.271	
Anxiety				.739
	Depression	.720	.000	
	Suicidality	.247	.013	
Separation/ Individuation				.233
	Depression	-.061	.101	
	Suicidality	-.075	.159	
Depression				.684
	Suicidality	.289	.002	.26
Interpersonal Stress				
	Suicidality	.038	.469	

Table 4: Comparison of Post Hoc Nested Models

Model	X^2	df	RMSEA	CFI	ΔX^2 p-value
1) Hypothesized Model	1164	286	.093	.963	
2) 2 paths added- Interpersonal Stress predicted by Anxiety and Avoidance	940	284	.081	.972	.001
3) Separation/Individuation variable and corresponding paths deleted	821	263	.078	.975	.001
4) Interpersonal stress variable and corresponding paths deleted	578	180	.079	.979	.001
5) Deletion of nonsignificant parameter- Suicidality predicted by avoidance	579	181	.079	.979	ns

APPENDIX B

FIGURES

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Figure 1

Model of the Etiology of Adolescent Suicidality
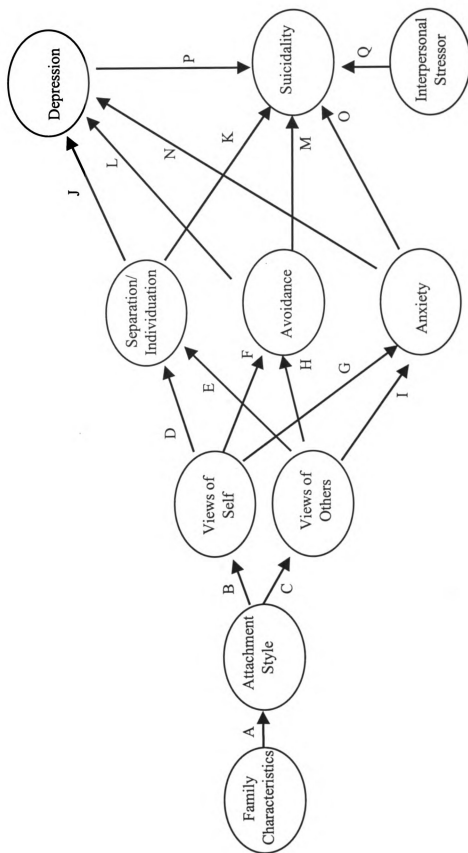
Figure 2
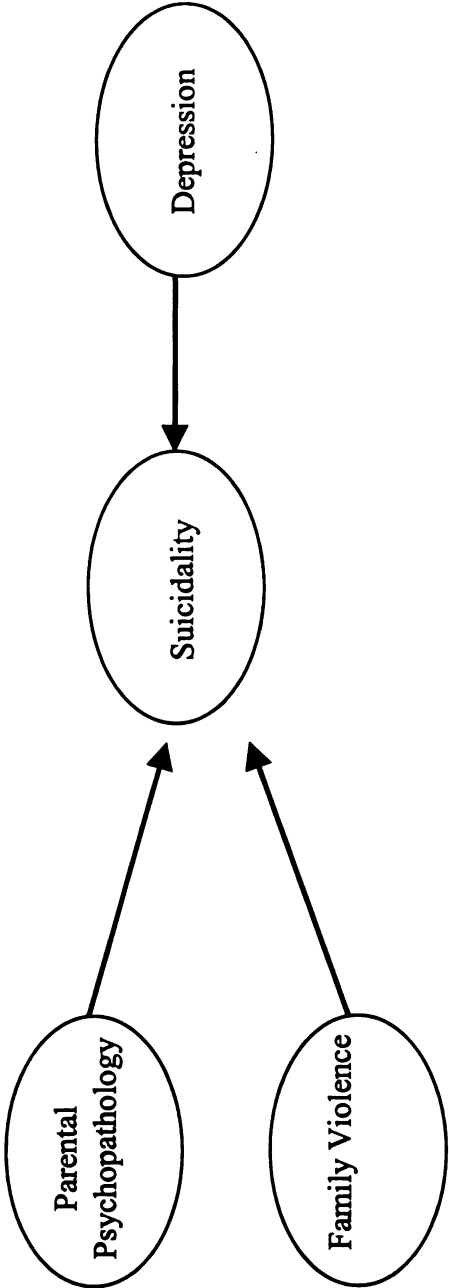
Figure 3

Example of Attachment Theory Model Previously Utilized to Explain Adolescent Suicidality
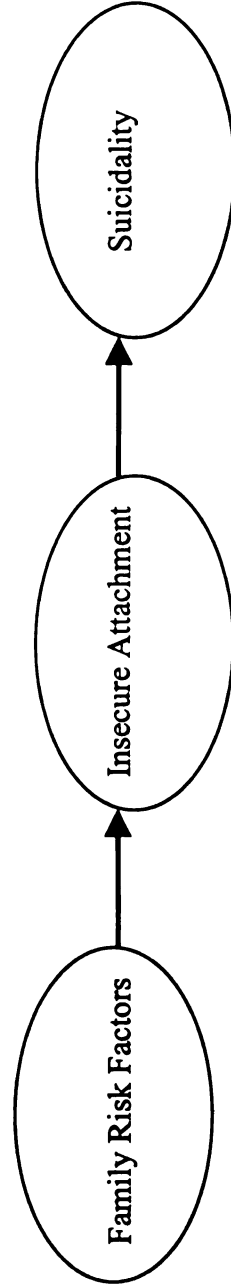
Figure 4

Intersection of Models of Self and Others, Attachment and Individuation, and Resulting Dynamic Characteristics[1]

ATTACHMENT
Model of Self

	Positive	Negative	
	secure attachment	pre-occupied/ anxious ambivalent attachment	Positive
	I	II	Model of Other
	dismissing avoidant attachment	fearful avoidant attachment	Negative
	III	IV	

AVOIDANCE OF NEGATIVE AFFECT

low ———— high

INDIVIDUATION — DETACHMENT

DE-INDIVIDUATION

INTERPERSONAL ANXIETY

low ———— high
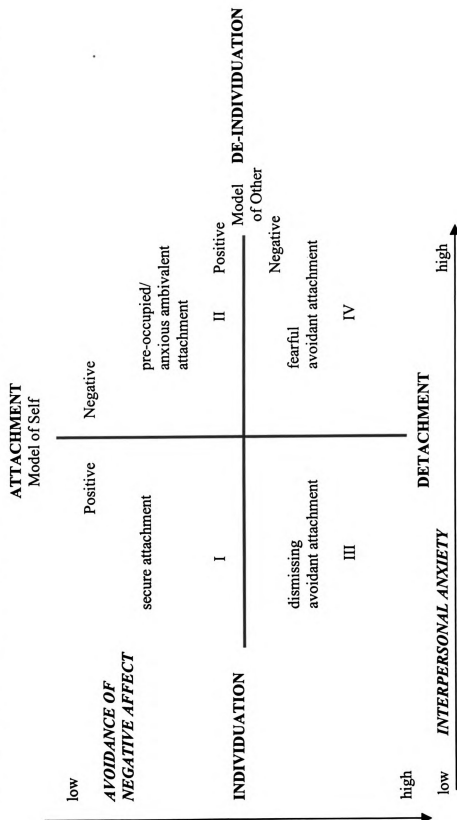
[1] Adapted from models proposed by Kaplan (1988), Bartholomew (1990), and Shaver & Clark (1996).

Figure 5- Structural Model of the Etiology of Adolescent Suicidality: Standardized
parameter estimates; squared multiple correlations in bold italics (total variance)
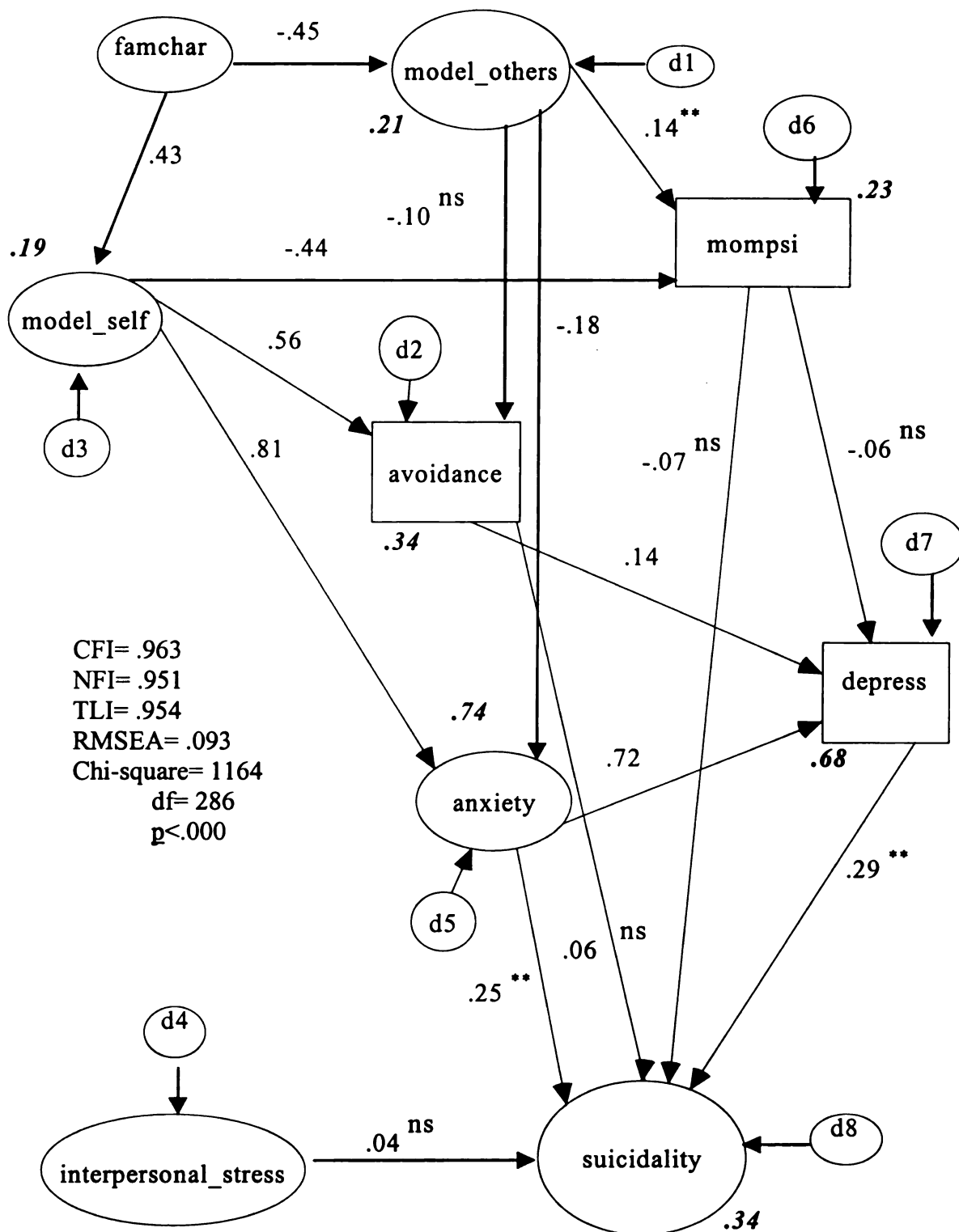
CFI= .963
NFI= .951
TLI= .954
RMSEA= .093
Chi-square= 1164
df= 286
p<.000

All pathways p<.001 unless otherwise indicated
*p<.05   **p<.01   ns= not significant

104

Figure 6: Standardized parameter estimates for alternative model proposed in Figure 2 squared multiple correlations in bold italics (total variance accounted for)

CFI= .946
NFI= .943
TLI= .874
RMSEA= .224
Chi-square= 168.54
df= 9
p<.000
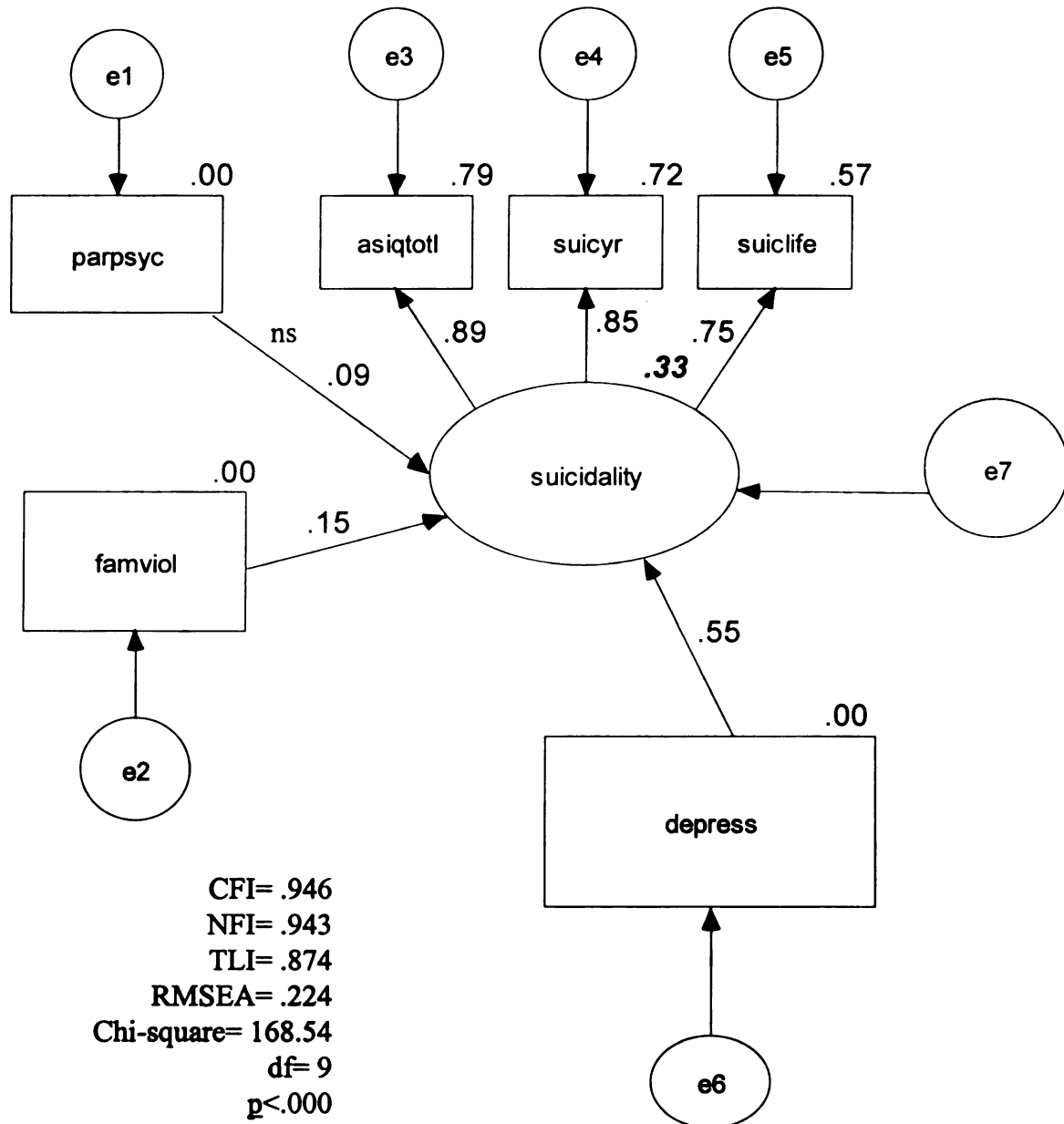
All pathways significant at p<.001 unless otherwise indicated

Figure 7: Standardized parameter estimates for alternative model proposed in Figure 3, squared multiple correlations in bold italics (total variance accounted for)

CFI= .985
NFI= .982
TLI= .968
RMSEA= .115
Chi-square= 73.75
df= 13
p<.000

All pathways significant at p<.001 unless otherwise indicated

*p<.05   **p<.01   ns= not significant

106
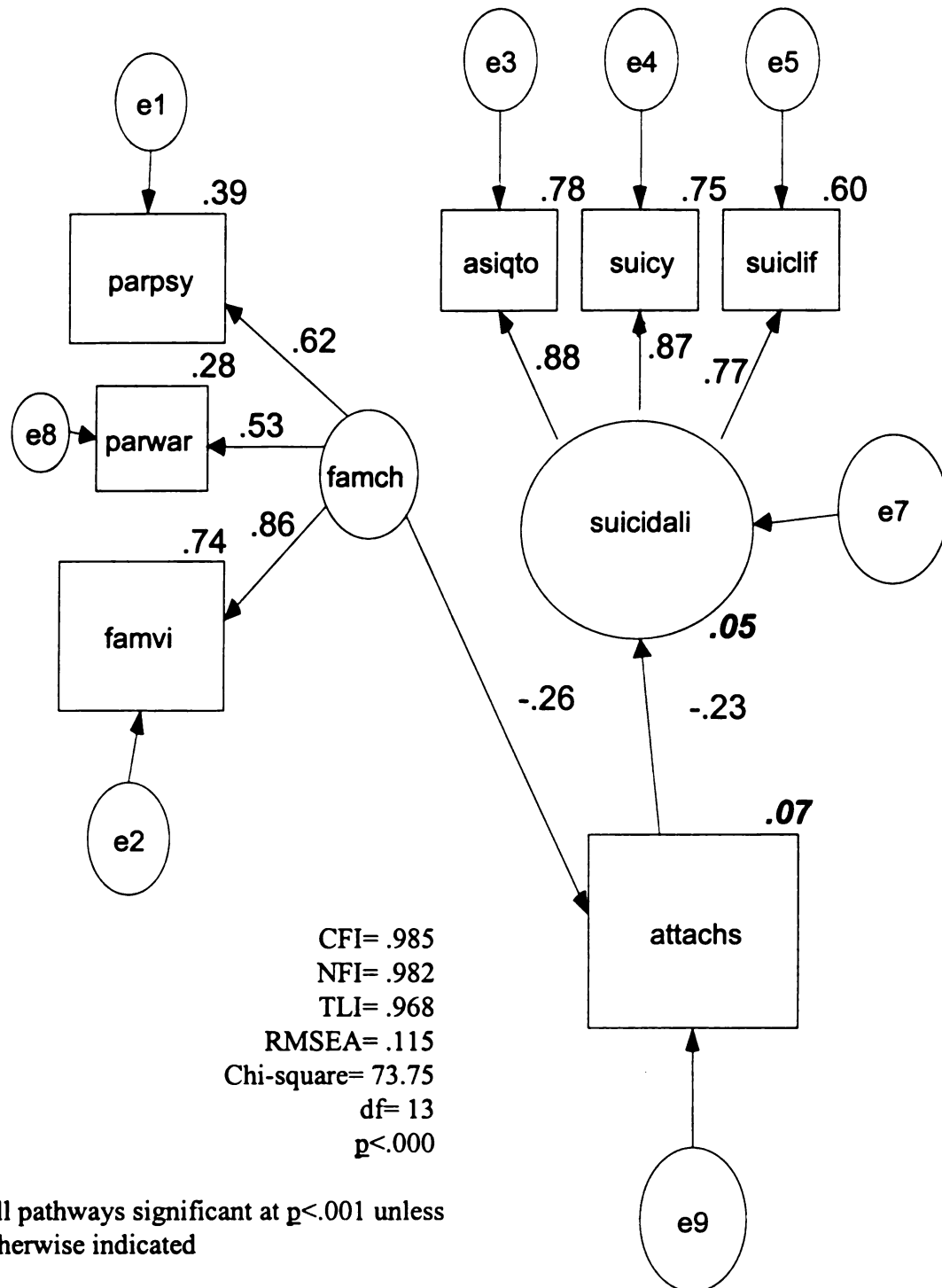
Figure 8- Final Post Hoc Model of the Etiology of Adolescent Suicidality: Standardized parameter estimates with squared multiple correlations in bold italics (total variance accounted for)

CFI= .979
NFI= .970
TLI= .973
RMSEA= .079
Chi-square= 578.51
df= 180
p<.000

All pathways p<.001 unless otherwise indicated
*p<.05   **p<.01   ns= not significant
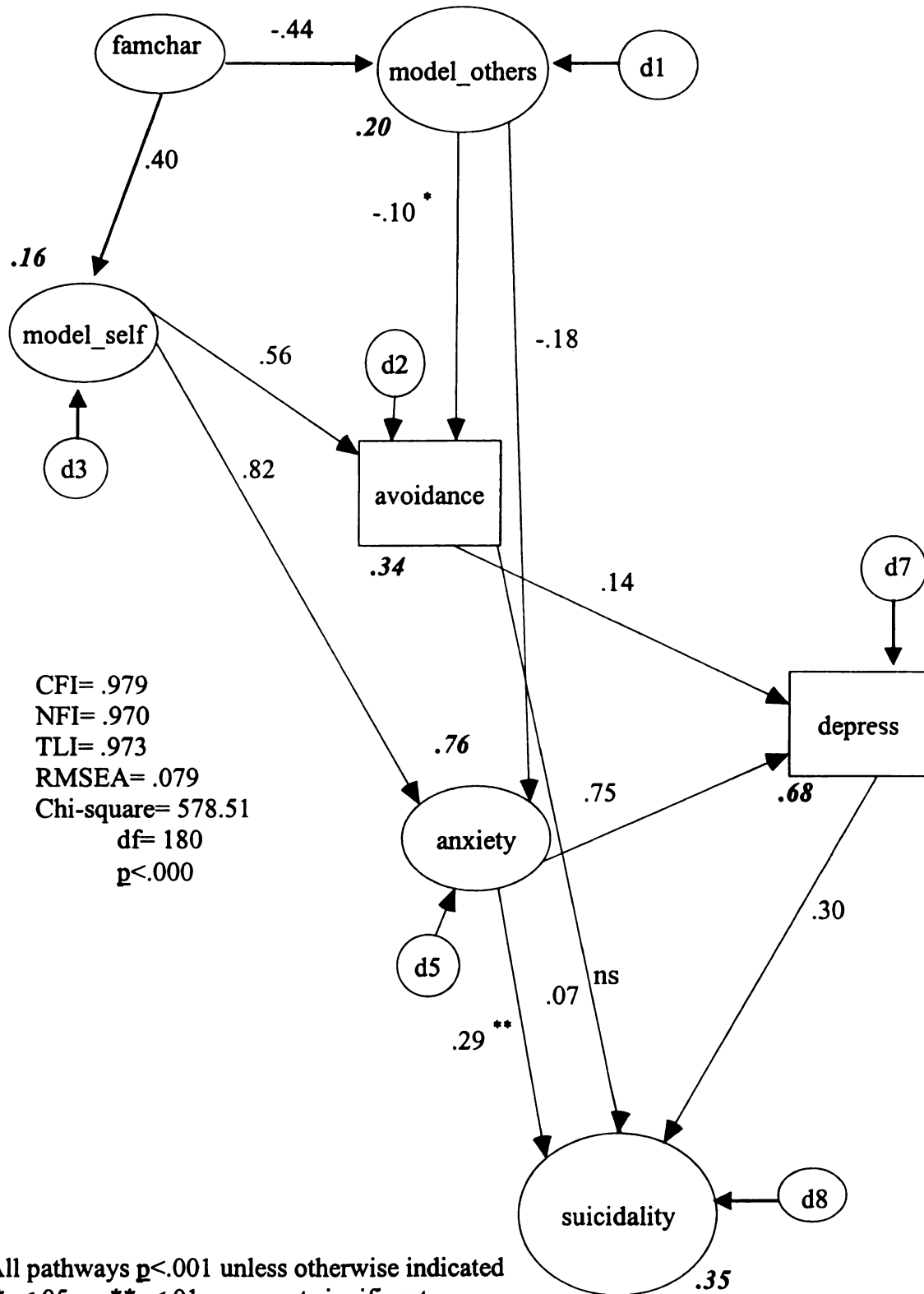
APPENDIX C

QUESTIONNAIRE PACKET

Attachment, Relationships, and Feelings

This questionnaire packet contains questions about how you have been feeling recently, events that have happened to you, your current relationships with others, and your memories of your childhood. This will take a total of approximately two hours.

In order to assist in keeping all information strictly confidential, please <u>DO NOT</u> place your name or student number on the computer scoring sheets or the questionnaire packet.

Please place <u>all</u> answers to the questionnaires on the computer scoring sheets. The only exception to this is on the first questionnaire, where you will be asked to specify general information regarding parental occupation in the space provided.

PLEASE pay close attention to the question numbering as you complete this questionnaire packet. There will be reminders along the way to help you remember to make sure that the question you are answering corresponds to the appropriate space on the answer sheet.

Also, please pay attention to the time frame specified for each questionnaire (for example, some questionnaires ask about the past month, others ask about the past year).

If you have ANY questions, please do not hesitate to ask the administrator. Thank you for participating!

Demographic Questionnaire

On computer scoring sheet #1, please blacken the number that corresponds to the appropriate answer. Where necessary, write in answers in the spaces provided.

1. Your sex: 1) female   2) male

2. Your age: 1) 17   2) 18   3) 19   4) 20   5) 21

           6) 22   7) 23   8) 24   9) 25   10) Other:

                                                   specify_____

3. Your year in college: 1) freshman   2) sophomore   3) junior

                             4) senior   5) other

4. Your ethnic/racial background: 1) African-American   4) Asian-American

                                     2) Caucasian/White   5) Hispanic/Latino

                                     3) American Indian   6) Multiracial

                                                        7) Other:

                                                         specify_____

5. Father's education: 1) grades 1, 2, 3, 4, 5, or 6   *Graduate degree:*

                             2) grades 7, 8, 9, 10, 11, or 12   7) MA

                             3) some college   8) Ph.D.

                             4) AA degree   9) Law

                             5) BA/BS   10) MD

                             6) some grad school   11) Other: specify

                                                                  _____

Father's occupation: _____

                                     (Please be specific)

6. Mother's education:

1) grades 1, 2, 3, 4, 5, or 6	*Graduate degree:*
2) grades 7, 8, 9, 10, 11, or 12	7) MA
3) some college	8) Ph.D.
4) AA degree	9) Law
5) BA/BS	10) MD
6) some grad school	11) Other: specify

_____

Mother's occupation: _____
(Please be specific)

7. Parent's marital status: 1= married 2= divorced 3= separated 4= never married 5= widowed

CLOSE RELATIONSHIP QUESTIONNAIRE

This questionnaire applies to all emotionally close relationships, not just romantic ones. Following are descriptions of four general relationship styles that people often report. *You should be on #8 on computer scoring sheet #1.*

8. **Pick the single alternative that best describes you or is closest to the way** you are.

   1) It is relatively easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me.

   2) I am somewhat uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I sometimes worry that I will be hurt if I allow myself to become too close to others.

   3) I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

   4) I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have other depend on me.

Now, for *numbers 9 thru 12*, please rate (on a scale of 1 to 7) each of the four relationship styles described above according to the **extent** to which each description corresponds to your **general relationship style**.

	Not at all like me			Somewhat like me			Very much like me
9. Style 1.	1	2	3	4	5	6	7
10. Style 2.	1	2	3	4	5	6	7
11. Style 3.	1	2	3	4	5	6	7
12. Style 4	1	2	3	4	5	6	7

.

SELF EVALUATION QUESTIONNAIRE

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle for each statement to indicate (on a scale of 1 to 4) **how you feel _right_ now, that is, _at this moment_**. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your **present feelings** best.

1=not at all   2=somewhat   3=moderately so   4=very much so

Right now:

13. I feel calm

14. I feel secure

15. I am tense

16. I feel strained

17. I feel at ease

18. I feel upset

19. I am presently worrying over possible misfortunes

20. I feel satisfied

21. I feel frightened

22. I feel comfortable

23. I feel self-confident

24. I feel nervous

25. I am jittery

26. I feel indecisive

27. I am relaxed

28. I feel content

29. I am worried

30. I feel confused

31. I feel steady

32. I feel pleasant

SELF EVALUATION QUESTIONNAIRE

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle for each statement to indicate (on a scale of 1 to 4) **how you _generally_ feel**. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe **how you generally feel**.

1=not at all   2=somewhat   3=moderately so   4=very much so

Generally:

33. I feel pleasant

34. I feel nervous and restless

35. I feel satisfied with myself

36. I wish I could be as happy as others seem to be

37. I feel like a failure

38. I feel rested

39. I am "calm, cool, and collected"

40. I feel that difficulties are piling up so that I cannot overcome them

41. I worry too much over something that really doesn't matter

42. I am happy

43. I have disturbing thoughts

44. I lack self-confidence

45. I feel secure

46. I make decisions easily

47. I feel inadequate

48. I am content

49. Some unimportant thought runs through my mind and bothers me

50. I take disappointments so keenly that I can't put them out of my mind

51. I am a steady person

52. I get in a state of tension or turmoil as I think over my recent concerns and interests

114

Rosenberg Scale

Please blacken in the number that best describes your response to each question according to this scale:

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

53. I feel that I am a person of worth, at least on an equal plane with others.

54. I feel that I have a number of good qualities.

55. All in all, I am inclined to feel that I am a failure.

56. I am able to do things as well as most other people.

57. I feel I do not have much to be proud of.

58. I take a positive attitude toward myself.

59. On the whole, I am satisfied with myself.

60. I wish I would have more respect for myself.

61. I certainly feel useless at times.

62. At times, I think I am no good at all.

Instructions: The following list of statements describes different aspects of students' relationships with their mother. In many cases, the primary female parent-figure/caregiver is the "mother". If you consider someone else to be your primary female parent-figure, please respond to the questions that refer to "mother" with that person in mind. Imagine a scale ranging from 1 to 5 that tells how well each statement applies to you. Please blacken in the appropriate number from "1" (Not at all true of me) to "5" (Very true of me). If the statement **does not apply, enter "1"**. Please be completely honest. Your answers are entirely confidential and will be useful only if they accurately describe you.

Not at all true of me			Very true of me	
1	**2**	**3**	**4**	**5**

63. Sometimes my mother is a burden to me.

64. I feel like I am constantly at war with my mother.

65. I blame my mother for many of the problems I have.

66. I wish I could trust my mother more.

67. I have to be careful not to hurt my mother's feelings.

68. I sometimes feel like I'm being punished by my mother.

69. I wish my mother wasn't so overprotective.

70. I wish my mother wouldn't try to manipulate me.

71. I wish my mother wouldn't try to make fun of me.

72. I feel that I have obligations to my mother that I wish I didn't have.

73. My mother expects too much from me.

74. I wish I could stop lying to my mother.

75. I often wish that my mother would treat me more like an adult.

76. I am often angry at my mother.

77. I hate it when my mother makes suggestions about what I do.

78. Even when my mother has a good idea I refuse to listen to it because she made it.

79. I wish my mother wouldn't try to get me to take sides with her.

80. I argue with my mother over little things.

81. My mother is sometimes a source of embarrassment to me.

82. I am sometimes ashamed of my mother.

83. I get angry when my mother criticizes me.

84. When I don't write my mother often enough I feel guilty.

Not at all true of me   **Very true of me**
    1   2   3   4   5

85. I feel uncomfortable keeping things from my mother.

86. I often have to make decisions for my mother.

87. I sometimes resent it when my mother tells me what to do.

ASQ

Show how much you agree with each of the following items by rating them on this scale:

Totally Disagree	Strongly Disagree	Slightly Disagree	Slightly Agree	Strongly Agree	Totally Agree
1	**2**	**3**	**4**	**5**	**6**

88. Overall, l am a worthwhile person.

89. I am easier to get to know than most people.

90. I feel confident that other people will be there when I need them.

91. I prefer to depend on myself rather than other people.

92. I prefer to keep to myself.

93. To ask for help is to admit that you're a failure.

94. People's worth should be judged by what they achieve.

95. Achieving things is more important than building relationships.

96. Doing your best is more important than getting on with others.

97. If you've got a job to do, you should do it no matter who gets hurt.

98. It's important to me that others like me.

99. It's important to me to avoid doing things that others won't like.

100. I find it hard to make a decision unless I know what other people think.

101. My relationships with others are generally superficial.

102. Sometimes I think I am no good at all.

103. I find it hard to trust other people.

104. I find it difficult to depend on others.

105. I find that others are reluctant to get as close as I would like.

106. I find it relatively easy to get close to other people.

107. I find it easy to trust others.

108. I feel comfortable depending on other people.

Totally Disagree	Strongly Disagree	Slightly Disagree	Slightly Agree	Strongly Agree	Totally Agree
1	2	3	4	5	6

109.I worry that others won't care about me as much as I care about them.

110.I worry about people getting too close.

111.I worry that I won't measure up to other people.

112.I have mixed feelings about being close to others.

113.While I want to get close to others, I feel uneasy about it.

114.I wonder why people would want to be involved with me.

115.It's very important to me to have a close relationship.

116.I worry a lot about my relationships.

117.I wonder how I would cope without someone to love me.

118.I feel confident about relating to others.

119.I often feel left out or alone.

120.I often worry that I do not really fit in with other people.

121.Other people have their own problems, so I don't bother them with mine.

122.When I talk over my problems with others, I generally feel ashamed or foolish.

123.I am too busy with other activities to put much time into relationships.

124.If something is bothering me, others are generally aware and concerned.

125.I am confident that other people will like and respect me.

126.I get frustrated when others are not available when I need them.

127.Other people often disappoint me.

BDI

Instructions: This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, blacken in the number (1, 2, 3, or 4) corresponding to the **one** statement in each group which **best describes** the way you have been feeling the **PAST WEEK, including today.** If several statements within a group seem to apply equally well, mark each one. **Be sure to read all the statements in each group before making your choice.**

128.
1   I do not feel sad.
2   I feel sad.
3   I am sad all the time and I can't snap out of it
4   I am so sad or unhappy that I can't stand it.

129.
1   I am not particularly discouraged about the future.
2   I feel discouraged about the future.
3   I feel I have nothing to look forward to.
4   I feel that the future is hopeless and that things cannot improve.

130.
1   I do not feel like a failure.
2   I feel I have failed more than the average person
3   As I look back on my life, all I can see is a lot of failures.
4   I feel I am a complete failure as a person.

131.
1   I get as much satisfaction out of things as I used to.
2   I don't enjoy things the way I used to.
3   I don't get real satisfaction out of anything anymore.
4   I am dissatisfied or bored with everything.

132.
1   I don't feel particularly guilty.
2   I feel guilty a good part of the time.
3   I feel quite guilty most of the time.
4   I feel guilty all the time.

133.
1   I don't feel I am being punished.
2   I feel I may be punished.
3   I expect to be punished.
4   I feel I am being punished.

134.
1   I don't feel disappointed in myself.
2   I am disappointed in myself.
3   I am disgusted with myself.
4   I hate myself.

135. 1   I don't feel I am any worse than anybody else.
      2   I am critical of myself for my weaknesses or mistakes.
      3   I blame myself all the time for my faults.
      4   I blame myself for everything bad that happens.

136. 1   I don't have any thoughts of killing myself.
      2   I have thoughts of killing myself, but I wouldn't carry them out.
      3   I would like to kill myself.
      4   I would kill myself if I had the chance.

137. 1   I don't cry any more than usual.
      2   I cry more now than I used to.
      3   I cry all the time now.
      4   I used to be able to cry, but now I can't cry even though I want to.

138. 1   I am no more irritated now than I ever am.
      2   I get annoyed or irritated more easily than I used to.
      3   I feel irritated all the time now.
      4   I don't get irritated at all by the things that used to irritate me.

139. 1   I have not lost interest in other people.
      2   I am less interested in other people than I used be.
      3   I have lost most of my interest in other people.
      4   I have lost all of my interest in other people.

140. 1   I make decisions about as well as I ever could.
      2   I put off making decisions more than I used to.
      3   I have greater difficulty in making decisions than before.
      4   I can't make decisions at all anymore.

141. 1   I don't feel I look any worse than I used to.
      2   I am worried that I am looking old or unattractive.
      3   I feel that there are permanent changes in my appearance that make me look unattractive.
      4   I believe that I look ugly.

142. 1   I can work about as well as before.
      2   It takes an extra effort to get started at doing something.
      3   I have to push myself very hard to do anything.
      4   I can't do any work at all.

143.
1   I can sleep as well as usual.
2   I don't sleep as well as I used to.
3   I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
4   I wake up several hours earlier than I used to and cannot get back to sleep.

144.
1   I don't get more tired than usual.
2   I get tired more easily than I used to.
3   I get tired from doing almost anything.
4   I am too tired to do anything.

145.
1   My appetite is no worse than usual.
2   My appetite is not as good as it used to be
3   My appetite is much worse now.
4   I have no appetite at all anymore.

146.
1   I haven't lost much weight, if any, lately.
2   I have lost more than 5 pounds.
3   I have lost more than 10 pounds.
4   I have lost more than 15 pounds.

147.   I am purposely trying to lose weight by eating less.
                   1=Yes; 2=No

148.
1   I am no more worried about my health than usual.
2   I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
3   I am very worried about physical problems and it's hard to think of much else.
4   I am so worried about my physical problems that I cannot think about anything else.

149.
1   I have not noticed any recent change in my interest in sex.
2   I am less interested in sex than I used to be.
3   I am much less interested in sex now.
4   I have lost interest in sex completely.

PLEASE GO TO COMPUTER SHEET # 2

THOUGHTS ABOUT MY LIFE

Listed below are sentences which describe thoughts that people sometimes have. Read each sentence carefully and decide <u>which of these thoughts you have had in the **PAST MONTH.**</u> For each thought, blacken the number corresponding to the answer that best describes your own thoughts. There are no right or wrong answers so answer each sentence as openly and honestly as possible. Be sure to answer each sentence. Do NOT leave any sentences blank.

This thought was in my mind:

Almost Every Day	**Couple of Times a Week**	**About Once a Week**	**Couple of Times a Month**
1	**2**	**3**	**4**

About Once a Month	**I Had This Thought Before But Not in the Past Month**	**I Never Had This Thought**
5	**6**	**7**

Please begin with #1 on computer scoring sheet #2.

1. I thought it would be better if I was not alive

2. I thought about killing myself

3. I thought about how I would kill myself

4. I thought about when I would kill myself

5. I thought about what to write in a suicide note

6. I thought about telling people I plan to kill myself

7. I thought that people would be happier if I was not around

8. I thought about how people would feel if I killed myself

9. I wished I were dead

10. I thought about how easy it would be to end it all

11. I thought that killing myself would solve my problems

12. I thought that others would be better off if I was dead

13. I wished I had the nerve to kill myself

14. I wished that I had never been born

15. I thought that if I had the chance I would kill myself

Almost Every Day 1	Couple of Times a Week 2	About Once a Week 3	Couple of Times a Month 4

About Once a Month 5	I Had This Thought Before But Not in the Past Month 6	I Never Had This Thought 7

16. I thought about ways people kill themselves

17. I thought about killing myself, but would not do it

18. I thought about having a bad accident

19. I thought that life was not worth living

20. I thought that my life was too rotten to continue

21. I thought that the only way to be noticed was to kill myself

22. I thought that if I killed myself people would realize I was worth caring about

23. I thought that no one cared if I lived or died

24. I wondered if I had the nerve to kill myself

25. I thought that if things did not get better I would kill myself.

Life Events Scale

Following is a list of experiences which many students have some time or other. Please indicate for each experience how much it has been a part of your life **over the past month**.

Not at all part of my life	**Only slightly part of my life**	**Distinctly part of my life**	**Very Much part of my life**
1	**2**	**3**	**4**

26. Conflicts with boyfriend's/girlfriend's/spouse's family

27. Being let down or disappointed by friends

28. Conflict with professor(s)

29. Social rejection

30. Too many things to do at once

31. Being taken for granted

32. Financial conflicts with family members

33. Having your trust betrayed by a friend

34. Separation from people you care about

35. Having your contributions overlooked

36. Struggling to meet your own academic standards

37. Being taken advantage of

38. Not enough leisure time

39. Struggling to meet the academic standards of others

40. A lot of responsibilities

41. Dissatisfaction with school

42. Decisions about intimate relationship(s)

43. Not enough time to meet your obligations

44. Conflict with friends/family about your drug or alcohol use

45. Dissatisfaction with your mathematical ability

46. Important decisions about your future career

47. Financial burdens

48. Dissatisfaction with your reading ability

Not at all part of my life 1	Only slightly part of my life 2	Distinctly part of my life 3	Very Much part of my life 4

49. Important decisions about your education

50. Loneliness

51. Lower grades than you hoped for

52. Conflict with teaching assistant(s)

53. Not enough time for sleep

54. Conflicts with your family

55. Heavy demands from extracurricular activities

56. Finding courses too demanding

57. Conflicts with friends

58. Hard effort to get ahead

59. Poor health of a friend

60. Disliking your studies

61. Getting "ripped off" or cheated in the purchase of services

62. Dissatisfaction with your drug/alcohol use

63. Social conflicts over smoking

64. Difficulties with transportation

65. Disliking fellow student(s)

66. Conflicts with boyfriend/girlfriend/spouse

67. Dissatisfaction with your ability at written expression

68. Interruptions of your school work

69. Social isolation

70. Long waits to get service (e.g., at banks, stores, etc.)

71. Being ignored

72. Dissatisfaction with your physical appearance

73. Finding course(s) uninteresting

74. Gossip concerning someone you care about

75. Failing to get expected job

76. Dissatisfaction with your athletic skills

Loss of Important Relationships

77. During the **PAST YEAR**, have you lost any important relationships due to moving, a job change, divorce or separation, death, or some other reason? 1=Yes   2=No

78. Please indicate **the number of persons** who are **no longer available to you**.

    1= 1 person   2= 2 people   3= 3 people   4= 4 people   5= 5 people

    6= 6 people   7= 7 people   8= 8 people   9= not applicable/did not lose any
                                                        important relationships

79. Overall, how much of your support was provided by these people who are no longer available to you?

    1= none at all/not applicable   2= a little   3= a moderate amount

                    4= quite a bit   5=a great deal

EARLY CHILDHOOD RELATIONSHIP QUESTIONNAIRE

The majority of the following statements refer to your <u>early childhood relationship</u> with your mother (when you were approximately 3 to 8 years old). In most cases the principal care-giver is the "mother". If someone else was the principal person responsible for your care in childhood, please respond to the questions which refer to "mother" with that person in mind.

A few of the questions have two parts. For example "when I caused trouble as a child I knew my mother would forgive me". Some people might feel like they never caused trouble as a child, however, they consider their mother very forgiving. How then do they answer? Only answer **AGREE or STRONGLY AGREE** if you agree with **both** parts of the statement. If you agree with only one part of the statement answer **NEUTRAL.** If you disagree with both parts of the statement **answer DISAGREE or STRONGLY DISAGREE.**

STRONGLY DISAGREE	**DISAGREE**	**NEUTRAL** NEITHER DISAGREE NOR AGREE	**AGREE**	**STRONGLY AGREE**
1	**2**	**3**	**4**	**5**

Please blacken in the appropriate circle on the computer sheet.
You should be on # 80 of computer sheet #2.

80. In childhood I felt like I was really treasured by my mother.

81. In childhood I sometimes felt like my mother was really lonely when I was not with her.

82. My mother was not very affectionate.

83. When I was a young child and little things went wrong I did not feel sure I could count on my mother to take care of me.

84. As a child I couldn't stand being separated from my mother.

85. My mother can make me feel really good but when she is not nice to me she can really tear me apart.

86. In my family of origin we don't make a show of expressing our feelings. We prefer keeping feelings to ourselves.

87. Neither my mother nor myself are perfect but somehow we made it through my childhood.

88. I remember when I was frightened as a child my mother holding me close.

STRONGLY DISAGREE	DISAGREE	NEUTRAL NEITHER DISAGREE NOR AGREE	AGREE	STRONGLY AGREE
1	2	3	4	5

89. When I was a child my mother sometimes told me that if I was not good she would stop loving me.

90. My mother is selfishly caught up in herself to the exclusion of everybody else.

91. My family was not particularly intimate, but this has never bothered me.

92. It's hard for me to remember my early relationship with my mother in any detail.

93. In childhood I sometimes felt that my mother and I were so alike that I didn't know where she ended and I began.

94. If anything happened to my mother I wonder if I could survive it.

95. I remember as a child feeling a desire to protect my mother.

96. Even though I went through rough times with my mother during my childhood, somewhere along the line I managed to let go of the majority of those angry, hurt feelings.

97. In childhood I knew I was low on my mother's priority list.

98. My mother was an all-around excellent mother.

99. No one gets under my skin like my mother.

100. As a child I never thought separations from my parents were any big deal.

101. I often felt responsible for my mother's welfare.

102. In childhood my mother sometimes threatened to leave me or to send me away it I wasn't good.

103. To this day my mother has no clue who I am or what I am all about.

104. Even with all our past difficulties, I realize my mother did the best for me that she could.

105. I have forgotten what most of my early childhood was like.

106. I always knew my mother was there for me; no matter what I could depend on her.

STRONGLY DISAGREE	DISAGREE	NEUTRAL NEITHER DISAGREE NOR AGREE	AGREE	STRONGLY AGREE
1	2	3	4	5

107. There are times when I feel like shaking my mother and saying "wake up and see me for who I am".

108. In childhood I often had the impression that my mother was not listening to me. She often tuned me out.

109. During my childhood I sometimes felt like I was my mother's whole life.

110. My mother and I are more accepting of each other's differences, than we have been in the past.

111. When I was young I often feared something dreadful would happen to my mother or father.

112. I remember my mother telling me that I didn't pay enough attention to her or love her enough.

113. I often take my mother's opinion about me to heart and lose sight of my own opinion about myself.

114. My mother is a real nag.

115. My mother and I were so alike we often could finish each others sentences.

116. I think people put too much emphasis on the mother/child relationship.

117. I remember very little about my early childhood (ages three to seven).

118. The concept of the loving, supporting mother is pure myth.

119. My relationship with my mother has gone through major changes over the course of my childhood and adolescence.

120. Even as an adult I sometimes feel like I will never dig myself out from under my mother's influence.

121. As a child I sometimes got the feeling that without me my mother would have fallen apart.

122. I couldn't have asked for a better mother.

STRONGLY DISAGREE	DISAGREE	NEUTRAL NEITHER DISAGREE NOR AGREE	AGREE	STRONGLY AGREE
1	**2**	**3**	**4**	**5**

123. If my mother was not fair to me as a child I realize now it was because she was dealing with her own problems.

124. If something really bad happened to me in childhood I did not feel I could count on my mother to support me.

125. When I was a child I sometimes got the feeling that my mother wished I was never born.

126. I remember when I was a child feeling scared that one or both of my parents would die unexpectedly.

127. My mother can devastate me with her criticisms.

128. In childhood my mother often told me she was sacrificing herself for me.

129. I don't think my early childhood relationship with my mother has any significant influence on who I am today or my present relationships.

130. My mother was always there for me when I needed her.

131. When I acted bad as a child my mother would, at times, threaten to send me away.

132. I never felt like my mother gave me enough attention.

133. For all our past problems my mother and I can still enjoy a good laugh together.

134. During my childhood my mother would often turn to me and tell me lots of things that upset and bothered her.

135. In childhood I often worried about my mother's state of health.

136. I find it difficult to remember my early childhood.

137. My mother was a perfect mother.

138. My mother's issues are still interfering with my life.

139. When I think back to my early childhood experiences I discover things about myself and my parents that I've never considered before.

These questions ask about your family history. For each question, blacken the number that best describes how you feel. Although some of these questions are of a personal nature, please try to answer as honestly as you can. Your answers will be kept confidential.

140. Has your <u>mother</u> ever suffered from alcoholism, depression, or anything else that might be considered a psychological problem?   1=Yes   2= No

141. If yes, have these difficulties ever affected your relationship with <u>her</u>?
1= never/not applicable   2= rarely   3= sometimes
4=often   5= very often

142. Has your <u>father</u> ever suffered from alcoholism, depression, or anything else that might be considered a psychological problem?   1=Yes   2= No

143. If yes, have these difficulties ever affected your relationship with <u>him</u>?
1= never/not applicable   2= rarely   3= sometimes
4=often   5= very often

144. Has your <u>mother</u> ever attempted suicide?
1= never   2= once   3= several times
4= many times   5= committed suicide

145. Has your <u>father</u> ever attempted suicide?
1= never   2= once   3= several times
4= many times   5= committed suicide

146. Have either of your parents had serious problems with the "law"?
1= never   2= rarely   3= sometimes   4=often   5= very often

147. Were you brought up by your parents?   1=Yes   2= No

148. What was your relationship with your <u>mother</u> like when you were younger?
1= very poor   2= poor   3= ok   4= good   5= excellent

149. What was your relationship with your <u>father</u> like when you were younger?
1= very poor   2= poor   3= ok   4= good   5= excellent

PLEASE GO TO COMPUTER SHEET # 3

Please begin with #1 on computer scoring sheet #3.

1. What is your relationship with your <u>mother</u> like **now**?
    1= very poor   2= poor   3= ok   4= good   5= excellent
    6= no contact   7= she is deceased

2. What is your relationship with your <u>father</u> like **now**?
    1= very poor   2= poor   3= ok   4= good   5= excellent
    6= no contact   7= she is deceased

3. Did you ever witness physical violence between your parents while growing up?
    1= never   2= rarely   3= sometimes   4=often   5= very often

4. Were you ever physically abused while growing up?
    1= never   2= rarely   3= sometimes   4=often   5= very often

5. Were you ever verbally/emotionally abused while growing up?
    1= never   2= rarely   3= sometimes   4=often   5= very often

6. When you were growing up, were you ever able to confide in your parents?
    1= never   2= rarely   3= sometimes   4=often   5= very often

7. When you were growing up, did you ever feel like your parents understood you?
    1= never   2= rarely   3= sometimes   4=often   5= very often

8. When you were growing up, did you ever feel loved and respected by your parents?
    1= never   2= rarely   3= sometimes   4=often   5= very often

9. <u>Now</u>, are you ever able to confide in your parents?
    1= never   2= rarely   3= sometimes   4=often   5= very often

10. <u>Now</u>, do you ever feel like your parents understand you?
    1= never   2= rarely   3= sometimes   4=often   5= very often

11. <u>Now</u>, do you ever feel loved and respected by your parents?
    1= never   2= rarely   3= sometimes   4=often   5= very often

Thoughts and Feelings

Using the scale below, please indicate how often during the **PAST YEAR** you have felt or behaved in the following ways:

Never/ None of the time				Always/ A great many times
1	**2**	**3**	**4**	**5**

In the **past year:**

12. I have been thinking of ways to kill myself.

13. I have told someone I want to kill myself.

14. I believed my life will end in suicide.

15. I have made attempts to kill myself.

16. I feel life just isn't worth living.

17. Life is so bad I feel like giving up.

18. I just wish my life would end.

19. It would be better for everyone involved if I were to die.

20. I feel there is no solution to my problems other than taking my life.

21. I have come close to taking my own life.

Now, please indicate how often in your **LIFETIME** (prior to the past year) you have felt or behaved in the following ways:

Never/ None of the time				Always/ A great many times
1	2	3	4	5

In your **lifetime** (prior to the past year):

22. I thought of ways to kill myself.

23. I told someone I wanted to kill myself.

24. I believed my life would end in suicide.

25. I made attempts to kill myself.

26. I felt life just wasn't worth living.

27. Life was so bad I felt like giving up.

28. I just wished my life would end.

29. It thought it would be better for everyone involved if I were to die.

30. I felt there was no solution to my problems other than taking my life.

31. I came close to taking my own life.

Instructions: The following list of statements describes different aspects of students' relationships with their father. In many cases, the primary male parent-figure/caregiver is the "father". If you consider someone else to be your primary male parent-figure, please respond to the questions that refer to "father" with that person in mind. Imagine a scale ranging from 1 to 5 that tells how well each statement applies to you. Please blacken in the appropriate number from "1" (Not at all true of me) to "5" (Very true of me). If the statement **does not apply, enter "1"**. Please be completely honest. Your answers are entirely confidential and will be useful only if they accurately describe you.

Not at all true of me   **Very true of me**

1   2   3   4   5

32. Sometimes my father is a burden to me.

33. I feel like I am constantly at war with my father.

34. I blame my father for many of the problems I have.

35. I wish I could trust my father more.

36. I have to be careful not to hurt my father's feelings.

37. I sometimes feel like I'm being punished by my father.

38. I wish my father wasn't so overprotective.

39. I wish my father wouldn't try to manipulate me.

40. I wish my father wouldn't try to make fun of me.

41. I feel that I have obligations to my father that I wish I didn't have.

42. My father expects too much from me.

43. I wish I could stop lying to my father.

44. I often wish that my father would treat me more like an adult.

45. I am often angry at my father.

46. I hate it when my father makes suggestions about what I do.

47. Even when my father has a good idea I refuse to listen to it because he made it.

48. I wish my father wouldn't try to get me to take sides with him.

49. I argue with my father over little things.

50. My father is sometimes a source of embarrassment to me.

51. I am sometimes ashamed of my father.

52. I get angry when my father criticizes me.

53. When I don't write my father often enough I feel guilty.

Not at all true of me   **Very true of me**

    1   2   3   4   5

54. I feel uncomfortable keeping things from my father.

55. I often have to make decisions for my father.

56. I sometimes resent it when my father tells me what to do.

BSI

The following is a list of problems people sometimes have. Please read each one carefully, and blacken the circle that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE **PAST 7 DAYS** INCLUDING TODAY. Blacken the circle for only one number for each problem and do not skip any items.

Not at All	**A Little Bit**	**Moderately**	**Quite A Bit**	**Extremely**
1	**2**	**3**	**4**	**5**

You should be on #57 of computer sheet #3.

During the **past 7 days**, including today, how much were you distressed by:

57. Nervousness or shakiness inside

58. Faintness or dizziness

59. The idea that someone else can control your thoughts

60. Feeling others are to blame for most of your troubles

61. Trouble remembering things

62. Feeling easily annoyed or irritated

63. Pains in heart or chest

64. Feeling afraid in open spaces or on the streets

65. Thoughts of ending your life

66. Feeling that most people cannot be trusted

67. Poor appetite

68. Suddenly scared for no reason

69. Temper outbursts that you could not control

70. Feeling lonely even when you are with people

71. Feeling blocked in getting things done

72. Feeling lonely

73. Feeling blue

74. Feeling no interest in things

75. Feeling fearful

76. Your feelings being easily hurt

138

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

During the **past 7 days**, including today, how much were you distressed by:

77. Feeling that people are unfriendly or dislike you

78. Feeling inferior to others

79. Nausea or upset stomach

80. Feeling that you are watched or talked about by others

81. Trouble falling asleep

82. Having to check and double-check what you do

83. Difficulty making decisions

84. Feeling afraid to travel on buses, subways, or trains

85. Trouble getting your breath

86. Hot or cold spells

87. Having to avoid certain things, places, or activities because they frighten you

88. Your mind going blank

89. Numbness or tingling in parts of your body

90. The idea that you should be punished for your sins

91. Feeling hopeless about the future

92. Trouble concentrating

93. Feeling weak in parts of your body

94. Feeling tense or keyed up

95. Thoughts of death or dying

96. Having urges to beat, injure, or harm someone

97. Having urges to break or smash things

98. Feelings very self-conscious with others

99. Feeling uneasy in crowds, such as shopping or at a movie

Not at All	**A Little Bit**	**Moderately**	**Quite A Bit**	**Extremely**
1	**2**	**3**	**4**	**5**

During the **past 7 days**, including today, how much were you distressed by:

100.Spells of terror or panic

101.Getting into frequent arguments

102.Feeling nervous when you are left alone

103.Others not giving you proper credit for your achievements

104.Feeling so restless you couldn't sit still

105.Feelings of worthlessness

106.Feeling that people will take advantage of you if you let them

107.Feelings of guilt

108.The idea that something is wrong with your mind

Ways of Coping Checklist

The following items describe ways people sometimes cope in difficult situations. Please rate each of these items for how likely you would be to use it (on a scale of 1 to 4) in a stressful situation, such as those listed in the stressful Life Events Scale you filled out earlier today.

Would Not use			**Would use a great deal**
1	**2**	**3**	**4**

You should be on #109 of computer sheet #3.

109.Change something so things would turn out all right.

110.Accept sympathy and understanding from someone.

111.Keep my feelings to myself.

112.Accept the next best thing to what I wanted.

113.Ask someone I respect for advice and follow it.

114.Try not to burn my bridges behind me, but leave things open somewhat.

115.I know what has to done, so I will double my efforts and try harder to make things work.

116.Think about fantastic or unreal things (like perfect revenge or finding a million dollars) that make me feel better.

117.Just take things one step at a time.

118.Wish that I could change what had happened.

119.Wish I was a stronger person--more optimistic and forceful.

120.Have fantasies or wishes about how things might turn out.

121.Change something about myself so I could deal with the situation better.

122.Try not to act too hastily or follow my own hunch.

123.Get professional help and do what they recommend.

124.Keep others from knowing how bad things are.

125.Come up with a couple of different solutions to the problem.

126.Try to forget the whole thing.

127.Realize I brought the problem on myself.

Would Not use			Would use a great deal
1	**2**	**3**	**4**

128. Hope a miracle would happen.

129. Daydream or imagine a better time or place than the one I was in.

130. Go on as if nothing had happened.

131. Bargain or compromise to get something positive from the situation.

132. Refuse to believe it had happened.

133. Accept my strong feelings, but not let them interfere with other things too much.

134. Talk to someone to find out about the situation.

135. Feel bad that I couldn't avoid the problem.

136. Concentrate on something good that could come out of the whole thing.

137. Make a plan of action and follow it.

138. Blame myself.

139. Stand my ground and fight for what I wanted.

140. Talk to someone about how I was feeling.

141. Wish I could change the way I felt.

142. People's worth should be judged by what they achieve.

143. Talk to someone who could do something about the problem.

144. Wish the situation would go away or somehow be finished.

145. Avoid being with people in general.

146. Sleep more than usual.

147. Try to make myself feel better by eating, drinking, smoking, or taking medications.

148. Get mad at the people or things that caused the problem.

149. Change or grow as a person in a good way.

150. Criticize or lecture myself.

PLEASE GO TO COMPUTER SHEET # 4

Influential Relationship Questionnaire

Please begin with #1 on computer scoring sheet #4.

1. Has there ever been someone in your life (besides your parents) who you felt <u>helped</u> you to relate better to other people or feel better about yourself?
   1= Yes   2= No

2. If yes, did this person ever have a significant influence on your life?
   1= never/not applicable   2= rarely   3= sometimes   4=often   5= very often

3. Has there ever been someone in your life (besides your parents) who you felt <u>hurt</u> the way you feel about yourself or relate to other people?   1= Yes 2= No

4. If yes, did this person ever have a significant influence on your life?
   1= never/not applicable   2= rarely   3= sometimes   4=often   5= very often

5. Have you ever been in therapy?   1= Yes   2= No

6. If yes, did you ever find therapy helpful
   1= never/not applicable   2= rarely   3= sometimes   4=often   5= very often

7. If yes, have you ever found yourself in a situation where you thought about what your therapist would say or suggest?
   1= never/not applicable   2= rarely   3= sometimes   4=often   5= very often

8. Have you ever looked up to someone (besides your parents) and tried to be more like them or considered them to be a mentor?   1= Yes   2= No

9. If yes, did this person ever have a significant influence on your life?
   1= never/not applicable   2= rarely   3= sometimes   4=often   5= very often

SITUATIONAL SURVEY

INSTRUCTIONS: Please read these instructions carefully.

On each of the next 7 pages is a short story. Following each story are 4 questions with a choice of 5 answers for each. The four questions relate to the following four kinds of behavior: actual behavior, thoughts, feelings, and impulsive behavior in fantasy. Of the four, it is <u>only actual behavior</u> which **is outwardly expressed**; the other three take place only in the privacy of one's mind and, therefore, have no external repercussions.

What we want you to do is to select the <u>**one**</u> answer of the five which you think is the <u>**most**</u> representative of how you would react, and mark the number corresponding to that answer on the computer answer sheet by darkening the space marked <u>three (3)</u> next to that number. Then select the <u>**one**</u> answer you think is <u>**least**</u> representative of how you would react and mark it by darkening the space marked <u>one (1)</u> next to that number. The <u>other three responses should be marked as two (2)</u>.

For example, let us assume that out of the five possible answers to a question (e.g., numbers 66, 67, 68, 69, 70), response number 67 is the one you consider <u>most</u> representative of the way you would react, and response number 70 is the <u>least</u> representative. In this example, you would mark a <u>three (3)</u> next to number 67, a <u>one (1)</u> next to number 70, and a <u>two (2)</u> next to numbers 66, 68, and 69.

Read <u>all</u> the five answers following the question <u>before</u> you make your selections. In marking your answers on the computer sheet, be sure that the number of the answer agrees with the number on the computer sheet.

You are waiting for the bus at the edge of the road. The streets are wet and muddy after the previous night's rain. A motorcycle sweeps through a puddle in front of you, splashing your clothing with mud.

For each question below:
1= Least representative of you   3= Most representative of you
The other remaining responses should be marked as 2.

What would your ACTUAL reaction be?

10. I would try and remember the biker's face so I could find him later.
11. I'd wipe myself off with a smile.
12. I'd yell obscenities after the biker.
13. I'd scold myself for not having at least worn a raincoat.
14. I'd shrug it off since things like that happen all the time.

What would you IMPULSIVELY (in fantasy) want to do?

15. Wipe that biker's face in the mud.
16. Tell the police about the biker since he probably does this all the time.
17. Kick myself for standing so close to the edge of the road.
18. Let the biker know that I really didn't care that he splashed me.
19. Let the biker know that bystanders also have rights.

What THOUGHT might occur to you?

20. Why do I always get myself into things like this?
21. To hell with that biker!
22. I'm sure that basically that biker is a nice person.
23. You can expect something like this to happen on wet days.
24. I wonder if that biker splashed me on purpose.

How would you FEEL and why?

25. Satisfied, after all, it could have been worse.
26. Depressed, because of my bad luck.
27. Like shrugging my shoulders, because a person can't let things like that bother him.
28. Resentment, because the biker was so careless and mean.
29. Furious, that the motorcyclist got me dirty.

You are spending your vacation visiting an old friend who has moved with his parents to another town. He invites you to go with him to a fair given that weekend at the community clubhouse. Shortly after you arrive, he accepts an invitation to go out in a canoe with another friend, leaving you with a group of strangers to whom you have barely been introduced. They talk with you, but while some of them have canoes, for some reason no one asks you to go canoeing. Your friend, on the other hand, seems to be very popular that day. He looks as if he is having a wonderful time. As he paddles past, he calls out to you, "Why don't you go out in one of the canoes?"

For each question below:

           1= Least representative of you   3= Most representative of you
               The other remaining responses should be marked as 2.

What would your ACTUAL reaction be?
30. I'd say sarcastically, "I'm not canoeing because I'd rather watch you."
31. I'd tell him that I really didn't feel like going out in a canoe.
32. I'd wonder what's wrong with me.
33. I'd tell him that it's easier to get to know his friends by talking to them than it would be by going out in a canoe.
34. I'd get up and leave because he apparently wants to embarrass me.

What would you IMPULSIVELY (in fantasy) want to do?
35. Assure him that I am perfectly satisfied and happy, so he won't worry.
36. I'd like to punch him in the nose.
37. Point out that you cannot expect to be everybody's friend on your first day in a strange place.
38. Tell him that now I know what sort of a "friend" he really is.
39. I'd like to sink into the ground and disappear.

What THOUGHT might occur to you?
40. He has it in for me.
41. I should never have come here in the first place.
42. I'm glad my friend is enjoying himself.
43. Something like this can't be avoided in a place where you don't know the crowd.
44. I'll make him sorry for his behavior.

How would you FEEL and why?
45. Upset, because I was so unsuccessful.
46. Furious at him for the embarrassment.
47. Resigned, because this is the kind of situation every newcomer must put up with once in a while.
48. Angry to find that my friend is so disloyal.
49. Grateful, for having had such a pleasant day.

On your way to school, you are hurrying through a narrow street lined with tall buildings. Suddenly a piece of brick comes crashing down from a roof where some repairmen are working. The brick bounces off the sidewalk, bruising your leg.

For each question below:
1= Least representative of you   3= Most representative of you
The other remaining responses should be marked as 2.

What would your ACTUAL reaction be?

50. I'd tell the repairmen I was going to get my parents after them.
51. I'd be mad at myself for having such bad luck.
52. I'd hurry on so I wouldn't be late for school.
53. I'd continue on my way, happy that nothing worse had happened.
54. I'd try to discover who those irresponsible people were.

What would you IMPULSIVELY (in fantasy) want to do?

55. Remind the repairmen that they should be more careful.
56. Make sure the repairmen knew that nothing serious had happened.
57. Give them a piece of my mind.
58. Kick myself for not having watched where I was going.
59. See to it that those careless workers pay for their negligence.

What THOUGHT might occur to you?

60. Those repairmen don't know how to do their job right.
61. I'm lucky that I wasn't badly hurt.
62. Damn those men!
63. Why do such things always happen to me?
64. One can't be too careful these days.

How would you FEEL and why?

65. Angry, because I was hurt?
66. Furious, because I could have been killed by their carelessness.
67. Calm, because one should always be able to keep one's cool.
68. Upset by my bad luck.
69. Thankful that I'd gotten away with no more than a scratch.

You and a school friend are competing for president of your class. Although both of your chances seem about equal, your friend has been in school longer and is therefore more popular. Recently, however, you have had a party at which everyone in the class has had a good time. You are sure you are now very well-liked by all of them. However, your friend wins as president.

For each question below:
1= Least representative of you   3= Most representative of you
The other remaining responses should be marked as 2.

What would your ACTUAL reaction be?

70. I'd try to find out which persons in the class didn't vote for me and get even.
71. I'd do my best to continue to behave as I did before the election, as a true friend should.
72. I'd accept the outcome as proof that I wouldn't have made as good a president as my friend.
73. I'd refuse to cooperate with the new president.
74. I'd congratulate my friend on this victory.

What would You IMPULSIVELY (in fantasy) want to do?

75. Support the results as a good citizen should.
76. Kick myself for ever running for president, when I knew I wasn't as good as the other candidate.
77. Show the class how mistaken they had been in voting for such an incompetent person.
78. Help my friend to be a good president.
79. Break the neck of each and every member of the class who voted against me.

What THOUGHT might occur to you?

80. I guess I just don't have what it takes to be president.
81. I probably wouldn't like being president as much as I though I would.
82. There certainly is something fishy about the class's decision.
83. You can't let a failure get you down.
84. Who cares about the future of this class, anyway!

How would you FEEL and why?

85. Happy that I still have my old friends.
86. Upset because my defeat is known throughout the school.
87. Furious at the class because of their treatment of me.
88. Shrug it off, because that's the way the cookie crumbles.
89. Angry, because I have been the victim of an unfair decision.

You and John, one of your best friends, are playing catch. Unexpectedly Tammy, another friend from the next street, drops over. You introduce Tammy to John and you all play ball together. You are supposed to go to the amusement park with Tammy in two days and you are really looking forward to it. The day that you are supposed to go, Tammy calls up and says she can't go with you because she has to go over to her grandmother's. You decide to join some other friends going to the amusement park. At the amusement park you see Tammy and John riding the roller coaster.

For each question below:
     1= Least representative of you   3= Most representative of you
               The other remaining responses should be marked as 2.

What would your ACTUAL reaction be?

90. I'd snub them because I'm sure they'd try to pretend that they didn't see me.
91. I'd greet them politely as a civilized person should.
92. I'd curse them under my breath.
93. I'd tell them that I was glad that they had become friends.
94. I'd go home and sulk in my room.

What would you IMPULSIVELY (in fantasy) want to do?

95. Hide somewhere in order to avoid facing them.
96. Punch them in the nose.
97. Show them that I didn't mind that they were together.
98. Ask John if stealing your friend is the only way he knows of getting to the amusement park.
99. Show that you understand why they became friends.

What THOUGHT might occur to you?

100.Naturally Tammy liked John since he is so much better looking than I am.
101.Getting what you want can cause you to be disloyal to a friend.
102.They certainly are a pair of double-crossers.
103.I hope they get what they deserve.
104.They really seem to get along well together.

How would you FEEL and why?

105.Pleased that my friends get along so well.
106.Upset, because I shouldn't have been so trusting
107.Shrug it off because one has to take things like this in one's stride.
108.Really mad because they lied to me.
109.Furious at them, because of what happened.

You have a paper route on which there are many people. You have to work very hard because you need the money and jobs are scarce. It is your responsibility to make sure everything runs smoothly. You have a classmate who helps you deliver the papers. Recently many people have been complaining about not getting their papers. You know you have been careful in doing your job, so you decide to fire your helper. That same day your boss from the paper drops over at your house. Without letting you explain, your boss says the paper route is being taken away from you because you are careless. Your assistant is assigned your job and you are now in the position of helper.

For each question below:
    1= Least representative of you   3= Most representative of you
        The other remaining responses should be marked as 2.

What would your ACTUAL reaction be?
110.I'd be a good sport about it, since the boss is only doing his job.
111.I'd blame the boss for having made up his mind against me even before the visit.
112.I'd be thankful to get rid of such a tough job.
113.I'd look for a chance to make things hard for the assistant.
114.I'd blame myself for not being good enough for the job.

What would you IMPULSIVELY (in fantasy) want to do?
115.Congratulate my assistant on getting the paper route.
116.Try to find out if the boss from the paper and my helper had worked together to fix it so I would lose the paper route.
117.Tell my assistant to go to hell.
118.I'd like to kill myself for not having done something about my helper sooner.
119.I'd like to quit, but I don't know where I could get another job.

What THOUGHT might occur to you?
120.The boss deserves a screwball for a paper carrier.
121.To sell papers you have to have the right person in the right job.
122.There is no doubt that this was just an excuse to get rid of me.
123.I'm really lucky that I only lost my job and didn't have to pay for papers not delivered.
124.How could I be so dumb?

How would you FEEL and why?
125.Resentful, because the boss had it in for me.
126.Angry, at my assistant for getting my job.
127.Pleased that nothing worse had happened.
128.Upset that I am a failure.
129.Resigned, after all, you have to be satisfied with having done all that you can.

You have spent the last two summers working in a bicycle repair shop. At the time you started you had a choice between bicycle repair or working with your father. You preferred the other job despite your father's advice. Now that the repair shop has closed, you find that there are no other jobs for the summer. You can either go to work with your father or you can do odd jobs. You would like to repair the bikes of kids in the neighborhood but you don't have the necessary tools. After a great deal of hesitation, you decide to ask your dad to put up the money. After listening to your idea, he reminds you that he wanted you to work for him instead of at the repair shop. The he tells you, "I'm not prepared to throw away my hard-earned money on your crazy schemes. It's time you started helping me in my business."

For <u>each</u> question below:
    1= Least representative of you   3= Most representative of you
        The remaining three responses should be marked as 2.

<u>What would your ACTUAL reaction be?</u>
130.I'd accept his offer since everyone depends on everyone else in this world.
131.I'd admit to him that maybe he could lose his money if something went wrong.
132.I'd tell him off very strongly.
133.I'd tell him that I'd always thought that he had a grudge against me.
134.I'd thank him for still wanting me to work for him.

<u>What would you IMPULSIVELY (in fantasy) want to do?</u>
135.Go to work for him and make him happy.
136.Give up trying and end it all.
137.Take my father's offer since jobs don't grow on trees.
138.Let him know what a miser everyone thinks he is.
139.Tell him that I wouldn't work for him if he were the last person on earth.

<u>What THOUGHT might occur to you?</u>
140.He'll get what's coming to him one day.
141.You have to stand on your own two feet since your family won't always be around.
142.Why was I so stupid as to bring the subject up.
143.I must admit that my father is acting for my own good.
144.This proves what I've suspected all along, that my father has never believed in me.

<u>How would you FEEL and why?</u>
145.Angry, because he doesn't want me to succeed on my own.
146.Grateful for his offer of a job.
147.Resentful that he is hurting me.
148.Resigned, since you can't have everything your own way all the time.
149.Hopeless, because my father won't help me.

THANK YOU FOR COMPLETING THESE QUESTIONNAIRES!!!

Please make sure you pick up a debriefing sheet explaining more about this study before you leave. Also, please remember that there will be an oral debriefing explaining more about this study as soon as everyone participating in this group session has finished the questionnaires.

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154

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