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**DEPRESSION IN WOMEN: A TEST OF THE SELF-IN-RELATION
AND ATTACHMENT VULNERABILITY MODELS**

By

Christina Lynn Haemmerle

A DISSERTATION

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ABSTRACT

DEPRESSION IN WOMEN: A TEST OF THE SELF-IN-RELATION AND ATTACHMENT VULNERABILITY MODELS

By

Christina Lynn Haemmerle

Women are twice as likely to experience unipolar depression as compared to men (Chino & Funabiki, 1984; O'Neil et al., 1985; Weissman & Klerman, 1977). This study investigated two models that might explain the development of depressive symptoms in women. The Self-in-Relation model (SIR; Kaplan, 1986, 1991) stresses the importance of relationships to women's psychological health, whereas the Attachment-Vulnerability model (AV; Blatt, 1974; Blatt & Zuroff, 1992) focuses on the impact attachment relationships have on personality organization vulnerability. It was hypothesized that an integration of these two models would provide a more complete explanation for the presence of depressive symptoms in women, than would either of the two individual models.

Participants included 338 undergraduate female women who completed measures on: mutual empathy; vulnerability to depression; mother-child relationship; father-child relationship; personality organization vulnerability; stressful life events; four cards from the Thematic Apperception Test; and depressive symptoms.

Structural equation modeling (SEM) was used to test the hypothesized relationships in the three structural models (SIR, AV, and Combination). All of these relationships were statistically significant or approached significance. The overall fit of the

SIR and AV models were acceptable (average GFI's = 0.88, average RMSEA's = 0.09). The Combination model provided a better fit for the data than the nested SIR and AV models. Direct significant, positive relationships were demonstrated for: a) mutual empathy and self-in-relation; b) vulnerability to depression and depression; c) personality vulnerability and stressful life events; and d) stressful life events and depression. Results showed direct, significant negative associations for: a) mother-child/father-child relationships and personality vulnerability; b) personality vulnerability and self-in-relation; and c) self-in-relation and vulnerability to depression. Findings suggest that women who endorse a personality organization vulnerability are likely to view themselves as falling short of their ideal self (Blatt et al., 1976) and have difficulties in maintaining and building mutually empathic relationships (Kaplan, 1986; Surrey, 1991).

The results of this study indicate that the distinctive strengths of the SIR and AV models are complementary to each other. The Combination model seems to capture the influence of both the importance of relationships and independence and autonomy in the same individual and their respective contributions to women's psychological health. Limitations of this investigation include: a predominantly Caucasian college female sample; limited variability in severity of depression in sample; and inadequate sample size to test the Combination model. These limitations preclude generalizability of these findings to other ethnic groups of women. Future research exploring these models with other cultures, clinical populations, and larger sample sizes may lead to further insight into the increased prevalence of depression in women.

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This work has been a labor of love which I could not have accomplished without the help of my family, friends, and doctoral committee. I would like to thank my chairperson, Dr. Anne Bogat, for her guidance and encouragement. She has taught me how to critique theory, formulate a sound research design, and to organize my thoughts and ideas in a logical, coherent manner. Surprisingly, I was able to absorb some of her passion for research! I am also thankful of the opportunities to develop my clinical skills that Dr. Norman Abeles has provided for me. The motivation for this research was largely based on my therapeutic relationships with women at the MSU Psychological Clinic. I am grateful to Dr. Robert Caldwell, who not only encouraged my professional development, but also my personal development. I would also like to thank Dr. Rick DeShon for his invaluable expertise and patience during the statistical analyses. Furthermore, I appreciate the willingness of John Bergeron, Jennifer Durst, Angela McBride, and Camilla Williams to invest their time and energy coding part of the collected data set.

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KEY FOR THE MEASUREMENT MODELS

Self-in-Relation Model

Mutual Empathy

MPDQ-Mother	<i>mpdqm</i>
MPDQ-Father	
Mutuality	<i>mutf</i>
Distance	<i>distf</i>
IRI	
Perspective Taking	<i>irif1</i>
Personal Distress	<i>irif2</i>
Empathic Concern	<i>irif3</i>

Self-in-Relation

TAT	
Card 3 BM	<i>tata</i>
Card 4	<i>tatb</i>
Card 7 GF	<i>tatc</i>
Card 13 MF	<i>tatd</i>

Vulnerability to Depression

STSS	
Divided Self	<i>divself</i>
Silencing the Self	<i>silself</i>
RSE	<i>rse</i>
ARI	
Long-Term Consequences	<i>f1ari</i>
Negative Ways of Handling Anger	<i>f2ari</i>
Positive Ways of Handling Anger	<i>f3ari</i>

Depression

BDI	<i>bdi</i>
CES-D	<i>cesd</i>

Attachment-Vulnerability Model

Parent-Child Relationship

PBI-Mother and Father	
Care	<i>cm1</i> and <i>cf1</i>
Overprotection 1	<i>om1</i> and <i>of1</i>
Overprotection 2	<i>om2</i> and <i>of2</i>
PSI-Mother and Father	
Conflictual Independence	<i>confm</i> and <i>conf</i>
Emotional Independence	<i>emotm</i> and <i>emotf</i>

Key for the Measurement Models (cont`d).

Personality Vulnerability

PSI-R

Autonomy 1	<i>af1</i>
Autonomy 2	<i>af2</i>
Sociotropy 1	<i>sf1</i>
Sociotropy 2	<i>sf2</i>

Stressful Life Events

ICSRLE

General Relationship Difficulties	<i>slef1</i>
Academic Difficulties	<i>slef2</i>
Time Pressures	<i>slef3</i>
Intimate Relationship Difficulties	<i>slef4</i>

Depression

BDI	<i>bdi</i>
CES-D	<i>cesd</i>

INTRODUCTION

There are numerous theories from varying scientific disciplines that attempt to explain depression (Weissman & Klerman, 1977, 1985). Approximately one in four women and one in ten men are likely to experience depression at some time in their lives (DSM-IV, 1994). Evidence suggests that women are twice as likely to experience unipolar depression compared to men (Chino & Funabiki, 1984; Nolen-Hoeksema & Girgus, 1994; O'Neil, Lancee, & Freeman, 1985; Weissman & Klerman, 1977, 1985). Different theoretical conceptualizations of depression highlight specific constructs that may account for the development of depressive symptoms, as well as the documented gender differences. This proposal will critically examine two divergent models of depression: Self-in-Relation and Attachment-Vulnerability. The Self-in-Relation model (Kaplan, 1986, 1991) stresses the importance of relationships to women's psychological health, whereas the Attachment-Vulnerability model (Blatt, 1974; Blatt & Zuroff, 1992) focuses on the important influence attachment relationships have on personality organization development. Although both of these theories may contribute to our current understanding of depression, the present research suggests that an integration of these two models provides a more complete explanation for the development of depression in women.

Diverse theories, including those based on biological, cognitive, sociological, and personality conceptualizations, attempt to explain the development of depressive symptoms (Beck, 1974; Breggin, 1991; Landrine, 1988; Nolen-Hoeksema, 1990; Seligman, 1974; Warr & Parry, 1982; Weissman & Klerman, 1977, 1985).

Psychodynamic theories of depression recognize the significance of incorporating elements outside of the present situation to explain current psychiatric symptoms. The vast majority of dynamic theories of depression are based, in large part, on the seminal work of Sigmund Freud. Freud (1917/1989) was the first to distinguish between “mourning” and “melancholia.” He noted that both of these situations seemed to occur after the loss of an important person and shared common features such as loss of interest, decreased appetite, and difficulties sleeping. However, “melancholia” was also characterized by intense hostility towards the ego, as well as self-reproach. Freud concluded that, in “melancholia,” the loss (either actual or symbolic) of an important object was experienced as a loss of the ego. This distinction has contributed significantly to initial conceptualizations of depression.

More recent psychodynamic formulations of depression argue that individuals who are vulnerable to depression have difficulties in close relationships, are excessively dependent, feel extremely guilty, have a tendency to turn hostility inwards, and have experienced deprivation in childhood. In addition, depression is often precipitated by an actual or symbolic loss (Blatt, Quinlan, & Chevron, 1990; Weissman & Klerman, 1977). Psychodynamic research over the last few decades suggests that two types of unipolar depression are common (Blatt et al., 1990). Although these dimensions are labeled differently, the evidence indicates that one type of depression is concerned with issues surrounding interpersonal relationships, whereas the other type is focused around issues of self-worth and guilt (Arieti & Bemporad, 1980; Blatt et al., 1990; Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982; Blatt & Zuroff, 1992).

One particular psychodynamic model, the Attachment-Vulnerability model, has

contributed significantly to our theoretical understanding of how depression may develop (Blatt, 1974; Blatt & Zuroff, 1992). Blatt specifies two types of depression. The first is “anaclitic depression,” defined as feelings of helplessness, weakness, and intense fears of abandonment. The second subtype is “introjective depression,” which is characterized by feelings of worthlessness, guilt, and a sense of having failed to live up to expectations and standards. It is believed that women will more likely experience “anaclitic depression” (Blatt & Maroudas, 1992). Individuals can develop a personality organization vulnerability for either one of these subtypes of depression, depending on the quality of relationship to their parents (i.e., the parent-child attachment relationship). Specifically, an anxious attachment relationship with parents leads to the development of an interpersonal vulnerability, whereas an avoidant attachment relationship leads to the development of a self-evaluative vulnerability. In addition, an interpersonal and self-evaluative vulnerability can lead to the development of depressive symptoms in the presence of negative interpersonal and achievement life events, respectively. The Attachment-Vulnerability model has been extensively studied in clinical samples, as well as with college students (Blatt, D’Afflitti, & Quinlan, 1976; Blatt et al., 1982; Blatt & Zuroff, 1992; Zuroff, Quinlan, & Blatt, 1990). This model is useful because it incorporates not only past experiences, but current situational factors that may contribute to the etiology of depression.

Although psychodynamic theories have contributed significantly to our current understanding of depression, there are some inherent limitations to these theories. One is the belief that an investment in relationships is an undesired personality trait. Individuals who place too much emphasis on their relationships are considered “dependent,” “weak,”

and “helpless,” whereas autonomy and individuation are stressed as goals of healthy development (Blatt, 1974; Blatt & Zuroff, 1992). This line of reasoning could be attributed to the fact that Freud’s theories were based on observations of male development and then applied to theories concerning female development (Freud, 1924/1989). As a result, what is considered normal psychological development for women has been defined by what is regarded as normal psychological development for men (Horney, 1967; Quinn, 1994). Research has demonstrated, however, the importance of examining the “relational” or “connected” aspects of women’s personality development as a distinct trajectory from the autonomous, separate identity that men strive to achieve (Chodorow, 1978; Gilligan, 1982; Kaplan, 1986, 1991; Miller, J. B., 1994). Another limitation of the Attachment-Vulnerability model is the manner in which it has been studied. For instance, the association between parent-child relationships and personality vulnerability has been investigated as has the relationship between personality vulnerability and stressful life events; however, all three variables have not been examined in the same study. Studies are needed that investigate the association between parent-child relationships and stressful life events, mediated by personality organization development. In addition, it is unclear how well the Attachment-Vulnerability model accounts for the presence of depressive symptoms in women. A review of empirical studies discovered that women and men are typically grouped together in statistical analyses of this model, confounding the applicability of results for women specifically (Blatt et al., 1982; Blatt, Wein, Chevron, & Quinlan, 1979; Blatt, Zohar, Quinlan, Zuroff, & Mongrain, 1995; Chevron, Quinlan, & Blatt, 1978; Frank, S. J., Poorman, Van Egeren, & Field, 1997). Consequently, these existing psychodynamic theories and specifically, the

Attachment-Vulnerability model, may not be an accurate conceptualization of the development of depression in women.

A model of depression that incorporates women's unique developmental experiences may offer an explanation for the observed discrepancy between rates of unipolar depression for women and men (Chino & Funabiki, 1984; O'Neil et al., 1985; Weissman & Klerman, 1977). Specifically, women, age 15 or older, are twice as likely to experience major depression compared to their male counterparts (Nolen-Hoeksema & Girgus, 1994; Weissman & Klerman, 1985). Women are also more likely to report depressive symptoms and seek mental health services for these difficulties (Boggiano & Barrett, 1991; Chino & Funabiki, 1984; Johnson, R. W., Ellison, & Heikkinen, 1989; Kessler, Reuter, & Greenley, 1979; Nagelberg & Shemberg, 1980; O'Neil et al., 1985). Furthermore, evidence suggests that these gender differences are based on real differences and are not due to differences in reporting or help-seeking behaviors (Notman, 1989; Weissman & Klerman, 1977, 1985). Accordingly, any model that attempts to explain the development of depression needs to take into account these sex differences.

Recent work by researchers at the Stone Center at Wellesley College (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991) has examined the personality development of women, specifically addressing the deficits in male-based theories of development and formulating new theories focused on the unique experiences of women. From this frame of reference, Kaplan (1986) conceptualized the development of a women's core sense of self as developing within the context of relationships; she termed this "self-in-relation." According to this theory, the presence of mutual empathy builds the foundation for the self-in-relation and is nurtured in the mother-daughter relationship. Extending this line of

thought to address the development of depression in women, Kaplan (1991) believes that a woman is vulnerable to depression when she experiences events that serve as a loss of confirmation of her core self-structure, that is, events that question her ability to build and maintain relationships. This theory provides an alternative model for conceptualizing the development of depression in women and may contribute to our current understanding of the increased prevalence of depression in women. Unfortunately, no empirical literature exists to validate this theory.

The purpose of this research is to test both the Self-in-Relation and Attachment-Vulnerability models to determine their ability to explain depression in women. For the Self-in-Relation model of depression, this present research will be one of the first attempts to empirically test the model's utility. Quantitative methods could add both precision to this model and complement existing qualitative research. The Attachment-Vulnerability model, on the other hand, has been extensively researched. However, although researchers have tested parts of the model, a test of the complete model has yet to be published. This study also explores whether an integration of the Self-in-Relation and Attachment-Vulnerability models may provide a more complete explanation for the development of depression in women.

Self-in-Relation Model

Brief Overview

Self-in-Relation theory implies the following pathways to explain the development of depressive symptoms in women. Mutual empathy influences the development of the self-in-relation or core self-structure of women. Self-in-relation emphasizes the importance of relationships to women and their sense of self-esteem. This component may

impact women's likelihood of developing a vulnerability to depression, which in turn can lead to the development of depression. Delineating these implied pathways is the first step to conducting an empirical validation of this theory. Please refer to Figure 1 for an overview of the constructs and the pathways found in the Self-in-Relation model of depression.

Path A: The Influence of Mutual Empathy on Self-in-Relation

The development of the self-in-relation is contingent upon the presence of mutual empathy, which occurs within the context of relationships (Figure 1). Surrey (1991) emphasizes the importance of empathy as the central organizing experience for women's interpersonal interactions. Research and clinical case studies agree that women have a greater capacity for relatedness, emotional closeness, and emotional flexibility (Cohn, 1991; Gilligan, 1988; Guisinger & Blatt, 1994; Lyons, 1983; Prusank, Duran, & DeLillo, 1993).

Empathy and mutual empathy. Empathy, as a construct, can be defined in a variety of ways. Some researchers tend to focus on the cognitive structuring of empathy; that is, is the individual capable of perspective taking and understanding how the other person might think or feel without having the same experience? However, other researchers focus on the emotional response that is vicariously experienced from observing another person in a distressing situation--this is defined as emotional empathy (Chlopan, McCain, Carbonell, & Hagen, 1985; Eisenberg & Fabes, 1990; Mehrabian & Epstein, 1972). The process of empathic responses toward others is complex and may involve both cognitive and emotional responses, as well as a behavioral response. Hoffman (as cited in Cohn, 1991) found that boys and girls were equal in their ability to describe someone else's

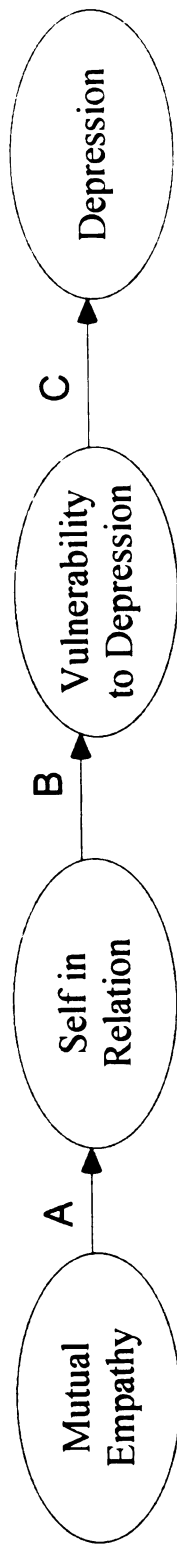


Figure 1. Self-in-Relation Structural Model

feelings; however, the awareness of someone else's feelings was more likely to be accompanied by a vicarious response for the girls. By taking the perspective of another individual (cognitive response), empathic feelings are often elicited within one's self (emotional response), and then these feelings are communicated to the individual in such a way that conveys an understanding of the individual's predicament (behavioral response). This process is defined as "accurate empathy," as it involves both an understanding and sensitivity to another person and the ability to communicate this understanding effectively, so the other person feels understood (Cohn, 1991; Eisenberg & Fabes, 1990; Layton, 1979; Surrey 1991). It is this last definition which bridges the gap between empathy and mutual empathy, a distinction made in the Self-in-Relation model.

Surrey (1991) asserts that the goal of development for women is to experience increasingly mutual empathic relationships and that this process begins with the early mother-daughter relationship. [It is important to note that the development of empathy is not limited to this relationship and can occur in daughter-father relationships as well.] Surrey outlines three critical aspects of the mother-daughter relationship that help create mutual empathy and lead to the importance of relationships to women. First, girls have an ongoing interest in and emotional desire to be connected with their mothers. To be psychologically present with the mother is experienced as self-enhancing, which allows for the process of describing and exploring feelings. It is through this exchange and discovery of feelings that a girl begins to "know the other" and "know the self." This process is the beginning of "differentiation" between the infant and mother (Chodorow, 1979). The second facet of the mother-daughter relationship occurs when the child's capacity for mutual empathy increases and the development of emotional connectedness allows for the

process of differentiation and clarification. A sense of separate self develops simultaneously with the development of a sense of basic relatedness for women (Chodorow, 1978; Surrey, 1991). In other words, the growth of the differentiated self occurs concurrently as a woman's relational capacities and networks grow (Kaplan, 1986). Consequently, this "mutual sharing process fosters a sense of mutual understanding and connection" (Surrey, 1991, p. 56).

This interaction between the mother and daughter creates emotional and cognitive connections that encourage both mother and daughter to be responsive to the feelings of each other. This is experienced as a feeling of mutual empowerment within the relationship. Both mother and daughter become mobilized to care for and respond to the well-being and development of the other. The motivational dynamic of mutual empowerment also focuses their attention on caring for and taking care of the relationship (Surrey, 1991). Through empathic identification with their primary caretaker, women idealize the mutuality and relatedness of relationships. Ideal mutual relationships are characterized by two separate individuals offering and receiving mutual gifts of self-disclosure within the context of an intimate and satisfying context (McAdams, Hoffman, Mansfield, & Day, 1996; Miller, J. B., 1994). This creates an ego ideal that is concentrated on caring for and relating to others (Lebe, 1986).

Mutuality in relationships, which begins in the earliest communications between infant and caretaker, is achieved through the cross-identifications between the daughter and her mother. The ability for the growing child to respond to her mother's feelings develops as the mother is able to express what it feels like to be a baby to her daughter (Winnicott, 1989). This process is also known as the "oscillating mother-daughter

introject” (p. 58); it occurs when the daughter takes on the role of the mother and the mother takes on the role of the daughter, depending on the needs of the situation or the individual at any given moment (Surrey, 1991). This interplay continues as a child develops within the context of the family. Individuality and connectedness are constantly renegotiated in the child-mother relationship. The experience of mutuality provides an adolescent with support, acknowledgment, and respect for maintaining her own beliefs, and her ability to offer mutuality allows her to express empathy for other family members (Grotevant & Cooper, 1986). According to Surrey, “all of life activity is carried on in a context of attentiveness and responsivity to the other as an intrinsic ongoing aspect of one’s own experience, what we call self-in-relation” (1991, p. 57).

Influence of mutual empathy on self-in-relation. This mutual empathic process described by Surrey (1991) influences the development of a relational core self-structure. The foundation of a relational core self-structure is built on the following three elements. The initial element is an interest in and attention to other individuals who form a base for emotional connections. This component includes the ability to empathize with others. Secondly, a mutual empathic process between two individuals is expected, where the mutual sharing of experiences leads to the heightened development of self and other. Not only is it important to understand the other individual, it is also important to be understood. Lastly, women expect interactions and relationships to be a process of mutual sensitivity and responses that provide the stimulus for further growth, empowerment, and self-knowledge. These ingredients lead to a strong relational core self-structure that involves healthy degrees of reciprocity and role flexibility (also defined as an oscillating self-structure). In summary, the self-in-relation can be understood as a

"context of attentiveness and responsivity to another as an intrinsic ongoing aspect of one's own experience" (Surrey, 1991, p. 57). It is clear that a central theme throughout all of these elements is the importance women place in maintaining and sustaining mutually rewarding and empathic relationships. It is central to a women's sense of esteem, according to this theory, that their relational qualities and self-image as a relational being are acknowledged, validated, and appreciated (Kaplan, 1986, 1991; Kaplan, Brooks, McComb, Shapiro, & Sodano, 1983).

The importance of women's relational qualities has been discussed and demonstrated in the literature. The importance of examining the "relational" or "connected" aspect of women's personality development compared to the autonomous, separate identity that men strive to achieve is often used to criticize the deficiencies of male-based personality theories. This difference between men and women is succinctly stated by Chodorow (1978) in The Reproduction of Mothering: "... the basic feminine sense of self is connected to the world; the basic masculine sense of self is separate" (p. 169).

Carol Gilligan (1982) found empirical support for this distinction in her exploratory study of how men and women solve moral dilemmas. Her results indicated that women not only described themselves as being connected to other important individuals in their lives, but that they also tended to solve moral dilemmas from a "response to care" orientation (i.e., morality is defined as sensitivity, responsibility to care for others). Additionally, she noted that most women felt caught between caring for themselves and caring for others (Lyons, 1983). In contrast, men often solved moral dilemmas by focusing on what is right and what one ought to do ("rights/responsibility")

orientation). Gilligan (1982) described women's self-concept as the "relational self" and men's self-concept as the "separated/autonomous self." This relational ego development, characteristic for women, affects how women view relationships. From this perspective, women have "a distinct way of seeing and being in relation to others" (Lyons, 1983, p. 127).

Chodorow (1979) elaborates on the development of the relational core self-structure, or "relational ego," in women by noting that girls, in contrast to boys, grow up perceiving themselves as similar to and remaining connected to their mothers. She defines this as a girl's "relational connection to the world" (p. 64). Consequently, the basic feminine personality is a "self-in-relation" (Chodorow, 1978). In contrast, the basic masculine personality is a denial of relation and connection, as they are taught to disconnect themselves from their mothers and identify with male figures (i.e., fathers, uncles, brothers). Separation and individuation are highly valued as masculine traits, whereas relational needs and emotions are often devalued as "not-me" (Chodorow, 1979; Guisinger & Blatt, 1994). Chodorow (1979) argues that because women develop relationally, differentiation also happens within the context of relationships, specifically between the young daughter and her primary caretaker. She indicates that differentiation does not indicate distinctness and separateness, but represents a particular way of being connected to others.

According to Kaplan (1986, 1991), this connection with others provides the necessary motivation to actively pursue the process of facilitating and enhancing connectedness with others. Evidence for this behavior is found in observations of females interacting with each other in a group context. Not only are girls more concerned with

reciprocity and maintaining positive relations with each other, they also exhibit specific behaviors to accomplish this goal, including expressing agreement with each other, pausing to allow each member a turn to speak, and working to make sure that each individual receives some share of the group's resources (Nolen-Hoeksema & Girgus, 1994). The importance of relationships for personality development has also been noted by other researchers, including object relations theorists and family systems theorists. These different schools of thinking are linked through their similar emphasis on the role that relationships have in personality development. Individuals do not exist in vacuums, but within the context of relationships, such as families, friends, and lovers (Miller, J. B., 1994). Similarly, this belief is found in Asian cultures, as individuals are not typically defined outside of their relationships (Guisinger & Blatt, 1994). The popular culture also emphasizes the importance of relationships to women. In a review of articles in popular women's magazines from the 1970s to early 1990s, Prusank, Duran, and DeLillo (1993) discovered a significantly greater number of articles discussing aspects of relationships compared to articles addressing issues of aloneness or separation.

Factors contributing to a weak relational core self-structure. Up to this point, the focus of this discussion has been on the development of the self-in-relation from a mutually empathic relationship between a young girl and her primary caretaker. If everything occurs as expected, a woman feels that her ability to maintain and sustain mutually rewarding and empathic relationships is acknowledged, validated, and appreciated (Kaplan, 1986, 1991); consequently, she would feel good about herself as a relational being. However, development of any individual is never perfect, and complications in this process can lead to a weak relational core self-structure. This can

occur when a woman is taught to believe that her wishes are inherently harmful to others and that she does not have the capacities to build and maintain relationships (Kaplan, 1986, 1991). This most likely happens when the relationship between the young girl and caretaker lacks mutual empathy and understanding. Surrey (1991) notes that guilt and shame can become tied to the experience of failure in mutual empathy, which adversely affects a woman's self-esteem. Infants who have been significantly disappointed once or repeated times by their mother's inability to meet their needs may develop states of acute confusion and feelings of intolerable anxiety (Winnicott, 1989). In addition, when a mother fails to meet the needs of her growing daughter, a breakdown in empathy relationships can lead the daughter to feel unrecognized and empty. This leads to the daughter feeling unreal, depressed, and disconnected, especially from her mother (Balint, as cited in Chodorow, 1978).

To summarize this pathway of the Self-in-Relation model, the relational core self-structure is believed to develop from a relationship that is characterized by an open interchange of thoughts and feelings between participants and mobilizes each individual to care for and respond to the well-being and growth of the other, as well as the development of the relationship. These mutually empathic relationships build the foundation of a woman's self-in-relation, which validates her ability to build and maintain mutually satisfying and rewarding interpersonal relationships.

Path B: Self-in-Relation Impact on Vulnerability to Depression

As stated in the previous section, sometimes women do not develop a strong self-in-relation due to early relationship experiences and failures in mutual empathy. This weak foundation can contribute to women being vulnerable to depression (Figure 1).

Vulnerability factors of depression are characterized by the following components: vulnerability to loss; inhibition of action or assertiveness; inhibition of anger and aggression; and low self-esteem. Each of these elements of depression takes on a special meaning when examined within the context of the Self-in-Relation theory of development for women.

Vulnerability to loss. Vulnerability to loss is often experienced by women when they lose their emotional connections with important individuals in their lives. Women often take responsibility for failing to achieve mutually affirming relationships and may believe that they do not have the ability to build and maintain these relationships (Kaplan et al., 1983). Bernardez-Bonesatti (1978) believes that when women have unresolved dependency and individuation issues with their mothers, these issues become transferred to their emotional relationships with men. Therefore, the loss of connection with a male significant other represents the loss of an earlier attachment with the mother. As a consequence, the threat of the loss is magnified. Besides feeling like a personal failure, society also devalues the relational qualities women have to offer. Terms such as “dependency” and “smothering” are often used in a derogatory manner to describe the behavior of women (Kaplan, 1986). J. B. Miller (1976) suggests that what our society perceives as weaknesses in women should be viewed instead as strengths. Along similar lines, the “selfless syndrome” argues that women experience emotional difficulties if they believe that they have failed to take into consideration other people’s needs (Lemkau & Landau, 1986).

According to Kaplan (1986, 1991), women often feel as though they are constantly in a state of loss when they are disappointed by the lack of mutuality and understanding in

their relationships. This loss is conceptually different than the loss of an actual or symbolic object and more accurately represents a loss of confirmation of a woman's core self-structure. Consequently, this devastating loss of one's sense of self can lead to feeling vulnerable to experiencing depressive feelings. Jack (1991) supports this conceptualization of depression. She believes that the loss experienced in depression is the loss of the self. Furthermore, findings from research with depressed college women indicated that the basis for their depression was significantly more likely to be concerned with interpersonal relations (Boggiano & Barrett, 1991). Boggiano and Barrett attribute this finding to the disappointment many female college students experience in their failure to actualize their ideal goals of establishing positive and intimate relationships.

Inhibition of action and assertion. The second element of the constellation of vulnerability factors is the inhibition of action and assertion. If a woman feels she has failed at maintaining her relational connections, she will try even harder to re-establish these connections, hoping that she will be able to restore her relational abilities and skills and confirm her core self-structure. Unfortunately, this leads to an inhibition of other forms of action and assertion for fear that these actions will cause further damage to the tenuous relational connections with significant others (Kaplan, 1986; Notman, 1989). Lemkau and Landau (1986) note that this is manifested behaviorally through a lack of assertion within the relationship.

After listening to narratives of depressed women, Jack (1991) developed the "Silencing the Self" theory, which states that women's depression is related to experiences in close relationships, specifically when women "silence" their feelings and identity to preserve and maintain a relationship. Consequently, this leads to the development of an

unheard and unvalued sense of identity, which causes women to feel even more separate and distant in the relationship. She believes that women are “self-silencing” when they change their thoughts to remain passive and inactive in their relationships. More strongly stated, “active silencing of the self leads to the inner split of depression, the condition of self-alienation, and hopelessness” (Jack, 1991, p. 168).

Inhibition of anger and aggression. The third vulnerability factor of depression is the inhibition of anger and aggression. Women often fear that their anger will destroy their mutually empathic relationships. Anger and its destructiveness is often interpreted by women as a confirmation of their worthlessness. However, the containment of anger often leads to feelings of helplessness and inaction (Kaplan, 1986, 1991). Anger is often so feared, that at times, women have difficulty recognizing and expressing it (Lemkau & Landau, 1986). The expression of anger is feared because it establishes automatic aloneness, separateness, and disconnection from the object of anger (Bernardez-Bonesatti, 1978; Lerner, 1977, 1980). In addition, anger is feared because it challenges the status quo of the relationship and the potential necessity for a woman to make a change. Therefore, the suppression of anger is necessary to avoid changing what is familiar (Jack, 1991). Women often have a tendency to mediate their expression of anger by crying, apologizing, and feeling guilty; these behaviors nullify the expression of anger (Bernardez-Bonesatti, 1978; Lerner, 1977). Lerner (1980) states that “hurt, rather than anger, emphasizes the relational *we* rather than the autonomous *I*” (p. 141, emphasis added).

These internal prohibitions against female anger are often reinforced by cultural stereotypes that suggest women should “play dumb,” “let the man win,” “be the follower, not the leader,” as well as avoid direct expressions of self-assertion, competitiveness, and

intellectual abilities (Lerner, 1974, 1980). In addition, Lerner (1977) believes that there are cultural taboos against expressing female anger (e.g., the belief that anger makes a woman unladylike, unfeminine, unmaternal, and sexually unattractive). Instead, women turn anger towards themselves and may express it indirectly or ineffectively; this increases the likelihood that women will experience depression (Bernardez-Bonesatti, 1978).

This difficulty in recognizing and expressing anger is thought to arise to some degree as a result of unresolved issues between daughters and their mothers. Lerner (1980) believes that when a daughter receives messages that any attempt to separate from the mother is threatening and wrong, she is influenced (unconsciously) to forgo her own needs to maintain her connection with her mother. Patriarchal culture and the mother-daughter relationship can teach a daughter that “silencing and diminishing themselves enables her to achieve a certain type of intimacy within a relationship of inequality” (Jack, 1991, p. 149).

Low self-esteem. The last vulnerability factor of depression is low self-esteem. When women fail at building and maintaining mutually rewarding relationships, they often take responsibility for this failure. This leads to a belief that their core self-structure is destructive. Relationships are central to women’s self-esteem because they help women feel powerful and effective; consequently, failing at relationships can be experienced as devastating (Kaplan, 1986; Notman, 1989). Also, when women measure themselves against culturally valued masculine norms, they denigrate their relational capacities. All of these factors contribute to lower self-esteem (Kaplan, 1986).

A negative evaluation of self has been shown to be highly related to a wide range of reported negative self comments (Brown, Andrews, Bifulco, & Veiel, 1990).

Additional research by Brown, Bifulco, and Andrews (1990) discovered that a negative evaluation of self was correlated with close relationships that were tense and difficult, whereas a positive evaluation of self was correlated with positive aspects of close relationships and a broader range of interpersonal ties and experiences. Rado (as cited in Roberts, J. E. & Monroe, 1992) believes that premorbid depressive individuals exhibit labile self-esteem because they rely to an inordinate degree on the love and approval of significant others to maintain their sense of worth. If the individual has these external sources of self-worth, self-esteem is not affected; however, if these relationships are lost, these individuals demonstrate an abnormally low self-esteem.

The Self-in-Relation model argues that the following vulnerability factors become accentuated when a woman does not feel confident about her abilities to sustain mutually rewarding relationships: vulnerability to loss; inhibition of action and assertion; inhibition of anger and aggression; and low self-esteem. It is believed that our patriarchal culture, as well as beliefs and schemas about how to behave in relationships, have contributed to these vulnerability factors. In contrast, a relatively strong relational core self-structure is theorized to help shield women from experiencing these risk factors.

Path C: Impact of Vulnerability to Depression on Depression

The Self-in-Relation model proposes that the above mentioned risk factors constitute a vulnerability constellation that predisposes women to experience symptoms of depression. Experiencing these vulnerability factors can lead to the development of depressive symptoms in some individuals (Figure 1).

Bernardez-Bonesatti (1978) asserts that the inhibition of anger in women leads to an increase in the preponderance of depression in women. Recent research has attempted

to delineate the relationships between the suppression of anger and depressive symptoms (Kopper & Epperson, 1991; Kopper-Roland, 1988). Gender and sex-role classifications (feminine, masculine, androgynous, and undifferentiated) appear to affect the experience and expression of anger. Kopper-Roland concluded that, for women, the suppression of anger appears to be the most problematic. Results suggest that there is an association between aspects of anger and depression, but these relationships are modified by sex-role classifications.

Jack (1991) believes that the symptoms of depression are a more extreme form of censorship and are a result of the unheard and unvalued sense of identity that develops when women “silence” themselves. Likewise, it has been demonstrated that women who are involved in relationships that lack intimacy and emotional support are more likely to become depressed when faced with a stressful event (Weissman & Klerman, 1977). Jack developed a questionnaire to assess schemas regarding standards for self-judgment, regulating behavior in relationships, and depression. This work developed from listening for recurring themes from the narratives of a small sample of women, the majority of whom were depressed. Furthermore, an exploratory study testing Jack’s “Silencing the Self” theory, hypothesized that relationship satisfaction and silencing the self behaviors were expected to account for more variance in depressive symptoms in women than men (Thompson, 1995). These results showed that, for women, silencing the self behaviors accounted for the most variance in depressive symptoms compared to demographic variables and relationship satisfaction. In contrast, income accounted for the most variance in depressive symptoms for men.

Self-esteem has been demonstrated to be a critical vulnerability factor in

depression. In a longitudinal study of women in North London, a negative evaluation of self was associated with an increased risk of later depression after a provoking crisis occurred (Brown, Andrews, et al., 1990). However, research has indicated that depression is more likely to occur in the combined presence of negative self-esteem and negative environmental factors (Brown, Bifulco, et al., 1990). Additional research suggests that individuals with labile self-esteem were differentially vulnerable to increases in depressive symptoms after a stressor had occurred (Roberts, J. E. & Monroe, 1992).

Another line of research has attempted to delineate social risk factors that may contribute to a vulnerability constellation of depression for women. The following factors have been considered social risk factors: maternal loss in childhood (before the age of 15), marital status, lack of marital intimacy, the stress of child rearing (specifically, three or more children under the age of 14), and lack of employment outside of the home (Brown & Harris, 1978; Drill, 1987; Lloyd, 1980; Ridsdale, 1986; Roy, 1985, 1996; Tennant, 1985; Tennant, Hurry, & Bebbington, 1982; Weissman & Klerman, 1977). Brown and Harris believe that these factors contribute to depression when combined with a stressful life event. However, the evidence for some of these influences is equivocal (i.e., maternal loss in childhood, lack of employment outside of home). After a review of the available evidence, Tennant (1985) concluded that social risk factors act independently of each other and may vary considerably in different populations.

The available data suggest that the vulnerability factors included in the Self-in-Relation model of depression do indeed increase a woman's likelihood of experiencing depressive symptoms. Specifically, empirical evidence appears to support the inhibition of anger and aggression and low self-esteem vulnerability factors (Brown, Andrews, et al.,

1990; Brown, Bifulco, et al., 1990; Jack, 1991; Thompson, 1995).

Summary and Critique of the Self-in-Relation Model

Self-in-relation develops from a mutually empathic relationship with the mother that encourages a woman to value her ability to build and maintain interpersonal relationships. When a woman does not feel confident about her abilities to sustain mutually rewarding relationships, she is more likely to experience a constant state of felt loss, be less assertive, bury her anger and aggression, and have a decrease in self-esteem. Stereotypes and beliefs about how to behave in relationships become more salient when women believe they have failed to attain mutually empathic relationships. The impact these vulnerability factors exert on the development of depression were gathered from listening to women's experiences in therapeutic settings and formulating a theory that incorporates what women experience in their own lives without a priori conceptions (Jack, 1991; Kaplan, 1986; Lemkau & Landau, 1986).

The Self-in-Relation model was developed to address the deficiencies of male-centered theories of personality, as well as to develop new ideas concerning women's development. Researchers interested in this area have aspired to validate this theory by listening to women's experiences and describing their observations. Attempts have been made to measure the aspects of mutually empathic relationships (Genero, Miller, & Surrey, 1990; Genero, Miller, Surrey, & Baldwin, 1992). In addition, efforts have been made to illustrate the observations and data obtained from women in a variety of settings, including mental health clinics, women's shelters, and research studies to validate the impact of the self-in-relation on vulnerability factors. Currently, there are no empirical data examining the self-in-relation construct. Further endeavors that employ quantitative

methods could add precision to the existing theory. Likewise, quantitative data would complement the existing qualitative research in this area and further our knowledge of how depression may develop in women.

Furthermore, there is a limited amount of research to support the influence vulnerability factors have on depression in women. The available data suggest that these factors (especially the inhibition of anger and aggression and low self-esteem) do indeed increase the likelihood of experiencing depressive symptoms (Brown, Andrews, et al., 1990; Brown, Bifulco, et al., 1990; Jack, 1991; Jack & Dill, 1992; Thompson, 1995). Research conducted by Brown and colleagues (Brown, Andrews, et al., 1990; Brown, Bifulco, et al., 1990) indicate, however, that these vulnerability factors do not influence an onset of depression on their own, but are more significant when combined with a stressful life event. The Self-in-Relation model, however, does not accommodate for the association between stressful life events and vulnerability factors of depression leading to the development of depressive symptoms.

Moreover, theorists from a feminist postmodern perspective cite three criticisms of the Self-in-Relation theory. First, because this theory de-emphasizes individual autonomy and achievement for women, it may inadvertently support traditional gender roles and stereotypes (Douglas, 1995). The emphasis on women as caring, empathic, relational beings can be translated to mean that males' needs and wishes take precedence (Westkott, 1989). Second, this theory does not allow for developmental differences between women of race, culture, age, or sexual orientation (Douglas, 1995). Third, it focuses too exclusively on the influence the mother-daughter relationship has on developing female identity (Douglas, 1995). These theorists believe that the Self-in-Relation theory does not

significantly contribute in new ways to our understanding of the psychological development of women (Douglas, 1995; Westcott, 1989).

Another model which may help shed light on the increased rates of depression experienced by women is the Attachment-Vulnerability model of depression (Blatt, 1974; Blatt & Zuroff, 1992). Contrary to the Self-in-Relation model, this model has been extensively researched in the literature and incorporates the influence of stressful life events on depression.

Attachment-Vulnerability Model

Brief Overview

The Attachment-Vulnerability model emphasizes the parent-child relationship, personality organization vulnerability, and life events to explain the development of depression. The parent-child relationship is believed to influence an individual's personality organization vulnerability. As a result, this vulnerability can increase the likelihood of developing depressive symptoms in the presence of stressful life events. Blatt specifies two distinct paths leading to the development of anaclitic and introjective depression. For the purpose of this research, these paths are grouped together under the core elements found in the Attachment-Vulnerability model. Please refer to Figure 2 for an overview of the constructs and pathways for the Attachment-Vulnerability model of depression.

Path A: Parent-Child Relationship Impact on Personality Organization Vulnerability

This model proposes that the parent-child relationship has a profound influence on the development of personality organization (Figure 2). Aspects of this relationship include: attachment styles of children, components of the parent-child relationship that

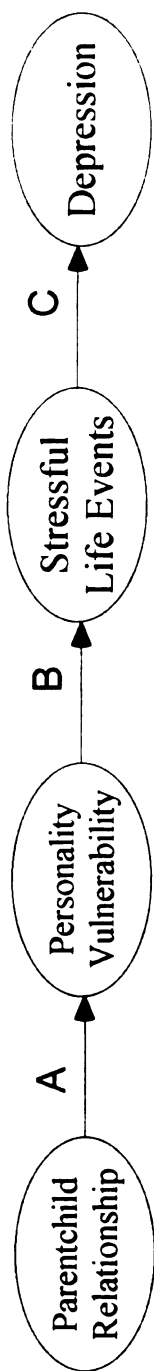


Figure 2. Attachment-Vulnerability Structural Model

contribute to depression, and adult attachment styles. The influence these factors have on personality organization development is also presented. It is believed that an anxious attachment relationship with parents leads to an interpersonal vulnerability, whereas an avoidant attachment relationship leads to a self-evaluative vulnerability.

Attachment styles in children. From the moment a child is born, she develops an attachment toward her parents, as she is dependent on them for her survival. John Bowlby (1973a, 1973b, 1980) and his student, Mary Ainsworth, were the first to recognize the importance of the relationship between a child and her primary caretaker, usually the mother. Through this attachment relationship, the child develops internal working models of the self and other (Bowlby, 1973a, 1973b, 1980). The child learns, through the behavior of her parents, what to expect from others, as well as beliefs and expectations about her own self worth (Bowlby, 1973a; Paterson, Pryor, & Field, 1995; Sroufe, 1986). These internal working models influence how the infant organizes and interprets her experiences. Bowlby (1973a) asserts there are two dimensions to these internal representations: how accessible and responsive the attachment figure is likely to be and how acceptable or unacceptable the infant feels in relation to her attachment figure. For instance, an unwanted child may feel not only unwanted by her parents, but also unwanted by other significant individuals with whom she may come into contact. Furthermore, the child may feel that she is not worthy of receiving any love and affection. It is these internal working models that influence the personality development of individuals (Bowlby, 1980). Individual differences in attachment relationships reflect the quality of interaction between a child and her parents (Egeland & Sroufe, 1981; Sroufe, 1986; Sroufe & Waters, 1977). Likewise, Bowlby (1973a, 1980) believes that an individual's

internal working models are indicative of the individual's actual experience with her parents.

By observing infants interacting with their mothers, Ainsworth, Blekar, Waters, and Wall (1978) noticed three categories of infant responses. Securely attached infants cried when their mothers left the room, but were easily calmed when their mother returned. These infants often wanted to be picked up and held by their mothers. Insecurely (or anxiously) attached infants were characterized as belonging to either the ambivalent or avoidant group. Ambivalent infants tended to be anxious from the beginning, did not explore the room when their mother was there, became agitated when separated, and although they tended to seek their mother's comfort upon her return, they simultaneously were difficult to soothe. The avoidant group of infants explored their new environment without checking back with their mothers, were not affected when their mothers left the room, and tended to avoid their mother when she returned. Based on these observations, and subsequent research, attachment can be categorized into two components: a cognitive-affective dimension, defined as the underlying quality of affect toward attachment figures, as well as a behavioral dimension, defined as the utilization of these figures for support and proximity (Hoffman, 1984; Paterson et al., 1995).

Research has demonstrated specific patterns of behavior associated with each of these attachment styles. For instance, insecurely attached infants are significantly less competent, show little enthusiasm for problem solving, use their parents' assistance ineffectively, and are less self-reliant. In addition, insecure attachment has been shown to interfere with a child's subsequent ability to develop meaningful interpersonal relationships, to be able to trust others, and to develop a stable self-concept independent

of the original attachment relationship (Blatt & Homann, 1992).

Aspects of the parent-child relationship that contribute to depression. The quality of care in the parent-child relationship is believed to influence the quality of attachment (Egeland & Sroufe, 1981). Both disturbed and secure patterns of caring relationships are internalized by the child as mental representations. These impaired mental representations (from disturbed attachment relationships) may result in affective and cognitive consequences that can create a vulnerability to later depression (Blatt & Homann, 1992).

Research has delineated specific aspects of the caretaker-infant relationship that contribute to these impaired internal working models. Specifically, lack of parental care, parental rejection, and parental control are identified as risk factors influencing the development of depressive symptoms in adolescents and adults (Frank, S. J. et al., 1997; Parker, 1983, 1984; Parker, Tupling, & Brown, 1979; Zemore & Rinholm, 1989). Parker (1983, 1984) demonstrated that the combination of lack of caring and overprotection significantly increased the likelihood of experiencing depression later in life. This seems to be especially true for women who experienced their mothers as overprotective (Zemore & Rinholm, 1989). Controlling parents interact with their children through predominantly negative methods, exhibiting elements of strictness combined with inconsistent expressions of love and affection. This inconsistency reflects a conditional acceptance attitude toward the child, which creates conditions in which a child could feel shame for having fallen short of the “ideal” in the eyes of the self and others (Blatt & Homann, 1992). Inconsistent love from a father and high-conflict, paternally-dominated homes are two additional factors that increase the likelihood of experiencing depression in adult women (Schwarz & Zuroff, 1979). Pathogenic parents are often described as being more unresponsive, disparaging

and rejecting, and insistent on the child remaining close by and attached. This contributes to a child feeling anxious, over-dependent, and insecure (Parker, 1984).

In contrast, there are aspects of a secure attachment relationship that internalize positive working models of the self and other. These positive mental representations can lead to a relative invulnerability for developing depression or other psychiatric disorders (Blatt & Homann, 1992; Blatt & Zuroff, 1992). Research indicates that maternal sensitivity to infant signals is associated with a secure attachment style (Bretherton, Biringen, Ridgeway, Maslin, & Sherman, 1989). Adolescents who rated their parents as independence-encouraging and accepting were more likely to rate themselves as having a secure attachment relationship with their parents (McCormick & Kennedy, 1994). In addition, adolescents who exhibited conflictual independence, defined as freedom from feelings of conflict, guilt, and resentment in parental relationships, were more likely to evidence adaptive psychological functioning on self-report measures (Kenny & Donaldson, 1992). After examining the mother-daughter relationship and psychological separation in adolescence, Ruebush (1994) demonstrated that the greater the mother's understanding of her daughter, the less likely the daughter was to suffer from excessive guilt, anxiety, mistrust, responsibility, inhibition, anger, and resentment. Finally, securely attached adolescents are confident that they will be responded to by their parents; this confidence is believed to be indicative of positive mental representations (Blatt & Homann, 1992; Blatt & Zuroff, 1992; Ruebush, 1994).

Attachment styles in adult relationships. Attachment styles are thought to be relatively enduring and influential in adulthood relationships (Blatt & Homann, 1992; Bowlby, 1980; Brennan & Shaver, 1995; Collins & Read, 1990; Simpson, 1990).

Furthermore, research demonstrates that early attachment styles remain relatively constant unless there is a significant reparative relationship with a secondary care giver, a secure partner, or a therapist (VanUzendoorn, 1992). Bowlby (1973a, 1973b, 1980) asserted that individual differences in attachment styles reflected differences in individual's internal working models of the self and other. For example, anxiously attached individuals have internalized negative models of the self and other as evidenced by their having little confidence in the accessibility of their attachment figures. This results in coping behavior that allows them to remain close to this significant individual out of fear that they will be abandoned (Bowlby, 1973b).

One theory of adult attachment styles that also utilizes this concept has been proposed by Griffin and Bartholomew (1994). Their typology of adult attachment styles is based on an individual's internal models of the self and hypothetical others. The degree to which individuals feel that they are worthy to have others respond positively towards them is represented by the "self" dimension, whereas the "other" dimension reflects the degree to which individuals believe that others are generally expected to be available and supportive. These two dimensions yield four attachment styles: secure (positive self and other models); dismissing (positive self model and negative other model); fearful (negative self and other models); and preoccupied (negative self model and positive other model).

Griffin and Bartholomew observed that "each of these patterns is characterized by a distinct pattern of emotional regulation and interpersonal behavior" (1994, p. 431). Preoccupied individuals have a profound sense of unworthiness which motivates them to validate their self-worth through excessive closeness in personal relationships. Consequently, they are left to feel vulnerable to extreme distress when intimacy needs are

not met. Fearful individuals are similar to preoccupied individuals, in that they also value relationships to validate their self-worth. However, they often shun intimacy for fear of being criticized and rejected. Securely attached individuals have an internalized sense of self worth and are comfortable in intimate relationships.

Influence of attachment on personality organization vulnerability. Consequences of the early parent-child relationship can lead to vulnerabilities in different areas, depending on an individual's early experiences. Blatt and Zuroff (1992) discuss two types of vulnerabilities in personality organization: interpersonal and self-evaluative vulnerability. According to their model, an interpersonal vulnerability is characterized by an individual who is excessively dependent, affectively labile, and is preoccupied with attachment and interpersonal relationships. This vulnerability is thought to arise from an anxious, insecure attachment to parents, specifically the mother. A self-evaluative vulnerability is defined as an individual who is ambitious, self-critical, overcompensating, and obsessed with issues of failure, success, blame, and responsibility. Blatt and Zuroff argue that a self-evaluative vulnerability is influenced by avoidant, insecure attachments. In contrast, a secure attachment with parents leads to a relative invulnerability.

These vulnerabilities are also recognized by other researchers, although they use different terminology. Bowlby discusses how anxiously attached individuals seek interpersonal contact and are excessively dependent on others, compared to compulsively self-reliant individuals who avoid others and are scornful of people who seek close interpersonal relationships. Beck distinguishes between socially dependent and autonomous vulnerabilities. A socially dependent vulnerability is defined as an individual's investment in positive interactions with others and being careful to please others, as well

as attempting to avoid disapproval and rejection. An autonomous vulnerability refers to individuals who have a tendency to strive for meaningful goals, blame themselves when they fail to live up to expectations and standards, and are self-critical of their faults (Blatt et al., 1982; Blatt & Zuroff, 1992; Robins & Luten, 1991).

Researchers suggest that individuals who were anxiously or ambivalently attached to their primary care giver may develop a depression focused on issues of dependency, loss, and abandonment. In addition, the anxiety producing aspects of parental overprotection can encourage a child to feel vulnerable and afraid contributing to an interpersonal personality organization vulnerability (Blatt & Homann, 1992; Blatt & Zuroff, 1992; Leadbeater, Blatt, & Quinlan, 1995). Likewise, a preoccupied adult attachment style can strengthen a vulnerability of experiencing difficulties in interpersonal relationships (Griffin & Bartholomew, 1994).

In contrast, avoidant or insecurely attached individuals may develop a depression that is focused on issues of self-worth and self-criticism. Parental overprotection can augment a child's feelings of anger, hopelessness, and self-criticism, contributing to a self-evaluative personality organization vulnerability (Blatt & Homann, 1992; Blatt & Zuroff, 1992; Leadbeater et al., 1995). Similarly, a fearful adult attachment style may increase the likelihood of developing a vulnerability based on self-criticism (Griffin & Bartholomew, 1994).

Overall, there is a large amount of research that explains the influence early attachment relationships have on the development of an individual's personality organization. The internal working models of the self and other that are a result of the parent-child relationship have an impact on the behavior of the developing child that

continues throughout adulthood. Specific aspects of the parental relationship (i.e., lack of parental care, overprotection, and parental rejection) have been associated with the likelihood of developing depression. The type of attachment relationship and certain characteristics of parenting behavior can contribute to the development of a personality organization vulnerability: Anxiously attached individuals may develop an interpersonal vulnerability, whereas insecurely attached individuals may develop a self-evaluative vulnerability.

Path B: The Influence of Personality Organization Vulnerability on Life Events

The second pathway in this model proposes that individuals' personality organization vulnerability impacts their experience of life events (Figure 2). According to the diathesis-stress model of psychopathology, individual predispositions may create a differential sensitivity to certain types of stressful life events (Blatt & Zuroff, 1992; Coyne & Whiffen, 1995). Consequently, these individual predispositions or vulnerabilities may increase the likelihood of experiencing depressive symptoms in the presence of stressful life events (Blatt & Zuroff, 1992).

Whether or not an event is troublesome to an individual depends upon the personal relevance and meaning the individual assigns to that event. Lazarus and Folkman (1984) state "what is major or minor is, in effect, often an individual matter" (p. 309). Events determined to be personally troublesome may be indicative of an individual's difficulties with personal needs and expectations (Gruen, Folkman, & Lazarus, 1988; Kanner, Coyne, Schaefer, & Lazarus, 1981; Lazarus, 1984; Lewinsohn, Mermelstein, Alexander, & MacPhillamy, 1985; Thoits, 1983). Research examining the relationship between endorsed hassles and psychological health has demonstrated the importance of relevant

“central” hassles, which are more significant to an individual compared to other hassles. For instance, “central” hassles were found to correspond with more emotional distress when events were going wrong and more positive feelings when events were going well (Gruen et al., 1988; Lazarus, 1984; Lewinsohn et al., 1985). Furthermore, research examining the interpersonal relationships of college women suggest that interpersonal and self-evaluative individuals “create different types of interpersonal environments that can result in vulnerabilities to different types of stressful life events” (Blatt & Zuroff, 1992, p. 536).

Along similar lines, hassles can be thought of as the consequence of one’s cognitive appraisal of a situation. If an individual determines that a situation is indeed a hassle, this can be reflective of that individual’s personal vulnerability. Likewise, if another individual in the same situation does not appraise the situation as a “hassle,” this can be reflective of a relative invulnerability for that situation (Lazarus, 1984). Research supports this reasoning; depressed individuals, compared to nondepressed individuals, were more likely to use internal, global, expected, and stable attributions to characterize their most personally stressful life events (Gong-Guy & Hammen, 1980; Metalsky, Halberstadt, & Abramson, 1987).

According to the Attachment-Vulnerability model, two categories of life events are hypothesized to be influenced by the presence of a personality organization vulnerability. Specifically, an interpersonal vulnerability is believed to influence an individual's reactions to events that concern issues of loss and abandonment. In contrast, a self-evaluative vulnerability is theorized to influence an individual's reactions to perceived failure to attain achievement goals (Blatt & Zuroff, 1992; Hammen, Marks, Mayol, & deMayo, 1985).

Empirical evidence indicates that individuals with an interpersonal vulnerability tend to endorse more negative interpersonal life events than negative achievement events. In addition, these individuals tend to recall information that is congruent with their personality vulnerability. This finding also holds true for individuals with a self-evaluative vulnerability; these individuals recall more negative achievement events compared to negative interpersonal events (Blatt & Zuroff, 1992; Hammen et al., 1985; Rude & Burnham, 1993).

Path C: Life Events Impact on Depression

The final pathway in the Attachment-Vulnerability model of depression is the link between life events and the development of depression (Figure 2). The connection between stressful life events and hassles with depression are discussed, as well as the evidence to support the interaction of personality vulnerability with life events and consequences for an individual's psychological health. Specifically, an interpersonal vulnerability, in the presence of negative interpersonal events, leads to the development of anaclitic depression, whereas a self-evaluative vulnerability, in the presence of negative achievement events, leads to the development of introjective depression (Blatt & Zuroff, 1992).

Stressful life events and hassles and depression. Stressful life events have been associated with the development of psychiatric symptoms (Lloyd, 1980; Paykel et al., 1969; Thoits, 1983). Life events can be classified as positive or negative major events occurring in an individual's life (i.e., birth of a child or the death of a parent; Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978). Research studies indicate a relationship between the endorsement of stressful life events and the occurrence of psychological

symptoms of distress, including symptoms of anxiety and depression (Billings, Cronkite, & Moos, 1983; Frank, E., Anderson, Reynolds III, Ritenour, & Kupfer, 1994; Lewinsohn et al., 1985; Sarason, Johnson, & Siegel, 1978; Zatura, Guarnaccia, & Dohrenwend, 1986). Empirical evidence suggests that depressed individuals experience a greater number of negative events during the month preceding the onset of a depressive episode, and events are consistently rated as more aversive by depressed individuals compared to control groups (Lewinsohn & Talkington, 1979; Lloyd, 1980; Paykel et al., 1969). Certain kinds of events, especially those pertaining to academic events, domestic inconveniences, and interpersonal relationships, are experienced as especially aversive by depressed individuals (Lewinsohn & Talkington, 1979; Lloyd, 1980). J. G. Johnson (1992) noted that different categories of life events may differentially predict psychopathology levels as well as changes in psychiatric symptoms over time.

The endorsement of hassles, defined as “experiences and conditions of daily living that have been appraised as salient and harmful or threatening to the endorser’s well-being” (Lazarus, 1984, p. 376), are also significantly associated with the development of psychological symptoms of distress (Blankstein & Flett, 1992; Blankstein, Flett, & Koledin, 1991; Holm & Holroyd, 1992; Kanner et al., 1981; Lazarus, 1984; Miller, M. J., Tobacyk, & Wilcox, 1985; Roberts, S. M., 1995). For example, in college samples, hassles are significantly related to depression and anxiety symptoms. Likewise, college women tend to rate life hassles as more severe compared to college men (Blankstein & Flett, 1992). Studies suggest that hassles are a better predictor of psychological distress than life events (Holm & Holroyd, 1992; Kanner et al., 1981; Lazarus, 1984). Additionally, hassles appear to contribute to symptoms independent of major life events

(Kanner et al., 1981; Lazarus & Folkman, 1984).

Interaction between vulnerability, life events, and depression. Blatt and Zuroff (1992) hypothesized that individuals are at an elevated risk for depression when they experience life events that are congruent with their personality organization vulnerability (i.e., interpersonal or self-evaluative vulnerabilities). In other words, “. . . certain people will be sensitive to the loss or threat of loss posed by specific kinds of stressful experiences” (Coyne & Whiffen, 1995, p. 358). Previous research suggests that there is a specific association between personality organization vulnerabilities and congruent life events that increase the likelihood of experiencing depressive symptoms (Blatt & Zuroff, 1992; Clark & Oates, 1995; Hammen et al., 1985; Robins, 1990; Rude & Burnham, 1993; Santiago-Rivera & Bernstein, 1996; Zuroff & Mongrain, 1987). In addition, Zatura and colleagues (1986) suggest that problems of past rejection, loss, or goal frustration may make a person uniquely vulnerable to small events that are thematically equivalent.

Individuals are at risk for developing symptoms of depression to the extent that they can be characterized as having an interpersonal or self-evaluative vulnerability and to the extent that they encounter negative life events that match their specific vulnerabilities (Rude & Burnham, 1993). For instance, individuals who score high on measures of interpersonal vulnerability are more likely to be responsive to disruptions of interpersonal relations, to avoid direct conflict and confrontation by seeking compromises in conflictual situations, and to develop an anaclitic depression (Blatt & Zuroff, 1992). In addition, these individuals demonstrated significantly stronger associations between depression and schema-relevant negative interpersonal life events than between depression and schema-irrelevant negative achievement events (Hammen et al., 1985). Results from experimental

studies indicated that individuals with an interpersonal vulnerability reacted more negatively after exposure to a rejection situation compared to a failure situation (Blatt & Zuroff, 1992; Zuroff & Mongrain, 1987).

Likewise, research with adolescent girls demonstrated that those individuals who show greater interpersonal depressive vulnerability were also likely to react negatively to stressful events involving others (Leadbeater et al., 1995). Leadbeater and colleagues argue that adolescents who are concerned with issues of abandonment and seek attention and nurturing are more reactive to stressful life events involving others and are more likely to exhibit internalizing symptoms (including symptoms of depression). Depression appears to occur in response to disruptions of satisfying interpersonal relations for these adolescent women. In addition, Welkowitz, Lish, and Bond (1985) agree that women are more likely to experience this type of depression.

In contrast, the association between negative congruent life events and the development of depression for self-evaluative individuals is not as apparent. Some research studies have failed to find a significant association between negative achievement life events and depressive symptoms for these individuals (Hammen et al., 1985; Rude & Burnham, 1993; Santiago-Rivera & Bernstein, 1996). However, one research study utilizing hierarchical regression analysis demonstrated that a self-evaluative vulnerability interacted significantly with congruent life events, whereas a similar relationship for individuals with an interpersonal vulnerability was not found in the data (Clark & Oates, 1995). Likewise, for both men and women, the endorsement of a self-evaluative vulnerability better predicted distress after exposure to a failure scenario compared to a rejection scenario in studies utilizing a controlled experimental design (Blatt & Zuroff,

1992; Zuroff & Mongrain, 1987). Subsequently, individuals who endorsed a self-evaluative vulnerability are more likely to develop an introjective depression (Blatt & Zuroff, 1992).

Trends in the literature, from both longitudinal and experimental designs, indicate that individuals who endorse an interpersonal vulnerability are more vulnerable to experiencing depressive symptoms in the presence of negative interpersonal events. In contrast, the results for individuals with a self-evaluative vulnerability are mixed, suggesting that these individuals may be vulnerable to depression in the presence of a variety of life events beyond negative achievement events. In summary, the empirical evidence suggests that there is a greater specificity in the vulnerability of developing depression for interpersonal individuals compared to self-evaluative individuals (Blatt & Zuroff, 1992).

Summary and Critique of the Attachment-Vulnerability Model

This model of depression explains how the type of attachment relationship and certain characteristics of parenting behavior can contribute to the development of a personality organization vulnerability. Blatt and Zuroff (1992) theorized that anxiously attached individuals may develop an interpersonal vulnerability, whereas insecurely attached individuals may develop a self-evaluative vulnerability. The Attachment-Vulnerability model also recognizes the impact life events can have on the development of depression. The association between personality organization vulnerability and congruent life events is believed to increase the likelihood of an individual experiencing depressive symptoms; however, this relationship has empirical support mainly for those individuals with an interpersonal vulnerability who are most likely to be negatively affected by

experiences that highlight relationship issues. This model proposes that an anaclitic depression is focused around interpersonal issues, whereas an introjective depression is centered around issues of self-worth.

One of the inherent limitations of the Attachment-Vulnerability model is its negative focus on interpersonal relationships. Individuals who place too much emphasis on relationships are seen as “dependent,” “helpless,” and “weak,” and relationships characterized by “dependency” are viewed as a less mature form of relatedness. This negative view of interpersonal relationships is reflected in the term chosen to describe an interpersonal personality vulnerability--dependency. The Attachment-Vulnerability model neglects the positive aspects of relationships that have been described elsewhere as central to individuals’ sense of well-being. In some ways, this limitation is intrinsic to the psychoanalytic theory on which this model of depression is based. The benefits and importance of relationships are only recognized as consequences of societal expectations and sex-role stereotypes (Chevron et al., 1978).

The Attachment-Vulnerability model also suggests that independence is a more valued trait than interpersonal connectedness (Coyne & Whiffen, 1995). Women who endorse a relative invulnerability to depression are “characterized by goal-oriented strivings and feelings of accomplishment” (Blatt & Zuroff, 1992, p. 533). In addition, these women express confidence in their resources and capacities; have a sense of responsibility, inner strength, and independence; and a sense of pride and satisfaction in their accomplishments. There is no mention of positive involvement in relationships contributing to these feelings of self-efficacy. Interestingly, social support research contradicts the belief that independence should be valued at all costs. This research has

demonstrated that having at least one close relationship in the face of stressful events can buffer an individual from developing depressive symptoms (e.g., Brown, Bifulco, et al., 1990).

Another limitation to the Attachment-Vulnerability model is the manner in which it has been studied. Specific components of this model have been extensively researched (Blatt et al., 1982; Blatt & Homann, 1992; Blatt & Zuroff, 1992; Clark & Oates, 1995; Hammen et al., 1985; Leadbeater et al., 1995; Rude & Burnham, 1993; Zuroff & Mongrain, 1987). For instance, the association between aspects of the parent-child relationship and the development of a personality vulnerability leading to depression is well-documented (Blatt et al., 1982; Blatt & Homann, 1992; Blatt & Zuroff, 1992; Leadbeater et al., 1995). Furthermore, the relationship between personality development and stressful life events leading to depression is also substantiated (Clark & Oates, 1995; Hammen et al., 1985; Robins, 1990; Rude & Burnham, 1993; Santiago-Rivera & Bernstein, 1996; Zuroff & Mongrain, 1987). To date, however, there is no study that examines the entire model. In addition, conclusions about how well this model accounts for the variance in depressive symptoms is unclear, as the entire model has not been studied. A recent study examining the association between parent-child relationships, personality vulnerability, and depression, demonstrated that, for inpatient adolescent boys and girls, interpersonal and self-evaluative concerns (i.e., personality vulnerabilities) together explained approximately half of the variance in reported levels of depression (Frank, S. J. et al., 1997). Although this finding is impressive, the variables examined do not constitute a test of the Attachment-Vulnerability model. The effectiveness of this model in explaining the variance of depression in women cannot be demonstrated until all

of the relationships and pathways in the model are examined together.

An additional criticism of the Attachment-Vulnerability model is the dichotomy between interpersonal and self-evaluative vulnerabilities that Blatt and Zuroff (1992) have conceptualized. Individuals may develop vulnerabilities that include both interpersonal concerns and issues of self-worth (Coyne & Whiffen, 1995). Both interpersonal and self-evaluative vulnerabilities apparently explain a greater proportion of the variance in depressive symptoms for adolescents compared to either vulnerability alone (Frank, S. J. et al., 1997). The majority of studies reported in the literature divide individuals into these two separate categories, neglecting to mention those individuals who may have endorsed both interpersonal and self-evaluative vulnerabilities (Blatt & Maroudas, 1992; Blatt & Zuroff, 1992; Hammen et al., 1985; Rude & Burnham, 1993). An exception to this common practice, is one study that divided hospitalized patients into four categories: a group that endorsed an interpersonal vulnerability, a group that endorsed a self-evaluative vulnerability, a group that endorsed both vulnerabilities (the mixed group), and a group that did not endorse either vulnerability. Results demonstrated that the mixed group evidenced the highest levels of depression (Blatt et al., 1982). This finding suggests that it may be beneficial to include those individuals who endorse both an interpersonal and self-evaluative vulnerability in empirical investigations of the Attachment-Vulnerability model of depression.

Another limitation of the Attachment-Vulnerability model is whether it adequately explains the development of depression in women. Research indicates that women are more likely to endorse an interpersonal vulnerability, and that the correlations for hypothesized relationships in the model are more often significant for women. However,

gender differences have not been systematically examined (Blatt et al., 1982; Blatt & Maroudas, 1992)--men and women are usually grouped together in statistical analyses to test hypothesized relationships (Blatt et al., 1979; Blatt et al., 1982; Blatt et al., 1995; Chevron et al., 1978; Frank, S. J. et al., 1997). [The difficulty in documenting gender differences may be attributed to the methods used in scoring the measure used to assess interpersonal and self-evaluative vulnerabilities (Welkowitz et al., 1985). This will be discussed more fully in the Methods section of this proposal.] Consequently, the findings from these studies are often generalized to describe the experiences of both men and women and may be obscuring the specific aspects of this model that may contribute to a more complete explanation of the depressive symptoms in women (Blatt & Zuroff, 1992). These limitations highlight a concern that the Attachment-Vulnerability model may not accurately describe our understanding of how depression develops in women.

Combination Model

A merger of the Attachment-Vulnerability model with the Self-in-Relation model may be a more comprehensive explanation of the development of depression in women. The Self-in-Relation model adds an unique perspective to this explanation as it is derived from women's developmental history and not solely from men's experiences, whereas the Attachment-Vulnerability model is well-defined and empirically-validated. These distinctive strengths could complement each other when the two models are connected. Likewise, a combination of these models would offset the limitations inherent in each one. This presentation now directs attention to the pathways and constructs of this new Combination model.

Brief Overview

The Combination model of depression incorporates elements of both the Self-in-Relation and Attachment-Vulnerability models. This model argues that the parent-child relationship influences the development of a personality organization vulnerability. Self-in-relation is simultaneously affected by both mutual empathy and an individual's personality vulnerability. Subsequently, self-in-relation affects an individual's susceptibility to depression (vulnerability to depression), which in turn, can increase the likelihood of developing depressive symptoms. In addition, an individual's personality organization vulnerability can impact the life events experienced, which can influence the chances of experiencing depression. Please refer to Figure 3 for the constructs and pathways found in the Combination model of depression.

Path A: The Impact of Parent-Child Relationship on Personality Organization

Vulnerability

The type of attachment relationship and certain characteristics of parenting behavior can contribute to the development of a personality organization vulnerability (Figure 3). The most significant aspects of the parent-child relationship have been identified as lack of care, overprotection, and separation-individuation issues (Blatt, 1974; Blatt & Homann, 1992; Blatt & Zuroff, 1992; Leadbeater et al., 1995; Parker, 1984; Parker et al., 1979; Schwarz & Zuroff, 1979). Internal working models of the self and other that are a result of the parent-child relationship have an impact on the development of an individual which continues throughout adulthood (Blatt & Homann, 1992; Bowlby, 1973a, 1973b, 1980; Brennan & Shaver, 1995; Collins & Read, 1990; Griffin & Bartholomew, 1994; Simpson, 1990). Anxiously attached individuals may develop an

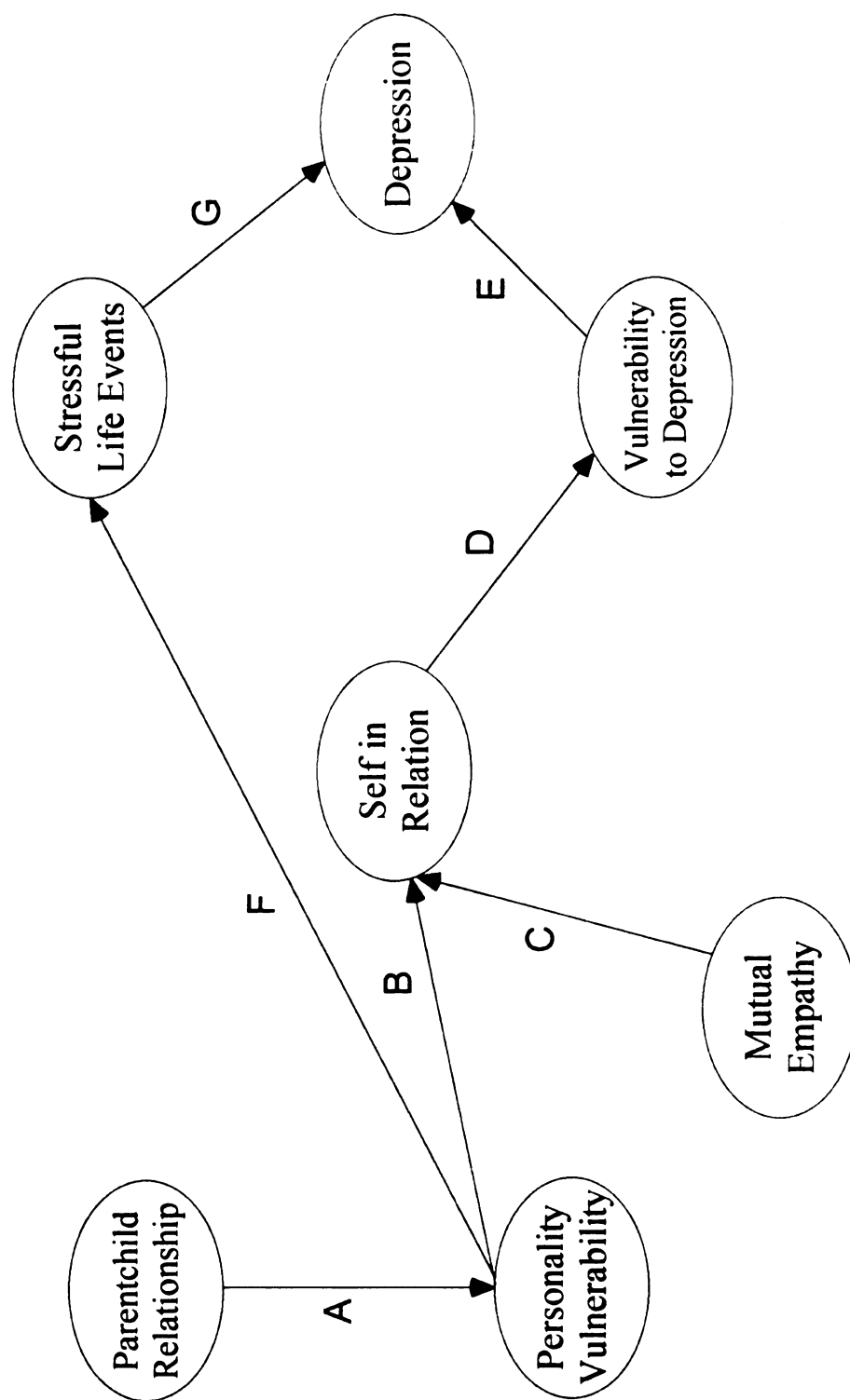


Figure 3. Combination Structural Model

interpersonal vulnerability, whereas insecurely attached individuals may develop a self-evaluative vulnerability (Blatt & Zuroff, 1992; Griffin & Bartholomew, 1994).

Path B: Personality Organization Vulnerability Influence on Self-in-Relation

A woman's sense of her core self-structure (i.e., self-in-relation) is proposed to be influenced, in part, by her personality organization vulnerability (Figure 3). In adults, the presence of mental representations, which are derived from prior attachment relationships with parents, greatly influence how one feels about other potential attachment figures, as well as how one feels about oneself (Sperling, Berman, & Fagen, 1992). These early attachment experiences have been shown to influence an individual's personality organization vulnerability.

In a study of attachment styles among young adults, which used a variety of attachment and relationship questionnaires, securely attached individuals obtained high ratings on coherence of interviews; degree of intimacy with friends; warmth and balance of control in friendships; and level of involvement in romantic relationships (Bartholomew & Horowitz, 1991). This secure attachment is mediated by an internal working model that believes the self is considered worthy of care, the other is esteemed, and the other is expected to be responsive to attachment needs (Pistole, 1994). Additionally, individuals rated as having a secure attachment style experienced greater relationship interdependence, mutuality, intimacy, commitment, trust, involvement, and satisfaction, indicating a relative invulnerability to personality organization (Pistole, 1994; Simpson, 1990). Results suggest that these individuals have a strong self-in-relation as they strive to achieve relationships characterized by involvement, mutuality, intimacy, and interdependence (Bartholomew & Horowitz, 1991; Genero et al., 1992; Kaplan, 1986,

1991; Surrey, 1991). Similarly, in a study of college women, those women who demonstrated a small difference score between ideal and real self concepts also tended to score high on a subscale assessing interpersonal competency (Blatt et al., 1976). In conclusion, women who demonstrate a relative invulnerability are likely to have a strong sense of self.

In comparison, the preoccupied group in Bartholomew and Horowitz's (1991) study scored high on elaboration, self-disclosure, emotional expressiveness, frequency of crying, reliance on others, use of others as a secure base, crying in presence of others, and care giving. This attachment style is mediated by a working model in which the self is not considered worthy, but the other is highly esteemed (Pistole, 1994). Individuals in this group were more likely to be dependent, affectively labile, hypervigilant toward distress and separation cues, experience more frequent negative emotions in the relationship, and tended to be preoccupied with attachment and interpersonal relationships (Blatt & Zuroff, 1992; Pistole, 1994; Simpson, 1990). Likewise, in a study of female college students, results demonstrated that high scores on a measure of interpersonal vulnerability for women were significantly correlated with lower semantic differential ratings of the real self. In addition, these scores were significantly correlated with increased difference scores between ideal and real self concepts (Blatt et al., 1976).

This characterization of individuals who are preoccupied with interpersonal relationships and attachment issues suggests that these behaviors are undesirable. What seems to be missing in the above discussion of individuals with this attachment style is the differentiation between excessive worry and normal concern for the well-being of the relationship. Some of the characteristics used to describe this group could be interpreted

as necessary behaviors that further the development of an increasingly mutual and intimate relationship (e.g., elaboration, self-disclosure, emotional expressiveness, care giving). These findings also suggest that women who endorse an interpersonal vulnerability are likely to view themselves as falling short of their ideal self. It is probable that these individuals are more likely to feel that they have difficulties in maintaining and building mutually empathic relationships; consequently, their relational core self-structure is relatively weak.

Path C: The Impact of Mutual Empathy on Self-in-Relation

Even though self-in-relation is being influenced by personality organization vulnerability, it continues to be influenced by the construct of mutual empathy (Figure 3). The relational core self-structure is believed to develop from a relationship that is characterized by an open interchange of thoughts and feelings between participants and mobilizes each individual to care for and respond to the well-being and growth of the other, as well as the development of the relationship. These mutually empathic relationships build the foundation of a woman's self-in-relation, which validates her ability to build and maintain mutually satisfying and rewarding interpersonal relationships (Chodorow, 1978, 1979; Gilligan, 1982; Kaplan, 1986, 1991; Kaplan et al., 1983; Surrey, 1991). A weak relational core self-structure can develop when a woman is taught to believe that her wishes are inherently harmful to others and that she does not have the capacities necessary to build and maintain relationships (Kaplan, 1986, 1991).

Path D: Self-in-Relation Influence on Vulnerability to Depression

Self-in-relation is believed to influence a woman's likelihood of experiencing the following vulnerability factors: vulnerability to loss, inhibition of action and assertion,

inhibition of anger and aggression, and low self-esteem (Figure 3). These elements become accentuated when a woman does not feel confident about her relational abilities (Bernardez-Bonesatti, 1978; Brown, Andrews, et al., 1990; Brown, Bifulco, et al., 1990; Kaplan et al., 1983; Lemkau & Landau, 1986; Lerner, 1977, 1980; Notman, 1989). Several researchers believe that our patriarchal culture, as well as beliefs and schemas about how to behave in relationships, have contributed to these vulnerability factors (Jack, 1991; Lerner, 1974, 1980; Miller, J. B., 1976). In contrast, a relatively strong relational core self-structure is theorized to help shield women from experiencing these risk factors.

Path E: The Impact of Vulnerability to Depression on Depression

The Combination model proposes that the above mentioned risk factors constitute a vulnerability constellation that predisposes women to experience symptoms of depression (Figure 3). The literature indicates that there is an association between aspects of anger and depression, although these relationships may be modified by sex-role classifications (feminine, masculine, androgynous, and undifferentiated; Kopper & Epperson, 1991; Kopper-Roland, 1988). Research also suggests that women who are involved in relationships that lack intimacy and emotional support are more likely to become depressed (Jack, 1991; Thompson, 1995; Weissman & Klerman, 1977). Likewise, self-esteem has been demonstrated to be a critical vulnerability factor in depression, especially when combined with negative environmental factors (Brown, Andrews, et al., 1990; Brown, Bifulco, et al., 1990; Roberts, J. E. & Monroe, 1992).

Path F: Personality Organization Vulnerability Influence on Life Events

This pathway indicates that individuals' personality organization vulnerability impacts their experience of life events (Figure 3). The diathesis-stress model of

psychopathology asserts that individual predispositions may create a differential sensitivity to certain types of stressful life events (Blatt & Zuroff, 1992; Coyne & Whiffen, 1995; Gruen et al., 1988; Kanner et al., 1981; Lewinsohn et al., 1985; Thoits, 1983). Two categories of life events are hypothesized to be influenced by the presence of a personality vulnerability: interpersonal vulnerability influences an individual's reactions to events that concern issues of loss and abandonment, whereas a self-evaluative vulnerability impacts an individual's reactions to perceived failure to attain achievement goals (Blatt & Zuroff, 1992; Hammen et al., 1985; Rude & Burnham, 1993).

Path G: The Impact of Life Events on Depression

The final pathway of the Combination model is the effect life events have on the development of depression (Figure 3). The endorsement of stressful life events has been associated with the occurrence of psychological symptoms of distress, including symptoms of anxiety and depression (Frank, E. et al., 1994; Lewinsohn et al., 1985; Lloyd, 1980; Paykel et al., 1969; Sarason et al., 1978; Thoits, 1983; Zatura et al., 1986). Research suggests that individuals who endorse an interpersonal vulnerability are more vulnerable to experiencing depressive symptoms in the presence of negative interpersonal events (Blatt & Zuroff, 1992; Hammen et al., 1985; Leadbeater et al., 1995; Rude & Burnham, 1993; Zuroff & Mongrain, 1987). Empirical evidence also indicates that individuals with a self-evaluative vulnerability may be vulnerable to experiencing depression in the presence of a variety of life events beyond negative achievement events (Blatt & Zuroff, 1992; Clark & Oates, 1995; Rude & Burnham, 1993; Santiago-Rivera & Bernstein, 1996; Zuroff & Mongrain, 1987).

Rationale

Women are twice as likely to experience unipolar depression compared to men (Chino & Funabiki, 1984; O'Neil et al., 1985; Weissman & Klerman, 1977). Theories from different disciplines have attempted to explain this discrepancy; however, these theories tend to explain only a portion of the increased prevalence of depression in women (Landrine, 1988; Nolen-Hoeksema, 1990; Warr & Parry, 1982; Weissman & Klerman, 1977, 1985). Nonetheless, two models, each from a different theoretical orientation, when combined have the potential of offering a more definitive explanation for the development of depressive symptoms in women (Blatt & Zuroff, 1992; Kaplan, 1986).

Self-in-Relation theory, derived from listening to women's experiences, stresses the importance of relationships to women's sense of self and well-being. From this perspective, women value their relational abilities and strive to achieve mutually satisfying and rewarding relationships with significant others (i.e., partners, parents, children, friends, co-workers). Depression may develop in women when they feel they have failed at achieving these ideal relationships or when they feel that they do not possess the skills and abilities necessary to build and maintain mutually rewarding relationships (Kaplan, 1986). In contrast, Attachment-Vulnerability theory, which is derived from psychoanalytic theory, stresses the importance of the early parent-child relationship on the personality organization development of an individual. Certain characteristics of this early relationship can lead to vulnerabilities that, when combined with stressful life events, may increase an individual's likelihood of developing depression. Specifically, it is hypothesized that women who were anxiously attached with their parents may develop a depression that is focused on issues of dependency, loss, and abandonment, whereas an

insecure attachment relationship can lead to a depression that is centered on issues of worthlessness, self-criticism, and guilt (Blatt & Zuroff, 1992).

As discussed earlier, both of these models have their limitations. The Self-in-Relation model has not been empirically validated and could benefit from utilizing quantitative methods to augment the available qualitative data. Although the Self-in-Relation model emphasizes the importance relationships have for women's psychological health, the Attachment-Vulnerability model suggests that women's investment in relationships is an undesired characteristic. In the Attachment-Vulnerability model, independence and autonomy are traits that are valued. Although there is ample empirical evidence to support parts of this model, there are some limitations regarding how the model has been studied: (1) only specific pathways of this model have been examined, (2) study participants have generally been dichotomized as having either an interpersonal or self-evaluative vulnerability, and (3) there is difficulty determining how well this model accounts for the presence of depressive symptoms in women. This proposal suggests that a combination of the Self-in-Relation and Attachment-Vulnerability models will provide a more complete and comprehensive model that may explain the development of depression in women.

The Combination model capitalizes on the strengths found in the Self-in-Relation and Attachment-Vulnerability models. This model values women's relational abilities and desire to build and maintain mutually empathic relationships, as well as the importance of relationships to women's sense of self and psychological health. In addition, this model allows for both interpersonal and self-evaluative vulnerabilities to co-occur within the same individual. Specifically, self-in-relation emphasizes women's concerns with

relationship issues, especially when women feel they have failed at maintaining mutually rewarding relationships, which is reflected in an interpersonal vulnerability. Likewise, a sense of perceived failure at developing rewarding connections with significant others and threats to women's esteem are reflected in a weak self-in-relation and a self-evaluative vulnerability.

This exploratory research has not only theoretical implications, but practical implications as well. Historically, theories regarding male psychological development have been applied to women's development without recognizing the unique aspects of each gender. In addition, women have often been measured against male norms, which have been considered the ideal standards for healthy development. Feminism, as well as other movements within psychoanalysis, have attempted to develop theories that reflect women's unique developmental experiences. Although women and men do share some commonalities, there are also important differences. The findings from this research endeavor will hopefully enhance what we currently know about women's development and clarify the pathways that lead to the development of depression in women.

This research also may have implications for practitioners who work with women in mental health settings. Depression can be a debilitating experience that can affect a woman's physical and psychological health. Some common symptoms of depression include poor appetite or oversleeping, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration, and feelings of hopelessness (DSM-IV, 1994). Research that would elucidate a model that explains the development of depression for women can subsequently lead to specific psychotherapeutic interventions and treatment plans. Preventive measures could also be implemented to possibly decrease the likelihood

that women may experience symptoms of depression.

Hypotheses

Self-in-Relation Model

Based on the presented literature review and implied pathways of Self-in-Relation theory, the following hypotheses are predicted:

Hypothesis 1

A direct, significant positive relationship is predicted between mutual empathy and self-in-relation (Path A, Figure 1).

Hypothesis 2

Self-in-relation is hypothesized to have a direct, significant negative association with vulnerability to depression (Path B, Figure 1).

Hypothesis 3

A direct, significant positive relationship is predicted between vulnerability to depression and depression (Path C, Figure 1).

Attachment-Vulnerability Model

Based on the available evidence and pathways of this model, the following hypotheses are predicted:

Hypothesis 4

A direct, significant negative relationship is hypothesized between parent-child relationship and personality vulnerability (Path A, Figure 2).

Hypothesis 5

Personality vulnerability is predicted to have a direct, significant positive association with stressful life events (Path B, Figure 2).

Hypothesis 6

A direct, significant positive relationship is hypothesized between stressful life events and depression (Path C, Figure 2).

Combination Model

Based on the above literature and the combined pathways of the Self-in-Relation and Attachment-Vulnerability models of depression, the following hypotheses are predicted:

Hypothesis 7

Parent-child relationship is predicted to have a direct, significant negative association with personality vulnerability (Path A, Figure 3).

Hypothesis 8

A direct, significant negative relationship is hypothesized between personality vulnerability and self-in-relation (Path B, Figure 3).

Hypothesis 9

Mutual empathy is predicted to have a direct, significant positive relationship with self-in-relation (Path C, Figure 3).

Hypothesis 10

A direct, significant negative association is hypothesized between self-in-relation and vulnerability to depression (Path D, Figure 3).

Hypothesis 11

Vulnerability to depression is predicted to have a direct, significant positive association with depression (Path E, Figure 3).

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Hypothesis 12

A direct, significant positive relationship is hypothesized between personality vulnerability and stressful life events (Path F, Figure 3).

Hypothesis 13

Stressful life events is predicted to have a direct, significant positive relationship with depression (Path G, Figure 3).

Hypothesis 14

The Combination model is an overall better fit compared to the Self-in-Relation model and Attachment-Vulnerability model.

METHOD

Participants

Participants were 338 female undergraduate students, recruited from Introductory Psychology courses at Michigan State University, who received class credit for completing all of the tasks involved in this study. The mean age of the participants was 19.22 (SD = 2.55), ranging from 18 to 58 years old. The majority of participants were single or never married (98.8%). The racial/ethnic makeup of this sample was 82.0% Caucasian/European-American, 9.4% African-American, 2.7% Latino/Hispanic/Chicano, 3.8% Asian/Pacific Islander women, and 1.5% other.

Demographic data concerning the parents of the participants were also obtained. The ages for the fathers ranged from 37 to 70; ages ranged from 35 to 62 for the mothers. Approximately 25.4% and 27.5% of the mothers and fathers, respectively, achieved a bachelor's degree. Approximately three-fourths of the participants' parents were currently

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married (74.0%), 21.9% of the parents were divorced or separated, 1.2% of the parents never married, and for 2.7% of the sample, one of the parents was deceased. The mean length of parents' marriages was 24.48 years ($SD = 4.73$), ranging from 8 to 49 years (Tables 1 - 4).

Instruments

The students were administered all of the following measures. Participants used computer scoring answer sheets to complete the questionnaires, except for completion of the Thematic Apperception Test (TAT) task. For this measure, respondents were asked to write their responses on blank pieces of paper. All participants completed the TAT first and the demographic questionnaire last. The remaining questionnaires were presented in one order to half of the participants and in the reverse order to the other participants, to account for possible ordering effects. A key outlining the measures, scales, and abbreviations for the measurement models is provided for convenience (please refer to the Key for the Measurement Models). The means, standard deviations, and range for each measure and scale are listed in Table 5.

Demographic Information

A demographic questionnaire was administered that consisted of questions concerning the student's age, marital status, education level, racial/ethnic background, parents' marital status, and parents' education levels (Appendix A).

Self-in-Relation Model

Mutual Empathy

Two different approaches were used to assess this construct. The perceived mutuality of respondents relationships with each parent was evaluated, as well as the

Table 1. Demographic Information: Age of Participants

Mean	19.23
Mode	19.00
Minimum	18.00
Maximum	58.00
Standard Error	0.14
Standard Deviation	2.55

Table 2. Demographic Information: Educational Level for Participants, Mothers, and Fathers

	<u>Participants</u>	<u>Mothers</u>	<u>Fathers</u>
% Completed Doctorate, Medical, or Professional degree	0.0	1.8	8.0
% Completed Master's degree	0.0	19.8	18.0
% Completed Bachelor's degree	0.9	25.4	27.5
% Completed Associate's degree	3.8	8.9	7.4
% Completed some college	88.8	20.1	19.5
% Completed High school diploma/ GED	6.2	21.6	14.8
% Less than 12 years	0.0	1.8	3.8
% Unknown	0.3	0.6	0.9

Table 3. Demographic Information: Parent's Marital Status

	<u>Frequency</u>	<u>Percent</u>
Currently married	250	74.0
Divorced	70	20.7
Separated	4	1.2
Deceased	9	2.7
Never Married	4	1.2
Unknown	1	0.3

Table 4. Demographic Information: Ethnicity of Participants

<u>Ethnicity</u>	<u>Frequency</u>	<u>Percent</u>
Caucasian/European-American	278	82.0
African-American	32	9.4
Latino/Hispanic/Chicano	9	2.7
Asian/Pacific Islander	13	3.8
Other	5	1.5
Unknown	2	0.6

Table 5. Psychometric Properties of Measures: Means, Standard Deviations, and Range

<u>Measure</u>	<u>Mean</u>	<u>SD</u>	<u>Range</u>
MPDQ-Mother	4.51	0.72	2.21-6
MPDQ-Father			
Mutuality	3.87	0.99	1-6
Distance	4.56	0.88	1-6
IRI			
Perspective Taking	17.79	3.74	5-25
Personal Distress	18.45	3.71	5-25
Empathic Concern	24.52	3.64	9-30
TAT			
Card 3 BM	2.15	0.76	1-5
Card 4	2.70	0.82	1-5
Card 7 GF	2.78	0.88	1-5
Card 13 MF	2.39	0.93	1-5
STSS			
Divided Self	14.96	5.50	7-31
Silencing the Self	21.99	5.35	9-43
ARI			
Long-Term Consequences	70.36	19.02	27-108
Negative Ways of Handling Anger	12.51	4.24	6-24
Positive Ways of Handling Anger	12.04	4.15	6-25
RSE	21.73	8.02	10-49
BDI	9.85	7.65	0-50
CES-D	17.61	11.48	0-60
PBI-Mother			
Care	29.41	6.70	2-36
Overprotection 1	7.50	2.91	0-12
Overprotection 2	8.17	2.68	0-12
PBI-Father			
Care	24.40	9.34	0-36
Overprotection 1	7.31	3.08	0-12
Overprotection 2	8.52	2.73	0-12
PSI-Mother			
Conflictual Independence	83.24	14.21	39-100
Emotional Independence	36.22	12.09	13-63
PSI-Father			
Conflictual Independence	91.48	15.45	36-110
Emotional Independence	31.17	12.55	13-64

Table 5 (cont'd).

<u>Measure</u>	<u>Mean</u>	<u>SD</u>	<u>Range</u>
PSI-Revised			
Sociotropy 1	50.14	10.16	13-73
Sociotropy 2	25.08	4.79	7-36
Autonomy 1	23.63	6.55	10-42
Autonomy 2	26.37	5.23	7-40
ICSLRE			
General Relationship Difficulties and Loneliness	17.45	5.31	10-36
Academic Difficulties	28.24	7.39	12-44
Time Pressures	15.79	3.91	6-24
Intimate Relationship Difficulties	12.57	3.76	6-24

individual's capacity for empathy. Surrey (1991) believes that the reciprocal relationship between a mother and her daughter fosters the daughter's ability to empathize with others. In this study, a woman's current capacity for empathy is believed to be reflective of whether or not she has learned these skills.

The Mutual Psychological Development Questionnaire (MPDQ; Genero et al., 1990). The MPDQ measures the perceived "mutuality" of the respondent's relationship with his/her spouse or partner. The instructions of this measure were modified to assess how respondents viewed their relationship with each of their parents, not their spouses or partners. Mutuality is defined as empathy (3 items), engagement (3 items), authenticity (4 items), empowerment (4 items), zest (4 items), and diversity (4 items). The first set of 11 items were rated from the respondent's perspective of the relationship (e.g., "When we talk about things that matter to my spouse/partner, I am likely to. . ."). The second set of 11 items were rated from the perspective of the other individual participating in the relationship (e.g., "When we talk about things that matter to me, my spouse/partner is likely to. . ."). Both forms have demonstrated adequate internal reliability ($\alpha = 0.92$) and test-retest reliabilities (r 's range from 0.86 to 0.93; Genero et al., 1992). Additionally, construct validity appears to be adequate as higher degrees of mutuality correlate significantly with measures of social support, relationship satisfaction, cohesion, and negatively correlate with measures of depression (Genero et al., 1990).

Respondents were asked to rate each item on a 6-point Likert scale (1 = never; 6 = all the time; Appendix B). Examples of items from this measure include: "When we talk about things that matter to my mother, I am likely to pick up on my mother's feelings" and "When we talk about things that matter to me, my father is likely to have difficulty

listening to me.” Mean mutuality scores were derived by reverse scoring the negative items and dividing the sum total rating by the total number of items answered. High scores represent greater perceived mutuality and closeness in the relationship. Separate z-scores for both mother and father ratings were calculated. The psychometric properties of this measure for this sample are presented in the Results section (refer to Review of Measurement Model).

Interpersonal Reactivity Index (IRI; Davis, 1980). This measure evaluates the cognitive and affective dimensions of empathy (Perspective-Taking and Fantasy scales; Empathic Concern and Personal Distress scales, respectively). All four scales (each with 7 items) have demonstrated adequate internal reliabilities (α 's range from 0.74 to 0.77) and test-retest reliabilities (r 's range from 0.62 to 0.71; Davis, 1983). In addition, a factor analysis conducted on an all female sample confirmed the dimensionality and subscale item composition of the IRI (Carey, Fox, & Spraggins, 1988).

Respondents were asked to rate each item on a 5-point Likert scale (1 = does not describe me well; 5 = describes me very well; Appendix C). The Perspective-Taking, Empathic Concern, and Personal Distress scales were most relevant to this research project. The Perspective-Taking scale assesses the respondent's ability to anticipate behavior and reactions to others, which consequently can facilitate smoother relationships (e.g., “I try to look at everybody's side of a disagreement before I make a decision”). The Empathic Concern scale evaluates an individual's capability to have feelings of sympathy and concern for other individuals (e.g., “When I see someone being taken advantage of, I feel kind of protective towards them”). Finally, the Personal Distress scale taps self-oriented feelings of personal anxiety and uneasiness in tense interpersonal interactions

(e.g., “I sometimes feel helpless when I am in the middle of a very emotional situation”). This subscale has been strongly associated with a specific “emotional” constellation of vulnerability, uncertainty, and fearfulness. Scale scores are obtained by reverse scoring certain items and summing scores for those items that comprise each scale (Davis, 1980). High scores on the first two factors (Perspective Taking and Empathic Concern) represent an increased capacity for perspective taking and empathic concern. The final factor (Personal Distress) was reversed scored so that high scores represented feelings of ease and calmness in anxiety-arousing interpersonal situations. For this sample, please refer to the Results section for the psychometric properties of these scales.

Self-in-Relation

Self-in-relation emphasizes the importance of relationships to women and their sense of self-esteem (Kaplan, 1986, 1991). This construct evaluates how women perceive their ability to build and maintain relationships. Although self-in-relation is not clearly defined, it shares similar characteristics with the concept of object relations. Object relations theorists believe that the quality of parenting affects the formation of internal object representations, which in turn affect later relational behavior (Fishler, Sperling, & Carr, 1990). This definition of object relations is similar to the process described by Self-in-Relation theory, although different terminology is used. Object relations theory, however, is based on a model of psychopathology, whereas the Self-in-Relation model stresses gender differences observed in normal developmental processes.

Thematic Apperception Test (TAT; Morgan & Murray, 1935). The TAT is considered a reliable assessment of object relations because it provides “. . . considerable access to cognitive and affective-motivational patterns related to interpersonal functioning

in intimate relationships" (Westen, 1991, p. 56). Cards 3BM, 4, 7GF, and 13MF of the TAT were administered, as they depict interpersonal relationships (Cards 4, 7GF, 13MF) and personal distress (Card 3BM). Respondents were asked to write stories that described the events, characters, characters' thoughts and feelings, and outcomes of events portrayed in each card.

The TAT responses were scored according to the Social Cognition and Object Relations Scales (SCORS; Westen, 1985), which assesses multiple dimensions of object relations: complexity of representations of people; affect-tone of relationship paradigms; capacity for emotional investment; and understanding of social causality. This scoring system attempts to delineate a variety of functions and structures of object relations including how individuals are represented in relationships; interpersonal wishes, affects, and conflicts; ways of attributing causes of other people's behavior; and capacity for investing in relationships (Westen, 1985). In this study, the TAT responses were scored on a 5-point scale for the affect-tone of relationship paradigms dimension, which assesses the affective quality of representations of people and relationships and the extent to which individuals expect their relationships to be destructive and threatening or safe and enriching. At the lowest level, individuals expect relationships to be malevolent and hostile, characterized by feelings of profound loneliness or disappointment. At the highest level, individuals represent relationships as predominately positive, characterized by benign and enriching interactions (Barends, Westen, Leigh, Silbert, & Byers, 1990; Westen, 1985). Inter-coder reliability using the SCORS system have yielded acceptable reliability coefficients (r 's range from 0.80 to 0.95; Westen, 1991).

Four clinical psychology graduate students served as coders for the TAT data and

were trained using the manual for the Social Cognition and Object Relations Scale (Westen, 1985). A portion of the responses from this data set (30 cases) were rated by each coder on a scale of 1 to 5 for Affect-tone of Relationships Paradigm, and inter-rater reliability was assessed using Pearson Correlation Coefficients. The pairwise reliabilities ranged from 0.76 to 0.88 with an average inter-rater reliability of 0.82. The remaining stories were divided among the trained coders and rated separately.

Vulnerability to Depression

Silencing the Self Scale (STSS; Jack, 1991). This scale was used to assess respondents' vulnerability to depression, specifically their vulnerability to loss and inhibition of action and assertion. This measure was developed from listening to the narratives of depressed women in a longitudinal study conducted by Jack (1991). This 31-item self-report measure contains four subscales: Externalized Self-Perception (6 items); Care as Self-Sacrifice (9 items); Silencing the Self (9 items); and Divided Self (7 items). Research with the STSS has demonstrated reliable internal consistency and adequate construct validity. Internal consistencies for a sample of college women ($N = 63$) were generally acceptable (α 's = 0.75, 0.65, 0.78, and 0.74, respectively; total $\alpha = 0.88$). Test-retest reliability coefficients were excellent (r 's ranged from 0.88 to 0.93). However, Jack and Dill (1992) urge researchers to interpret the Care as Self-Sacrifice subscale separately and with caution, as the internal consistency alpha coefficients were marginal (α 's range from 0.60 to 0.81, depending on sample studied).

Respondents rated each item on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree; Appendix D). The Silencing the Self subscale assesses schemas regulating behavior in relationships (e.g., "Instead of risking confrontations in close relationships, I

would rather not rock the boat”). The Divided Self subscale contains items that reflect the experience of presenting an outer compliant self to live up to societal standards, whereas the inner self grows angry and hostile (e.g., “I feel that my partner does not know my real self;” Jack, 1991; Jack & Dill, 1992). The Divided Self subscale and the Silencing the Self subscale were used to measure vulnerability to loss and inhibition to action and assertion, respectively. Subscale scores were obtained by reverse scoring the appropriate items and summing items for that scale. Higher scores on both of these subscales represents a vulnerability to depression. More specifically, higher scores on the Divided Self scale represent the division of an outer compliant self and an inner self that grows angry and hostile, while higher scores on the Silencing Self scale indicate a greater tendency to silence one’s own wishes for the sake of the relationship. The psychometric properties of these scales for this sample are presented in the Results section (refer to Review of Measurement Model).

The Anger Response Inventory (ARI; Tangney, Wagner, Marschall, & Gramzow, 1991). The ARI was developed to measure the range of possible cognitive and behavioral responses that people might select when angered by typical everyday situations. This inventory taps both constructive and destructive responses, as well as how respondents assess the possible likely outcomes for the self, the target individual, and the relationship. The 59-item measure contains the following scales and subscales: Anger Arousal (23 items); Intentions (constructive, malevolent, letting off steam; 23 items each); Maladaptive Responses (direct physical aggression, direct verbal aggression, direct symbolic aggression, indirect harm, malediction, displaced physical aggression, displaced verbal aggression, displaced to object, self-aggression, anger held in; 74 total items);

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Adaptive Behaviors (communicate with target, constructive action; 21 total items); Escapist-Diffusing Responses (diffusion, minimization, removal, doing nothing; 31 items total); Cognitive Reappraisals (target's role, self's role; 22 items total); and Long-Term Consequences (for self, for target, for relationship; 57 total items; Tangney et al., 1991). Both the internal consistencies (α 's range from 0.41 to 0.94) and test-retest reliabilities (r 's ranging from 0.56 to 0.82) for the individual scales are adequate. The internal consistency coefficient alpha and test-retest reliability coefficient for all 59 items of the ARI were also acceptable ($\alpha = 0.96$, $r = 0.76$, respectively). The ARI also demonstrates ample validity as it has been examined in relationship to more global self-report indices of hostility, aggression, and anger-management strategies. Furthermore, the relationship between ARI responses and self- and family-member reports of respondents' behaviors, as well as the relationship between ARI scales and measures of empathy, shame, and guilt, support the construct validity of this measure (Tangney, Hill-Barlow, et al., 1996).

Respondents were asked to read 23 scenarios of everyday interactions and to answer 10-14 questions based on that scenario on a 5-point Likert scale (1 = not likely to react in that way; 5 = very likely to react in that way; Appendix E). The questions following each scenario ask the individual to rate how angry she would become in that particular situation, how she would feel, what she would do, and the long-term consequences of her actions (Tangney, Hill-Barlow, et al., 1996).

Due to time constraints, 10 scenarios were selected that contained at least 3 of the 7 variables under consideration. For these 10 scenarios, respondents were asked to answer 14 questions for each scenario (with one exception, which contains 13 items). This shortened version of the ARI contains approximately half of the total items for the

following variables: self-aggression (5 items), anger held in (5 items), communicate with target (7 items), constructive action (2 items), consequences for self (10 items), consequences for target (10 items), and consequences for relationship (10 items). For this sample, please refer to the Results section for the psychometric properties of the ARI.

Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). This measure was used to assess respondents' level of self-esteem as a vulnerability to depression factor. The RSE is a global self-esteem scale that has adequate reliability and validity. The internal consistency coefficient alphas for the RSE range from 0.77 to 0.88. Rosenberg's self-esteem scale is correlated significantly with the Lerner self-esteem scale (Blascovich & Tomaka, 1991). Blascovich and Tomaka also found that the RSE was not importantly related to such variables as gender ($r = 0.10$), age ($r = 0.13$), marital status ($r = 0.17$), or grade point average ($r = 0.01$). Respondents rated 10 items on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree; Appendix F). An example of some items from the RSE include: "On the whole I am satisfied with myself," and "I feel that I'm a person of worth, at least on equal plane with others." After reverse scoring specified items, a total score was obtained by summing the items. The psychometric properties of the RSE for this sample are presented in the Results section.

Depression

Beck Depression Inventory (BDI; Beck, 1978). This measure was used to evaluate respondents' current level of depressive symptomology. The BDI has been shown to have good reliability and validity (see Beck, Steer, & Garbin, 1988 for a review). Previous research has demonstrated a significant relationship between the individual category scores and the total scores, suggesting that the BDI is highly reliable (Beck,

Ward, Mendelson, Mock, & Erbaugh, 1961). The internal consistency coefficient for the revised BDI (self-report measure instead of being administered by an interviewer) is acceptable ($\alpha = 0.86$; Beck & Steer, 1984). The highly significant relationship between the BDI and clinical ratings of depression attest to this measure's validity (Beck et al., 1961).

The BDI contains 21 groups of four statements each; the choices within each group of statements increases in the amount of severity. Respondents chose which statement within the group best described how they had been feeling in the past week (Appendix G). Some examples of items include: "I have lost most of my interest in other people," "I am critical of myself or my weaknesses or mistakes," "I don't sleep as well as I used to," and "I have to push myself very hard to do anything." This measure taps cognitive, motivational, behavioral, and somatic symptoms of depression (Beck & Steer, 1984). Higher scores on the BDI indicate higher levels of depressive symptomology. For the current study, refer to the Results section for the psychometric properties of the BDI.

The Center for Epidemiologic Studies Depression Scale (CES-D Scale: Radloff, 1977). The CES-D was developed to measure current level of depressive symptomology in the general population. This measure has demonstrated adequate reliability and validity. For the general population and a patient sample, both the internal consistency alpha coefficients (α 's range from 0.84 to 0.90) and test-retest reliability coefficients (r 's range from 0.86 to 0.92) are acceptable. In addition, the CES-D has demonstrated adequate validity as evidenced by this measure's ability to discriminate between psychiatric inpatient and general population samples, as well as levels of severity among patient groups. Furthermore, comparisons of correlations between the CES-D and other self-report measures of depression support the discriminant validity of this measure (Radloff, 1977).

Respondents rated 20 items on a 4-point Likert scale as to how much they have felt or behaved in the past week (1 = rarely or none of the time; 4 = most or all of the time; Appendix H). Examples of items include: “I felt lonely,” “I felt that everything I did was an effort,” and “I talked less than usual.” Scores were obtained by reverse scoring appropriate items and adding all of the items together (Radloff, 1977). Higher scores on the CES-D indicate respondents were experiencing higher levels of depressive symptoms. The reliability for the present sample is reported in the Results section.

Attachment-Vulnerability Model

Parent-Child Relationship

Specific aspects of the parent-child relationship (lack of care, overprotection, emotional independence, and conflictual independence) are believed to influence the development of a personality organization vulnerability.

Parental Bonding Instrument (PBI; Parker et al., 1979). The PBI assesses two dimensions of the parent-child relationship (care and overprotection; Parker, 1983, 1984). The Care scale (12 items) measures perceived parental warmth and affection versus indifference, whereas the Overprotection scale (13 items) assesses perceived level of parental control and intrusions versus encouragement of child’s autonomy (Lopez & Gover, 1993).

Research utilizing the PBI has demonstrated that low parental Care scale scores were better discriminators between depressed respondents and control subjects compared to the Overprotection scale scores, suggesting that the PBI delineates and quantifies a risk factor for neurotic types of depression. Additionally, an interaction effect was observed; depressed subjects scored the same-sexed parent more negatively (Parker, 1983). Parker,

Tupling, and Brown (1979) caution, however, that lack of parental Care is a sufficient, but not a necessary cause of depression. Acceptable reliability has been established for both clinical and non-clinical groups of respondents (Parker, 1984). In one study, the Care factor (12 items) accounted for 28% of the total variance of depressive symptoms, whereas the Overprotection factor (13 items) accounted for 17% of the variance (Parker et al., 1979). Test-retest reliabilities for the Care and Overprotection scales are adequate ($r = 0.76$ and $r = 0.63$, respectively; Parker, 1984; Parker et al., 1979).

Respondents rated each item on a 4-point Likert scale (0 = very unlike; 3 = very like; Appendix I). Sample items include “My mother could make me feel better when I was upset,” and “My father tried to control everything I did.” After reverse scoring the specified items, the scores are added to yield a maximum score of 36 and 39 for the Care and Overprotection scales, respectively (Parker et al., 1979). High scores indicate a perception of more lenient attitudes. Please refer to the Results section for a description of the psychometric properties of the PBI for this sample.

Psychological Separation Inventory (PSI; Hoffman, 1984). This measure was also used to assess aspects of the parent-child relationship. Similar to the PBI, respondents were asked to rate each parent separately (i.e., half of the items pertained to a respondent’s mother, the other half inquired about a respondent’s father). The complete Psychological Separation Inventory (PSI) contains 138 items divided into four subscales. These scales include Functional Independence (26 items), Conflictual Independence (50 items), Attitudinal Independence (28 items), and Emotional Independence (34 items). Internal consistency reliability alpha coefficients range from 0.84 to 0.92, whereas the test-retest reliabilities range from 0.69 to 0.96. Respondents were asked to rate each item on a

5-point Likert scale (1 = not at all true of me; 5 = very true of me; Appendix J). The mother and father scales were scored separately.

The Conflictual Independence and Emotional Independence subscales were most relevant to this research project. The Conflictual Independence scale assesses a respondent's freedom from excessive guilt, mistrust, resentment, and anger (e.g., "I wish I could trust my mother more"). Higher scores on the Conflictual Independent scale represent parent-daughter relationships characterized by conflict and tension. The Emotional Independence scale measures a respondent's freedom from excessive need for approval, closeness, togetherness, and emotional support from parental figures (e.g., "I sometimes feel like an extension of my father"). High scores on the Emotional Independence factor indicate a close, emotional relationship between the daughter and her parent. Research with the PSI has demonstrated that Conflictual Independence is associated with an absence of depression (Hoffman, 1984). In addition, the Emotional Independence scale appears to be measuring aspects of an anxious, insecure attachment style. For a summary of the psychometric properties of the PSI for mothers and fathers, please refer to the Results section.

Personality Organization Vulnerability

The Revised Personal Style Inventory (Robins et al., 1994). This inventory, used to assess personality organization vulnerability, was developed to address criticisms associated with other similar measures, specifically the Depressive Experiences Questionnaire (DEQ) and the Sociotropy-Autonomy Scale (SAS). Some of these limitations include: the inclusion of items that assess symptoms of depression (e.g., feelings of guilt); items that assess concepts that are indirectly related to the core

constructs of sociotropy (interpersonal vulnerability) and autonomy (self-evaluative vulnerability); and a high correlation between the two factors of personality organization vulnerability (Robins et al., 1994). In addition, the scoring methods used for the DEQ have obscured direct comparisons of gender differences (Welkowitz et al., 1985).

The Revised Personality Style Inventory is comprised of two higher order factors (Sociotropy and Autonomy) that are formed by six individual subscales. The internal consistency alpha coefficient for the Sociotropy and Autonomy factors are high ($\alpha = 0.90$ and $\alpha = 0.86$, respectively). In addition, the test-retest reliability coefficients of these two factors are average ($r = 0.80, 0.70$, respectively; Robins et al., 1994). Respondents rated each item on a 6-point Likert scale (1 = strongly disagree; 6 = strongly agree; Appendix K). The 48 items of the Personal Style Inventory formed six scales: Concern about what Others Think (e.g., “I am very sensitive to criticism by others”); Dependency (e.g., “I find it difficult if I have to be alone all day”); Pleasing Others (e.g., “I often let people take advantage of me”); Perfectionism/Self-Criticism (e.g., “It bothers me when I feel that I am only average and ordinary”); Need for Control (e.g., “In relationships, people are often too demanding of one another”); and Defensive Separation (e.g., “I tend to keep other people at a distance”). The psychometric properties of the PSI-R for this sample are reported in the Results section.

Life Events

Research suggests that the acknowledgment of hassles are a better predictor of psychological distress compared to the endorsement of life events (Kanner et al., 1981; Lazarus & Folkman, 1984). Consequently, a measure of everyday hassles was used to assess this concept.

The Inventory of College Students' Recent Life Experiences (ICSRLE; Kohn, Lafreniere, & Gurevich, 1990). This measure was used to assess the respondents' experiences of stressful events in the preceding month. The ICSRLE (Kohn et al., 1990) was developed specifically for a college student population, as well as to address the disadvantages of previously established hassles scales (i.e., the Hassles Scale; DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982). Development and validation of this measure suggests that it is free from contamination by items that resemble psychological symptoms and any biases from the inventory instructions. The ICSRLE has demonstrated adequate internal reliability ($\alpha = 0.89$) and adequate validity (significantly correlated with Perceived Stress Scale, $r = 0.65$). Factor analysis of the ICSRLE items determined seven subscales: Developmental Challenge (10 items); Time Pressure (7 items); Academic Alienation (3 items); Romantic Problems (3 items); Assorted Annoyances (5 items); General Social Mistreatment (6 items); and Friendship Problems (3 items). Alpha coefficients for these scales are acceptable (α 's range from 0.47 to 0.80) and are reasonably intercorrelated with each other (r 's range from 0.17 to 0.49; Kohn et al., 1990).

Respondents rated the extent each item affected them over the past month (4-point Likert scale: 1 = not at all part of your life; 4 = very much part of your life; Appendix L). Examples of items include: "Hard effort to get ahead," "Too many things to do at once," "Dissatisfaction with school," "Conflicts with boyfriend/girlfriend/spouse," "Disliking fellow students," "Loneliness," and "Conflicts with friends." Gender differences were demonstrated; that is, the mean score of females was significantly greater than that of men. Specifically, females consistently rated the following items more severe compared to their male counterparts: "conflict with significant other's family," "too many things to do at

once,” “conflicts with significant other,” and “dissatisfaction with your physical appearance.” Interpersonal events are defined as those having to do with romance, friendship, family, or other interpersonal relationships, whereas achievement events are defined as those related to school performance. Please refer to the Results section for a description of the psychometric properties of the ICSLRE for this sample.

Combination Model

This model incorporates all of the constructs that are found in the Self-in-Relation and Attachment-Vulnerability models of depression. The measures that were used to assess the two independent models of depression, were also used to assess the Combination model of depression.

Procedure

Participants were assessed in groups ranging from 15 to 25 and were given sufficient time to complete all measures. The participants spent approximately 2 hours completing all of the instruments in this study. The measures were administered by the principal investigator. Participants read an informed consent form prior to completing the measures; completion of the questionnaires was proof of their informed consent. They were then asked to complete the projective measure (TAT) followed by the rest of the measures. The rest of the measures were presented in one order to half of the participants and in the exact reverse order to the second half of participants to account for possible ordering effects. The responses to these items were placed on computer scoring sheets. After finishing these measures, participants completed a demographic questionnaire and were debriefed to the purpose and nature of this study.

RESULTS

Structural equation modeling (SEM) was used to test the hypothesized relationships in the three structural models (Self-in-Relation, Attachment-Vulnerability, and Combination) presented earlier (Figures 1, 2, and 3, respectively). Prior to the analyses of the hypotheses, decisions regarding missing data and the measurement properties of the scales for this sample were made.

The amount of missing data for the Self-in-Relation and Attachment Vulnerability models was minimal. Less than one percent of the data was missing for the entire Self-in-Relation Model (mothers = 0.21%; fathers = 0.48%) and the Attachment-Vulnerability Model (mothers = 0.17%; fathers = 0.92%). As a result, mean substitution was used to replace any missing data values in this sample. Only one participant was excluded from analysis because of difficulty in accurately completing the questionnaires. The final N for analyses was 338. The collected data were also scanned to determine if outliers, excessive, kurtosis, and skewness were present, as these characteristics can affect data analyses; none of these were found in the current data set. These data reflected a normal distribution pattern and were appropriate for analysis.

A review of the measurement properties of the questionnaires used to assess the latent constructs in each of these models was necessary to determine if these data fit the factor structure reported in the literature. Confirmatory factor analyses were conducted to determine if there was an acceptable degree of fit between the observed data and the hypothesized factor structure for each measure. To determine degree of fit, the Goodness of Fit Index (GFI) and Root Mean Square Error of Approximation (RMSEA) were

examined.¹ For those measures that did not have an acceptable degree of fit, exploratory factor analyses were conducted to improve the factor structure of these measures. These preliminary steps led to improved measurement models (Figures 4, 5, and 6) which were then used to analyze the hypothesized relationships between the constructs in each of the models. The results of these preliminary steps for the Self-in-Relation, Attachment-Vulnerability, and Combination models are outlined in the following sections.

Review of Measurement Model

Self-in-Relation Model

Please refer to the measurement model for the factor structures, measures, constructs, and pathways in the Self-in-Relation model (Figure 4).

Mutual Empathy

Mutual Psychological Developmental Questionnaire (MPDO; Genero et al., 1990).

Respondents completed this questionnaire twice; once in response to their mothers and then about their fathers. The literature reported one composite scale for this measure (Genero et al., 1990). The confirmatory factor analysis (CFA) for the mothers ($\chi^2 (212, N = 338) = 732.35, p < .001, GFI = 0.83, RMSEA = 0.09$) indicated a reasonable fit for the data, although not completely acceptable. An exploratory factor analysis (EFA) with a Promax Rotation supported a one-factor solution with 3 items deleted (Table 6)². The internal reliability for this sample ($\alpha = 0.92$) was similar to those

¹ Guidelines for interpreting GFI: 1.00 = ideal fit; 0.90-0.99 = excellent fit; 0.85-0.89 = average fit; < 0.85 = poor fit. Guidelines for interpreting RMSEA: 0.00-0.05 = excellent fit; 0.05-0.08 = moderate fit; 0.08-0.10 = acceptable fit; > 0.10 = poor fit (Bollen, 1989).

² After EFA analyses, items were deleted if: (1) item factor loadings were below 0.40; or (2) an item loaded on two factors and the discrepancy between the item factor loadings was less than 0.30.

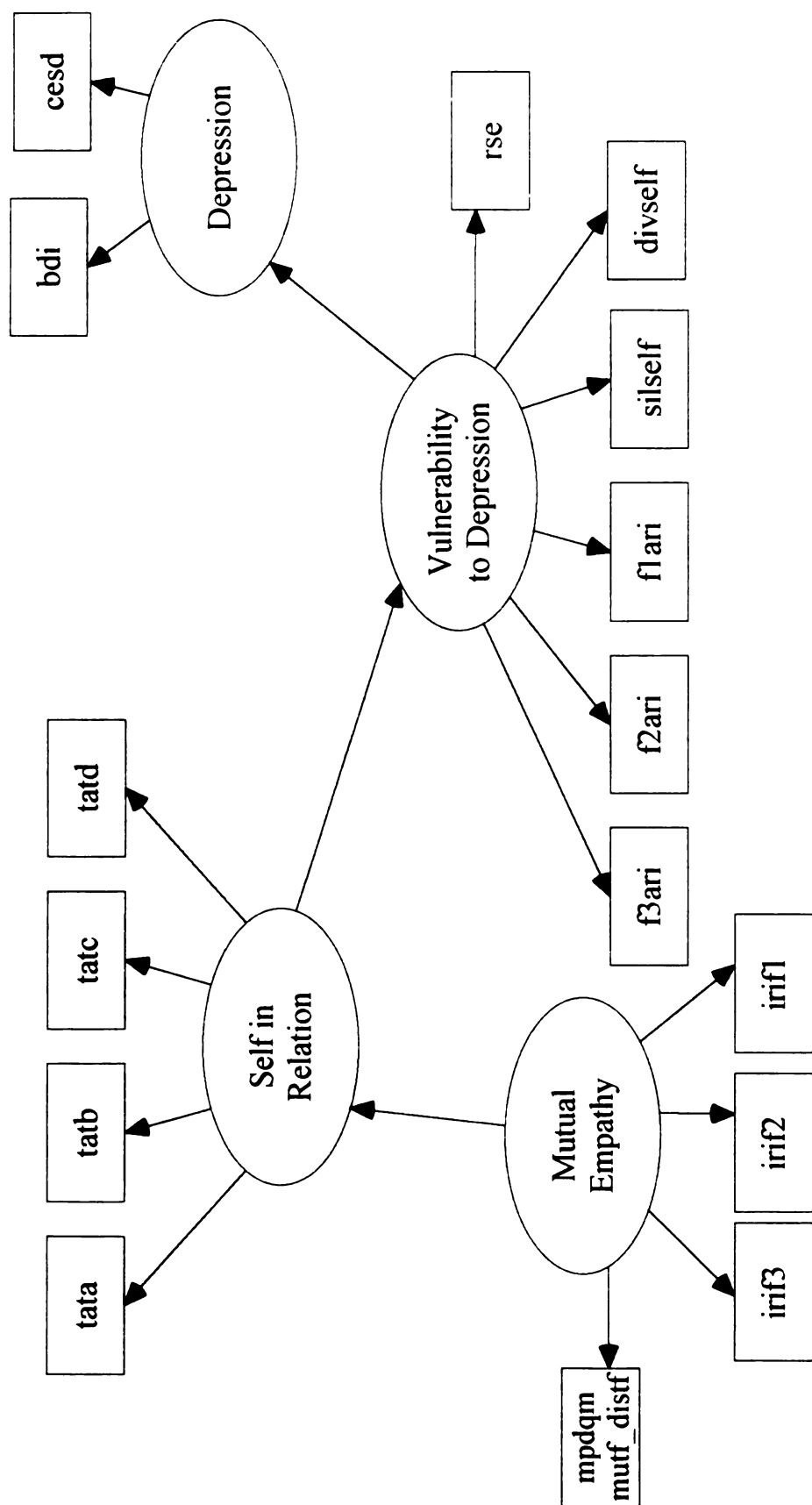


Figure 4. Self-in-Relation Measurement Model
Observed Variables for Mothers and Fathers

Table 6. Mutual Psychological Developmental Questionnaire-Mother

(Items and factor loadings, * = Reverse scored items)

Alpha = 0.92 (19 items)

14.	Try to understand me	(.81)
18.	Be open minded	(.80)
12.	Be receptive	(.77)
22.	Feel energized by our conversation	(.72)
7.	Respect my mother's point of view	(.72)
*13.	Get impatient	(.71)
*2.	Feel like we're not getting anywhere	(.70)
16.	Feel moved	(.70)
3.	Show an interest	(.67)
*21.	Have difficulty listening to me	(.65)
*4.	Get frustrated	(.62)
5.	Share similar experiences	(.62)
*6.	Keep feelings inside	(.55)
20.	Get involved	(.54)
*15.	Get bored	(.54)
*19.	Get discouraged	(.52)
1.	Pick up on my mother's feelings	(.51)
*17.	Avoid being honest	(.51)
*10.	Feel down	(.51)

Items deleted:

11.	Express an opinion clearly	(.49)
8.	Change the subject	(.49)
9.	See the humor in things	(.47)

findings reported by Genero and her colleagues (1990). The composite scale, *mpdqm*, is found in the measurement model (Figure 4).

Although a one-factor solution fit the data well for the mothers, the same was not true for the respondents' ratings of their fathers. The findings of the CFA for the respondents' ratings of their fathers demonstrated poor fit of these data to the factor structure (χ^2 (213, N = 338) = 1130.58, $p < .001$, GFI = 0.71, RMSEA = 0.11). An EFA with a Promax Rotation supported a two-factor solution; one factor represented mutuality, the other factor distance (Table 7). Each factor demonstrated adequate reliability (mutuality factor $\alpha = 0.92$, distance factor $\alpha = 0.90$). The two scales, *mutf* and *distf*, are found in the measurement model (Figure 4).

Interpersonal Reactivity Index (IRI; Davis, 1980). This measure assessed the respondents' capacity for empathy. The initial CFA indicated a reasonable fit (χ^2 (187, N = 338) = 526.54, $p < .001$, GFI = 0.87, RMSEA = 0.07); therefore, an EFA was conducted. The EFA with a Promax Rotation yielded a similar factor structure (3 factors) with 5 items being deleted (Table 8). The revised IRI (determined from the EFA) was used in subsequent analyses. In the current study, internal reliabilities for these revised factors were similar to those reported in the literature (α 's range from 0.74 to 0.80). The Perspective Taking (*irif1*), Personal Distress (*irif2*), and Empathic Concern (*irif3*) scales are the last three observed variables for the Mutual Empathy construct. Furthermore, all items of the Personal Distress (*irif2*) scale were reverse scored. Thus, higher scores on all three scales (*irif1*, *irif2*, *irif3*) represented an increased capacity for empathy (Figure 4).

Table 7. Mutual Psychological Developmental Questionnaire-Father

Factor 1: Mutuality (Items and factor loadings)

Alpha = 0.92 (12 items)

16.	Feel moved	(.82)
1.	Pick up on my father's feelings	(.80)
22.	Feel energized by our conversation	(.79)
20.	Get involved	(.78)
14.	Try to understand me	(.75)
5.	Share similar experiences	(.73)
9.	See the humor in things	(.71)
12.	Be receptive	(.68)
18.	Be open minded	(.68)
7.	Respect my father's point of view	(.64)
3.	Show an interest	(.64)
11.	Express an opinion clearly	(.62)

Factor 2: Distance (All items reverse scored)

Alpha = 0.90 (10 items)

19.	Get discouraged	(.89)
4.	Get frustrated	(.83)
21.	Have difficulty listening to me	(.78)
13.	Get impatient	(.77)
8.	Change the subject	(.70)
15.	Get bored	(.70)
10.	Feel down	(.69)
2.	Feel like we're not getting anywhere	(.67)
6.	Keep feelings inside	(.53)
17.	Avoid being honest	(.48)

Table 8. Interpersonal Reactivity Index

Factor 1: Perspective Taking (Items and factor loadings)

Alpha = 0.80 (5 items)

- 5. I try to look at everybody's side of a disagreement before I make a decision. (.80)
- 19. When I'm upset at someone, I usually try to "put myself in his/her shoes" for awhile. (.74)
- 21. Before criticizing somebody, I try to imagine how I would feel if I were in their place. (.73)
- 16. I believe that there are two sides to every question and I try to look at them both. (.72)
- 8. I sometimes try to understand my friends better by imagining how things look from their perspective. (.63)

Items deleted:

- 2. I sometimes find it difficult to see things from the "other guy's" point of view. (.55)
- 11. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments. (.36)

Factor 2: Personal Distress (* = Reverse scored items)

Alpha = 0.79 (5 items)

- 18. I tend to lose control during emergencies. (.82)
- *14. I am usually pretty effective in dealing with emergencies. (.78)
- 20. When I see someone who badly needs help in an emergency, I go to pieces. (.71)
- 4. In emergency situations, I feel apprehensive and ill-at-ease. (.67)
- *9. When I see someone get hurt, I tend to remain calm. (.63)

Items deleted:

- 7. I sometimes feel helpless when I am in the middle of a very emotional situation. (.43)
- 12. Being in a tense emotional situation scares me. (.37)

Factor 3: Empathic Concern

Alpha = 0.74 (6 items)

- 1. I often have tender, concerned feelings for people less fortunate than me. (.77)
- 15. I am often quite touched by things that I see happen. (.71)
- *10. Other people's misfortunes do not usually disturb me a great deal. (.71)
- 17. I would describe myself as a pretty soft-hearted person. (.61)
- *13. When I see someone being treated unfairly, I sometimes don't feel very much pity for them. (.56)

Table 8 (cont'd).

6. When I see someone being taken advantage of, I feel kind of protective towards them. (.46)

Item deleted:

3. Sometimes I don't feel very sorry for other people when they are having problems. (.44)

Self-in-Relation

Thematic Apperception Test (TAT; Morgan & Murray, 1935). Four cards of the TAT were used to solicit stories from the respondents (Cards 3BM, 4, 7GF, and 13MF). The initial CFA (each card represented one factor) was excellent ($\chi^2 (2, N = 338) = 4.14$, $p < .13$, GFI = 0.99, RMSEA = 0.06). In the measurement model, Cards 3BM, 4, 7GF, and 13MF are represented by *tata*, *tatb*, *tatc*, and *tatd*, respectively (Figure 4).

Vulnerability to Depression

Silencing the Self Scale (STSS; Jack, 1991). This measure was used to assess respondents' vulnerability to loss and inhibition of action and assertion. The two subscales that were selected from this measure (Divided Self and Silencing the Self) demonstrated acceptable fit of these data to these hypothesized factors ($\chi^2 (103, N = 338) = 271.78$, $p < .001$, GFI = 0.90, RMSEA = 0.07). Alpha reliabilities for each of the subscales were similar to those reported by Jack and Dill (1992) -- (α for Divided Self = 0.80; α for Silencing the Self = 0.66). High scores on the Divided Self (*divself*) and Silencing the Self (*silself*) scales indicated a vulnerability to depression (Figure 4).

The Anger Response Inventory (ARI; Tangney et al., 1991). This inventory was used to assess the inhibition of anger and aggression. The initial CFA of the nine variables of interest was extremely poor ($\chi^2 (1587, N = 338) = 5036.18$, $p < .001$, GFI = 0.64, RMSEA = 0.08). An exploratory factor analysis with a Promax Rotation yielded three separate factors: long-term consequences of action, negative ways of dealing with anger, and positive ways of dealing with anger with 10 items deleted (Table 9). The Long-Term Consequences (*flari*) factor combined items that represented consequences for the self, the target, and the relationship. The reliability of this factor was excellent ($\alpha = 0.95$). In

Table 9. Anger Response Inventory

Factor 1: Long-Term Consequences (Original scales items are from and factor loadings)
Alpha = 0.95 (27 items)

H11.	Relationship	(.76)	F11.	Relationship	(.65)
J11.	Relationship	(.76)	H9.	Self	(.64)
J10.	Target	(.74)	A11.	Relationship	(.64)
I11.	Relationship	(.73)	A10.	Target	(.63)
G9.	Self	(.72)	F10.	Target	(.63)
I9.	Self	(.72)	C8.	Self	(.62)
G10.	Target	(.72)	J9.	Self	(.59)
E11.	Relationship	(.71)	D9.	Self	(.58)
G11.	Relationship	(.70)	B11.	Relationship	(.57)
H10.	Target	(.69)	A9.	Self	(.56)
F9.	Self	(.68)	B9.	Self	(.54)
E10.	Target	(.68)	D11.	Relationship	(.52)
E9.	Self	(.67)	B10.	Target	(.46)
I10.	Target	(.66)			
<u>Items deleted:</u>					
C9.	Target	(.46)	C10.	Relationship	(.39)
D10.	Target	(.44)			

Factor 2: Negative Ways of Handling Anger
Alpha = 0.70 (6 items)

F7.	Anger In	(.63)
D5.	Self-directed Aggression	(.60)
H2.	Anger In	(.57)
I4.	Self-directed Aggression	(.56)
G3.	Anger In	(.49)
B4.	Anger In	(.49)
<u>Items deleted:</u>		
A3.	Self-directed Aggression	(.45)
E3.	Self-directed Aggression	(.39)
C4.	Self-directed Aggression	(.37)
J6.	Anger In	(.36)

Table 9 (cont'd).

Factor 3: Positive Ways of Handling Anger

Alpha = 0.67 (6 items)

J7.	Communicate with Target	(.69)
G7.	Communicate with Target	(.61)
H7.	Communicate with Target	(.60)
I2.	Communicate with Target	(.53)
C7.	Constructive Action	(.50)
B6.	Communicate with Target	(.45)

Items deleted:

E4.	Communicate with Target	(.51)
F5.	Communicate with Target	(.50)
A8.	Constructive Action	(.35)

addition, all items for this factor were reverse coded so that high scores represented more harmful consequences and a vulnerability to depression. For the second factor, Negative Ways of Handling Anger (*f2ari*), the reliability was adequate ($\alpha = 0.70$). High scores on the Negative Ways of Handling Anger factor are indicative of a vulnerability to depression. For the third factor, Positive Ways of Handling Anger (*f3ari*), the reliability was also adequate ($\alpha = 0.67$). Notably, all items for this scale were reverse coded so that high scores represent a less positive way of dealing with anger and consequently, a vulnerability to depression (Figure 4).

Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). This measure, used to assess self-esteem, contains one overall factor. The initial CFA was adequate ($\chi^2 (35, N = 338) = 184.79, p < .001, GFI = 0.90, RMSEA = 0.11$). This factor structure was accepted given the generous amount of prior research and validation of this measure. The ten item scale demonstrated excellent reliability ($\alpha = 0.91$) in this study. All items of this measure were reverse scored; a high *rse* score represented a vulnerability to depression (Figure 4).

Depression

Beck Depression Inventory (BDI; Beck, 1978). The initial CFA for this one-factor depression measure was excellent ($\chi^2 (189, N = 338) = 365.37, p < .001, GFI = 0.90, RMSEA = 0.05$). Likewise, the measurement properties of the BDI have been well established in the literature. For the respondents in the current study, the alpha reliability was above average ($\alpha = 0.88$). Higher scores on the BDI indicate higher levels of depressive symptomology. In Figure 4, the total score of this measure is represented by the observed variable *bdi*.

The Center for Epidemiologic Studies Depression Scale (CES-D Scale; Radloff, 1977). For this depression measure, the initial CFA was average (χ^2 (170, N = 338) = 556.74, $p < .001$, GFI = 0.85, RMSEA = 0.08). Although the measurement properties of this factor could be improved, the one overall factor was accepted as the CES-D has been widely used in the literature. Similar to the BDI, this measure demonstrated excellent reliability with the present sample ($\alpha = 0.92$). Higher scores on the CES-D indicate respondents were experiencing higher levels of depressive symptoms. The total score of all items of this measure is represented by the observed variable *cesd* in Figure 4.

Attachment-Vulnerability Model

Please refer to the revised measurement model for the factor structures, measures, constructs, and pathways of the Attachment-Vulnerability model (Figure 5).

Parent-Child Relationship

Parental Bonding Instrument (PBI; Parker et al., 1979). This questionnaire was completed twice by the participants; they responded once about their mothers and once about their fathers. The initial CFA for the PBI of the mothers was poor (χ^2 (274, N = 338) = 990.86, $p < .001$, GFI = 0.79, RMSEA = 0.09). An EFA with a Promax Rotation indicated a three-factor solution; the first factor represented caring aspects of the parent-child relationship, whereas the second and third factors contained items portraying an overprotective attitude of mothers toward their daughters (Table 10). Alpha reliabilities were acceptable (α 's ranging from 0.64 to 0.91). The care factor and two overprotection factors are represented by *cm1*, *om1*, and *om2*, respectively, in Figure 5. All of the items comprising the *om1* and *om2* factors were reverse coded, so that high scores represented a less overprotective mother-daughter relationship.

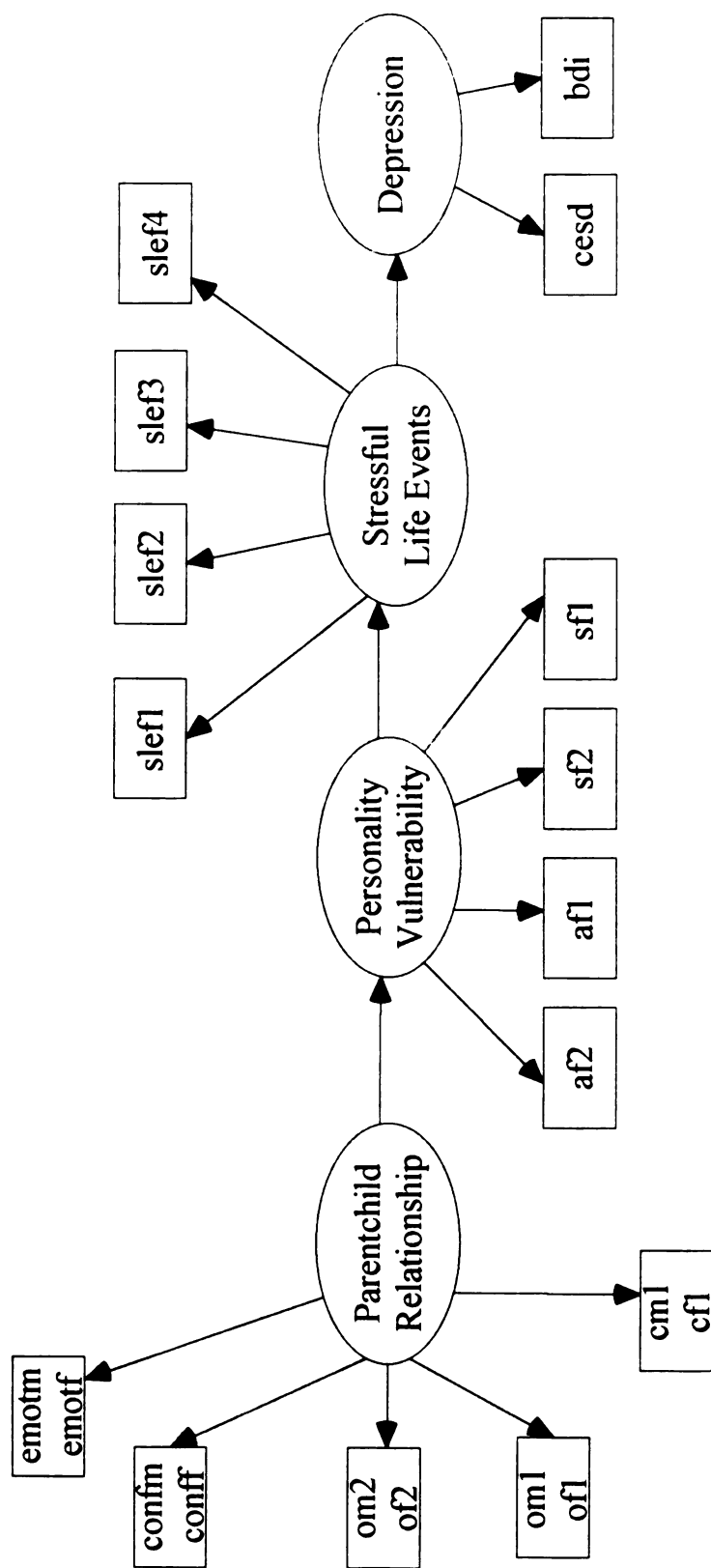


Figure 5. Attachment-Vulnerability Measurement Model
Observed Variables for Mothers and Fathers

Table 10. Parental Bonding Instrument-Mother

Factor 1: Care (Items and factor loadings, * = Reverse scored items)

Alpha = 0.91 (12 items)

*18.	Did not talk with me very much.	(.82)
12.	Frequently smiled at me.	(.80)
*4.	Seemed emotionally cold to me.	(.78)
*2.	Did not help me as much as I needed.	(.77)
*24.	Did not praise me.	(.76)
6.	Was affectionate to me.	(.75)
*16.	Made me feel I wasn't wanted.	(.71)
17.	Could make me feel better when I was upset.	(.68)
1.	Spoke to me with a warm and friendly voice.	(.67)
5.	Appeared to understand my problems and worries.	(.65)
11.	Enjoyed talking things over with me.	(.64)
*14.	Did not seem to understand what I needed or wanted.	(.57)

Factor 2: Overprotection (* = Reverse scored items)

Alpha = 0.78 (4 items)

*22.	Let me go out as often as I wanted.	(.99)
*21.	Gave me as much freedom as I wanted.	(.95)
*25.	Let me dress in any way I pleased.	(.80)
*3.	Let me do those things I liked doing.	(.56)

Items deleted:

*15.	Let me decide things for myself.	(.51)
*23.	Was overprotective of me.	(.49)

Factor 3: Overprotection

Alpha = 0.64 (4 items)

8.	Did not want me to grow up.	(.85)
13.	Tended to baby me.	(.75)
19.	Tried to make me dependent on her.	(.74)
20.	Felt I could not look after myself unless she was around.	(.64)

Items deleted:

9.	Tried to control everything I did.	(.52)
*7.	Liked me to make my own decisions.	(.42)
10.	Invaded my privacy.	(.36)

There were similar findings for the measurement properties of the PBI for the fathers. The initial CFA was poor (χ^2 (274, N = 338) = 1282.28, $p < .001$, GFI = 0.74, RMSEA = 0.10); however, a three-factor solution, similar to the PBI for the mothers, was supported by an EFA with a Promax Rotation (Table 11). Likewise, alpha reliabilities were acceptable and somewhat higher compared to the reliabilities for the mothers (father α 's ranging from 0.69 to 0.94). The observed variables *cf1*, *of1*, and *of2* represent the three factors for this measure in Figure 5. Additionally, the *of1* and *of2* factors were reverse scored, so that high scores represented a less overprotective father-daughter relationship.

Psychological Separation Inventory (PSI; Hoffman, 1984). This questionnaire was also completed twice by the participants, who rated each of their parents separately. The initial CFA for the mothers was poor (χ^2 (818, N = 338) = 2379.14, $p < .001$, GFI = 0.72, RMSEA = 0.08). An EFA with a Promax Rotation supported a two-factor solution; however, about half of the items of each original scale were deleted (Table 12). The alpha reliabilities for the Conflictual and Emotional Independence factors were excellent for this sample (α 's = 0.93 and 0.91, respectively). The revised Emotional and Conflictual Independence scales of the PSI for the mothers are represented by *emotm* and *confm* in Figure 5. Notably, all of the items in the *confm* scale were reverse scored, so that high scores represented a less conflictual mother-daughter relationship.

The initial CFA for the PSI for the fathers was also poor (χ^2 (818, N = 338) = 2902.35, $p < .001$, GFI = 0.62, RMSEA = 0.09). An EFA with a Promax Rotation indicated a similar factor structure to that found for the mothers (Table 13). In addition, alpha reliabilities were excellent for the father scales of this sample (Conflictual and

Table 11. Parental Bonding Instrument-Father

Factor 1: Care (Items and factor loadings, * = Reverse scored items)

Alpha = 0.94 (12 items)

*2.	Did not help me as much as I needed.	(.88)
*18.	Did not talk with me very much.	(.87)
11.	Enjoyed talking things over with me.	(.84)
*4.	Seemed emotionally cold to me.	(.84)
17.	Could make me feel better when I was upset.	(.82)
5.	Appeared to understand my problems and worries.	(.79)
12.	Frequently smiled at me.	(.77)
*24.	Did not praise me.	(.76)
6.	Was affectionate to me.	(.75)
*14.	Did not seem to understand what I needed or wanted.	(.71)
1.	Spoke to me with a warm and friendly voice.	(.69)
*16.	Made me feel I wasn't wanted.	(.68)
<u>Item deleted:</u>		
*7.	Liked me to make my own decisions.	(.36)

Factor 2: Overprotection (* = Reverse scored items)

Alpha = 0.80 (4 items)

*22.	Let me go out as often as I wanted.	(.96)
*21.	Gave me as much freedom as I wanted.	(.94)
*25.	Let me dress in any way I pleased.	(.77)
*3.	Let me do those things I liked doing.	(.59)
<u>Item deleted:</u>		
*15.	Let me decide things for myself.	(.52)

Factor 3: Overprotection

Alpha = 0.69 (4 items)

19.	Tried to make me dependent on him.	(.81)
8.	Did not want me to grow up.	(.79)
13.	Tended to baby me.	(.73)
20.	Felt I could not look after myself unless he was around.	(.62)
<u>Items deleted:</u>		
23.	Was overprotective of me.	(.57)
9.	Tried to control everything I did.	(.47)
10.	Invaded my privacy.	(.39)

Table 12. Psychological Separation Inventory-Mother

Factor 1: Conflictual Independence (Items and factor loadings)

Alpha = 0.93 (20 items)

14.	I am often angry at my mother.	(.78)
15.	I hate it when my mother makes suggestions about what I do.	(.76)
25.	I sometimes resent it when my mother tells me what to do.	(.75)
11.	My mother expects too much from me.	(.75)
2.	I feel like I am constantly at war with my mother.	(.74)
21.	I get angry when my mother criticizes me.	(.70)
6.	I sometimes feel like I'm being punished by my mother.	(.70)
8.	I wish my mother wouldn't try to manipulate me.	(.67)
18.	I argue with my mother over little things.	(.67)
3.	I blame my mother for many of the problems I have.	(.65)
10.	I feel that I have obligations to my mother that I wish I didn't have.	(.64)
16.	Even when my mother has a good idea I refuse to listen to it because she made it.	(.63)
13.	I often wish that my mother would treat me more like an adult.	(.62)
7.	I wish my mother wasn't so overprotective.	(.61)
17.	I wish my mother wouldn't try to get me to take side with her.	(.56)
12.	I wish I could stop lying to my mother.	(.55)
4.	I wish I could trust my mother more.	(.53)
5.	I have to be careful not to hurt my mother's feelings.	(.52)
9.	I wish my mother wouldn't try to make fun of me.	(.50)
19.	My mother is sometimes a source of embarrassment to me.	(.46)

Items deleted:

1.	Sometimes my mother is a burden to me.	(.62)
20.	I am sometimes ashamed of my mother.	(.41)
24.	I often have to make decisions for my mother.	(.10)

Factor 2: Emotional Independence

Alpha = 0.91 (13 items)

31.	I sometimes call home just to hear my mother's voice.	(.74)
30.	Being away from my mother makes me feel lonely.	(.74)
37.	My mother is my best friend.	(.73)
27.	I feel longing if I am away from my mother for too long.	(.70)
33.	After being with my mother for a vacation I find it difficult to leave her.	(.68)
29.	I wish that my mother lived nearer so I could visit her more frequently.	(.67)
28.	My mother is the most important person in the world to me.	(.66)
32.	While I am on vacation, I like to spend most of my time with my mother.	(.65)
42.	I'm not sure I could make it in life without my mother.	(.63)
39.	Sometimes I think I am too dependent on my mother.	(.62)
41.	I sometimes feel like an extension of my mother.	(.59)

Table 12 (cont'd).

38.	I seem to be closer to my mother than most people my age.	(.53)
34.	I like to hug and kiss my mother.	(.47)
<u>Items deleted:</u>		
40.	I care too much about my mother's reactions.	(.57)
36.	When I do poorly in school, I feel like I'm letting my mother down.	(.49)
35.	I decide what to do according to whether my mother will approve of it.	(.46)
26.	I like to show my friends pictures of my mother.	(.44)
23.	I feel uncomfortable keeping things from my mother.	(.30)
22.	When I don't write my mother often enough I feel guilty.	(.25)

Table 13. Psychological Separation Inventory-Father

Factor 1: Conflictual Independence (Items and factor loadings)

Alpha = 0.93 (20 items)

6.	I sometimes feel like I'm being punished by my father.	(.89)
8.	I wish my father wouldn't try to manipulate me.	(.81)
2.	I feel like I am constantly at war with my father.	(.81)
10.	I feel that I have obligations to my father that I wish I didn't have.	(.73)
15.	I hate it when my father makes suggestions about what I do.	(.70)
21.	I get angry when my father criticizes me.	(.68)
18.	I argue with my father over little things.	(.68)
25.	I sometimes resent it when my father tells me what to do.	(.66)
14.	I am often angry at my father.	(.66)
11.	My father expects too much from me.	(.64)
3.	I blame my father for many of the problems I have.	(.64)
9.	I wish my father wouldn't try to make fun of me.	(.60)
13.	I often wish that my father would treat me more like an adult.	(.60)
7.	I wish my father wasn't so overprotective.	(.58)
17.	I wish my father wouldn't try to get me to take side with him.	(.56)
19.	My father is sometimes a source of embarrassment to me.	(.54)
4.	I wish I could trust my father more.	(.54)
12.	I wish I could stop lying to my father.	(.53)
16.	Even when my father has a good idea I refuse to listen to it because he made it.	(.51)
5.	I have to be careful not to hurt my father's feelings.	(.48)

Items deleted:

1.	Sometimes my father is a burden to me.	(.52)
24.	I often have to make decisions for my father.	(.22)

Factor 2: Emotional Independence

Alpha = 0.93 (13 items)

37.	My father is my best friend.	(.75)
38.	I seem to be closer to my father than most people my age.	(.75)
39.	Sometimes I think I am too dependent on my father.	(.71)
32.	While I am on vacation, I like to spend most of my time with my father.	(.71)
27.	I feel longing if I am away from my father for too long.	(.69)
28.	My father is the most important person in the world to me.	(.68)
41.	I sometimes feel like an extension of my father.	(.68)
31.	I sometimes call home just to hear my father's voice.	(.66)
42.	I'm not sure I could make it in life without my father.	(.63)
34.	I like to hug and kiss my father.	(.62)
33.	After being with my father for a vacation I find it difficult to leave him.	(.62)

Table 13 (cont`d).

30.	Being away from my father makes me feel lonely.	(.61)
29.	I wish that my father lived nearer so I could visit him more frequently.	(.55)
<u>Items deleted:</u>		
40.	I care too much about my father`s reactions.	(.66)
23.	I feel uncomfortable keeping things from my father.	(.65)
36.	When I do poorly in school I feel I`m letting my father down.	(.62)
26.	I like to show my friends pictures of my father.	(.54)
20.	I am sometimes ashamed of my father.	(.44)
22.	When I don`t write my father often enough I feel guilty.	(.36)

Emotional Independence α 's = 0.93). The observed variables *emotf* and *conff* represent the two factors for this measure in Figure 5. The items in the *conff* scale were reverse scored; as a result, high scores on this scale represented a less conflictual father-daughter relationship.

Personality Organization Vulnerability

The Revised Personal Style Inventory (Robins et al., 1994). The literature reported a two-factor solution for this inventory. The initial CFA, however, was poor (χ^2 (1079, N = 338) = 2978.20, $p < .001$, GFI = 0.70, RMSEA = 0.07). An EFA with a Promax Rotation supported a four-factor solution; two Autonomy factors and two Sociotropy factors (Table 14). For this sample, the alpha coefficients of the Sociotropy factors were acceptable (α 's = 0.85 and 0.66, respectively). The alpha reliabilities for the Autonomy factors were lower compared to the Sociotropy factors for this sample (α 's = 0.72 and 0.69, respectively). These scales are represented by *af1*, *af2*, *sf1*, and *sf2* in Figure 5.

Stressful Life Events

The Inventory of College Students' Recent Life Experiences (ICSLRE; Kohn et al., 1990). The literature reported seven factors comprising the ICSLRE; however, the initial CFA was extremely poor (χ^2 (1127, N = 338) = 3552.48, $p < .001$, GFI = 0.64, RMSEA = 0.08). An EFA with a Promax Rotation indicated a four-factor solution with 33 items: General Relationship Difficulties/Loneliness, Academic Difficulties, Time Pressures, and Intimate Relationship Difficulties (Table 15). The alpha coefficients for these factors were acceptable (α 's ranged from 0.71 to 0.87). These four factors are represented by the *slef1*, *slef2*, *slef3*, and *slef4* observed variables (respectively) in

Table 14. Personal Style Inventory-Revised

Factor 1: Sociotropy (Items and factor loadings)

Alpha = 0.85 (13 items)

41.	I often let people take advantage of me.	(.74)
47.	It is hard for me to let people know when I am angry with them.	(.73)
15.	I try to please other people too much.	(.69)
29.	I am too apologetic to other people.	(.67)
9.	I worry a lot about hurting or offending other people.	(.67)
35.	It is hard for me to say "no" to other people's requests.	(.65)
1.	I often put other people's needs before my own.	(.63)
25.	I feel I have to be nice to other people.	(.54)
13.	I am easily persuaded by others.	(.52)
5.	I am very sensitive to the effects I have on the feelings of other people.	(.50)
45.	I judge myself based on how I think others feel about me.	(.48)
7.	I am very sensitive to criticism by others.	(.45)
11.	It is hard for me to break off a relationship even if it is making me unhappy.	(.42)

Items deleted:

33.	I have a hard time forgiving myself when I feel I haven't worked up to my potential.	(.49)
31.	I am very concerned with how people react to me.	(.46)
39.	I am most comfortable when I know my behavior is what others expect of me.	(.40)
19.	I often feel responsible for solving other people's problems.	(.10)

Factor 2: Sociotropy

Alpha = 0.66 (6 items)

27.	I like to be certain that there is somebody close I can contact in case something unpleasant happens to me.	(.81)
37.	I become upset when something happens to me and there's nobody around to talk to.	(.78)
17.	I find it difficult if I have to be alone all day.	(.57)
21.	It is very hard for me to get over the feelings of loss when a relationship has ended.	(.53)
43.	I become very upset when a friend breaks a date or forgets to call me as planned.	(.53)
3.	I find it difficult to be separated from people I love.	(.44)

Item deleted:

23.	It is very important to me to be liked or admired by others.	(.47)
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Table 14 (cont'd).

Factor 3: Autonomy

Alpha = 0.72 (8 items)

26.	It is hard for me to express admiration or affection.	(.68)
30.	It is hard for me to open up and talk about my feelings and other personal things.	(.67)
2.	I tend to keep other people at a distance.	(.64)
28.	It is difficult for me to make a long-term commitment to a relationship.	(.59)
42.	I rarely trust the advice of others when making a big decision.	(.56)
38.	Personal questions from others usually feel like an invasion of my privacy.	(.50)
10.	When I'm feeling blue, I don't like to be offered sympathy.	(.45)
20.	I often handle big decisions without telling anyone else about them.	(.40)

Items deleted:

22.	It is hard for me to have someone dependent on me.	(.38)
6.	I don't like relying on others for help.	(.38)
12.	In relationships, people are often too demanding of one another.	(.37)
16.	I don't like people to invade my privacy.	(.37)
34.	When making a big decision, I usually feel that advice from others is intrusive.	(.36)
46.	I become upset when others try to influence my thinking on a problem.	(.34)
4.	I am easily bothered by other people making demands of me.	(.10)

Factor 4: Autonomy

Alpha = 0.69 (7 items)

32.	I have a hard time forgiving myself when I feel I haven't worked up to my potential.	(.69)
24.	I feel badly about myself when I am not actively accomplishing things.	(.66)
8.	It bothers me when I feel that I am only average and ordinary.	(.66)
40.	I am very upset when other people or circumstances interfere with my plans.	(.55)
14.	I usually view my performance as either a complete success or a complete failure.	(.52)
44.	I become upset more than most people I know when limits are placed on my personal independence and freedom.	(.46)
48.	I feel controlled when others have a say in my plans.	(.43)

Items deleted:

18.	It is hard for me to take instructions from people who have authority over me.	(.33)
36.	I resent it when people try to direct my behavior or activities.	(.10)

Table 15. Inventory of College Students' Recent Life Experiences

Factor 1: General Relationship Difficulties/Loneliness (Items and factor loadings)

Alpha = 0.83 (10 items)

44.	Being ignored.	(.75)
12.	Being taken advantage of.	(.74)
6.	Being taken for granted.	(.72)
10.	Having your contributions overlooked.	(.69)
4.	Social rejection.	(.64)
42.	Social isolation.	(.64)
38.	Disliking fellow student(s).	(.53)
35.	Getting "ripped off" or cheated in the purchase of services.	(.53)
47.	Gossip concerning someone you care about.	(.51)
3.	Conflict with professors.	(.46)

Items deleted:

45.	Dissatisfaction with your physical appearance.	(.50)
24.	Loneliness.	(.49)
48.	Failing to get expected job.	(.47)
49.	Dissatisfaction with your athletic skills.	(.44)
26.	Conflict with teaching assistant(s).	(.44)
43.	Long waits to get service (e.g., at banks, stores, etc.).	(.42)
36.	Social conflicts over smoking.	(.42)
28.	Conflicts with your family.	(.34)
40.	Dissatisfaction with your ability at written expression.	(.33)
37.	Difficulties with transportation.	(.32)
7.	Financial conflicts with family members.	(.29)
33.	Poor health of a friend.	(.28)

Factor 2: Academic Difficulties

Alpha = 0.87 (11 items)

25.	Lower grades than you hoped for.	(.77)
16.	Dissatisfaction with school.	(.76)
46.	Finding course(s) uninteresting.	(.71)
11.	Struggling to meet your own academic standards.	(.71)
34.	Disliking your studies.	(.69)
20.	Important decisions about your future career.	(.69)
23.	Important decisions about your education.	(.67)
14.	Struggling to meet the academic standards of others.	(.59)
32.	Hard effort to get ahead.	(.51)
19.	Dissatisfaction with your mathematical ability.	(.51)
30.	Finding courses too demanding.	(.48)

Table 15 (cont'd).

Items deleted:

- | | | |
|-----|--|-------|
| 41. | Interruptions of your school work. | (.32) |
| 21. | Financial burdens. | (.31) |
| 22. | Dissatisfaction with your reading ability. | (.24) |

Factor 3: Time Pressures

Alpha = 0.79 (6 items)

- | | | |
|-----|--|-------|
| 13. | Not enough leisure time. | (.79) |
| 5. | Too many things to do at once. | (.74) |
| 27. | Not enough time for sleep. | (.73) |
| 18. | Not enough time to meet your obligations. | (.67) |
| 15. | A lot of responsibilities. | (.59) |
| 29. | Heavy demands from extracurricular activities. | (.57) |

Factor 4: Intimate Relationship Difficulties

Alpha = 0.71 (6 items)

- | | | |
|-----|---|-------|
| 2. | Being let down or disappointed by friends. | (.73) |
| 31. | Conflicts with friends. | (.71) |
| 8. | Having your trust betrayed by a friend. | (.66) |
| 39. | Conflicts with your boyfriend/girlfriend/spouse. | (.66) |
| 1. | Conflicts with your boyfriend's/girlfriend's/spouse's family. | (.59) |
| 17. | Decisions about intimate relationships. | (.50) |

Item deleted:

- | | | |
|----|--|-------|
| 9. | Separation from people you care about. | (.44) |
|----|--|-------|

Figure 5.

Depression

The two depression measures used to assess depressive symptomology in the Self-in-Relation model (Figure 4) were also used for this model (Figure 5). These measures are represented by the observed variables, *bdi* and *cesd*, in Figure 5.

Combination Model

This model incorporates all of the constructs that are found in the Self-in-Relation and Attachment-Vulnerability models of depression. The measures that were used in these models were also used in the Combination model. Please refer to the measurement model for these factor structures, measures, constructs, and pathways (Figure 6).

The following section will discuss the results of the hypotheses for each of the models. SEM analyses were conducted using the scales discussed above and represented in Figures 4 through 6. SEM allows for the objective evaluation of the adequacy of fit of a theoretical model to collected data (Raykov, Tomer, & Nesselroade, 1991). The advantages of using SEM analytic techniques include: (1) allowing for multiple indicators and latent variables, (2) allowing for measurement error in all variables, and (3) allowing for directing and indirect effects between factors. Measurement models specify the relationships of observed variables to latent variables, whereas the latent variable models outline the influence latent constructs have on each other (Bollen, 1989).

Characteristics of the data set determined which decisions were used in the SEM analyses. There were no indications of outliers, excessive kurtosis, or skewness, that could affect the covariance matrix. In addition, due to the minimal amount of missing data, any missing values were replaced with mean substitution. The properties of this

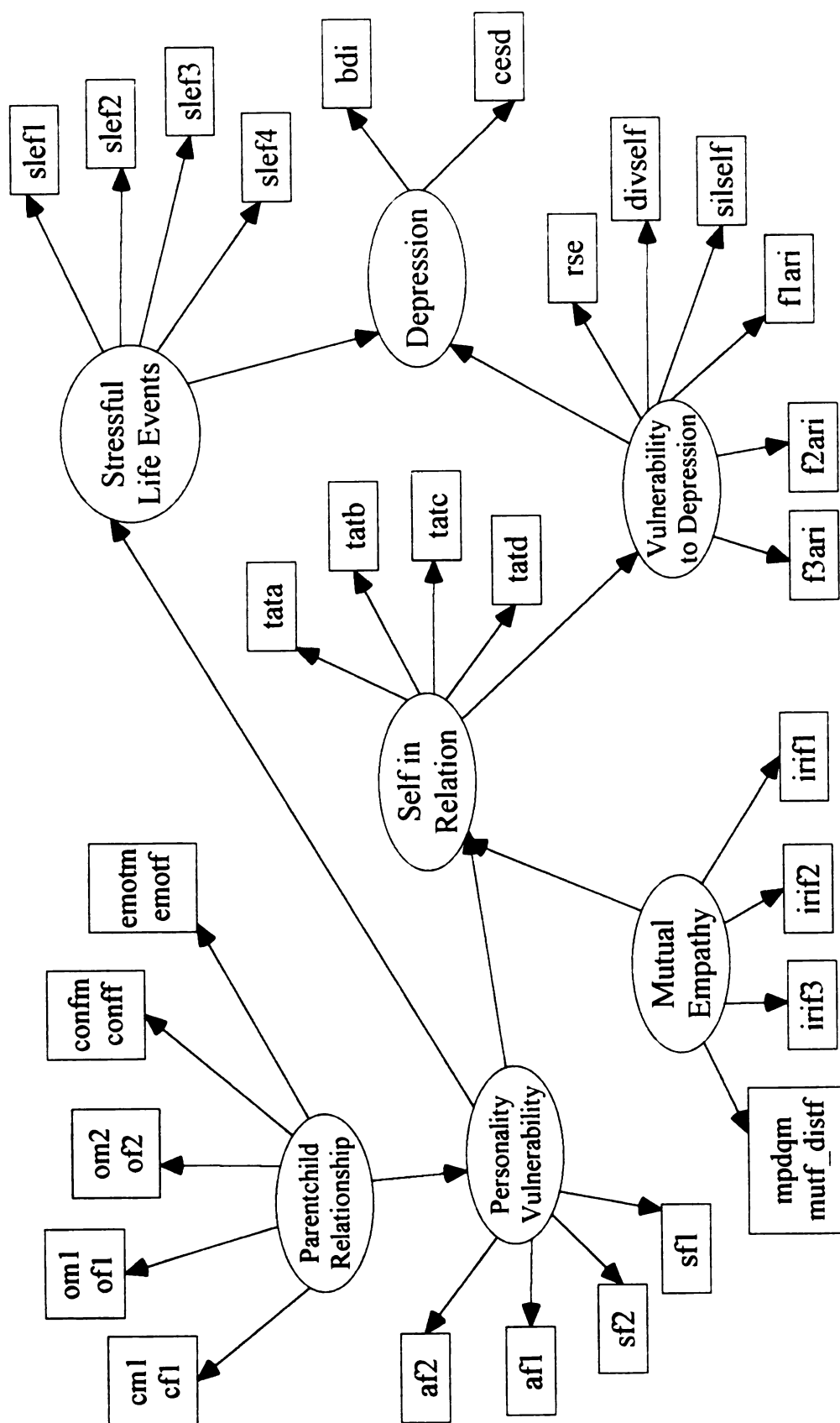


Figure 6. Combination Measurement Model
Observed Variables for Mothers and Fathers

interval-level data set allowed for the use of unbiased sample covariances to analyze the implied covariance matrix (Bollen, 1989). Maximum likelihood (ML) estimation was employed to yield optimal parameter estimates. Research suggests that ML estimation performs reasonably well under less than optimal conditions (e.g., small sample size -- Hoyle & Panter, 1995). The statistical package, AMOS (Arbuckle, 1994) was used to perform these SEM analyses. For every hypothesis in each model, results are presented first for the mothers and then for the fathers, as these analyses were conducted separately.

Results of the Hypotheses

Self-in-Relation Model

Hypothesis 1

For the mothers, a direct, positive relationship was found between the mutual empathy and self-in-relation latent variables; however, this relationship only approached significance at the .05 level (standardized $\beta = 0.15$, $z = 1.48$, $p < .10$, one-tailed test; Path A, Figure 7). In contrast, the father ratings yielded a direct, significant positive relationship between mutual empathy and self-in-relation (standardized $\beta = 0.29$, $z = 2.78$, $p < .01$, one-tailed test; Path A, Figure 8). These findings suggest that respondents who have mutually/close relationships with their fathers and endorse empathic attitudes are more likely to have a strong sense of self-in-relation.

Hypothesis 2

As predicted, self-in-relation had a direct, significant negative association with vulnerability to depression (Path B, Figures 7 and 8). For the model utilizing respondents' ratings of their mothers, the standardized regression weight was -0.20 ($z = -2.25$, $p < .03$,

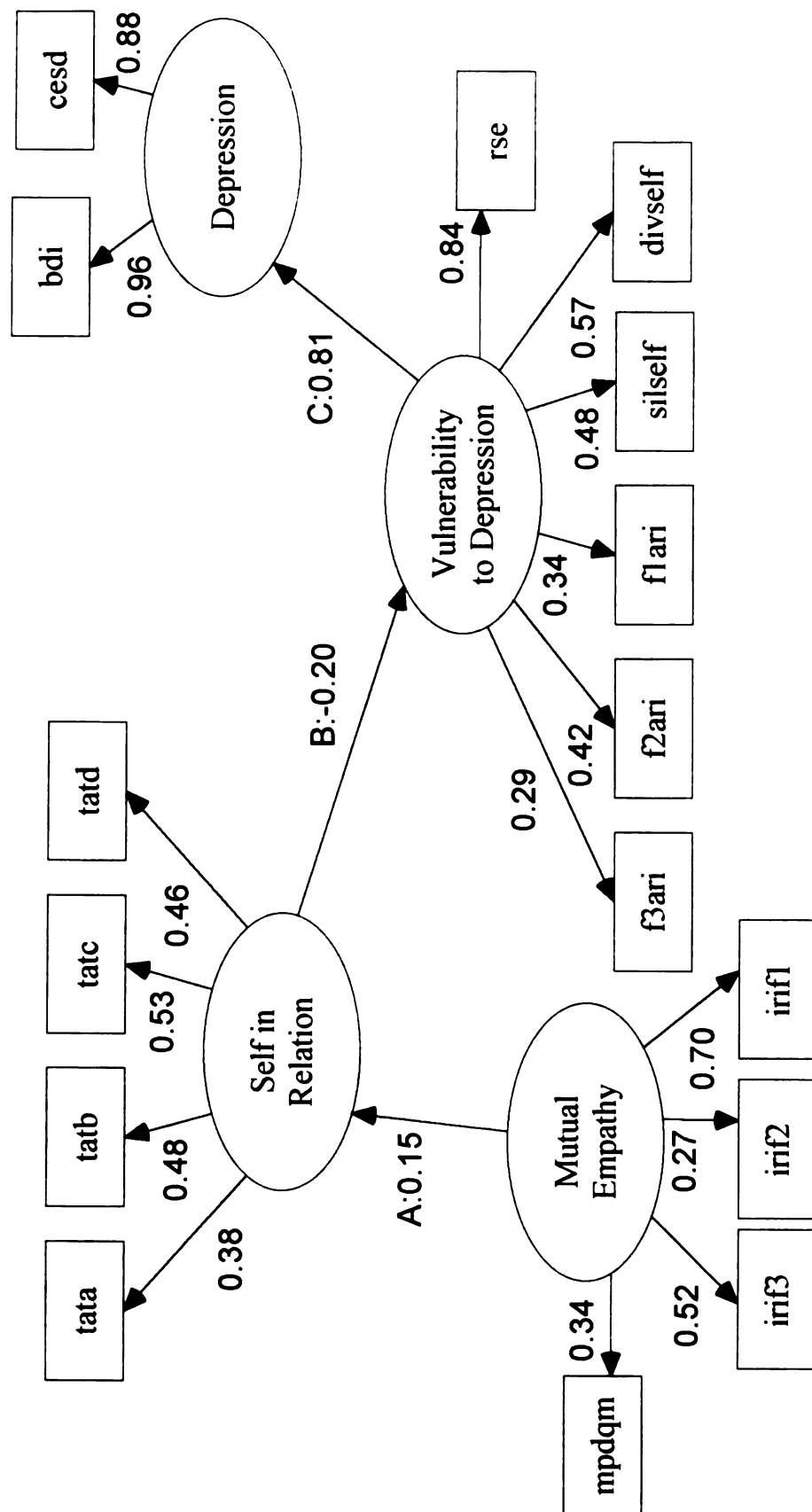


Figure 7. Self-in-Relation Measurement Model
Mothers

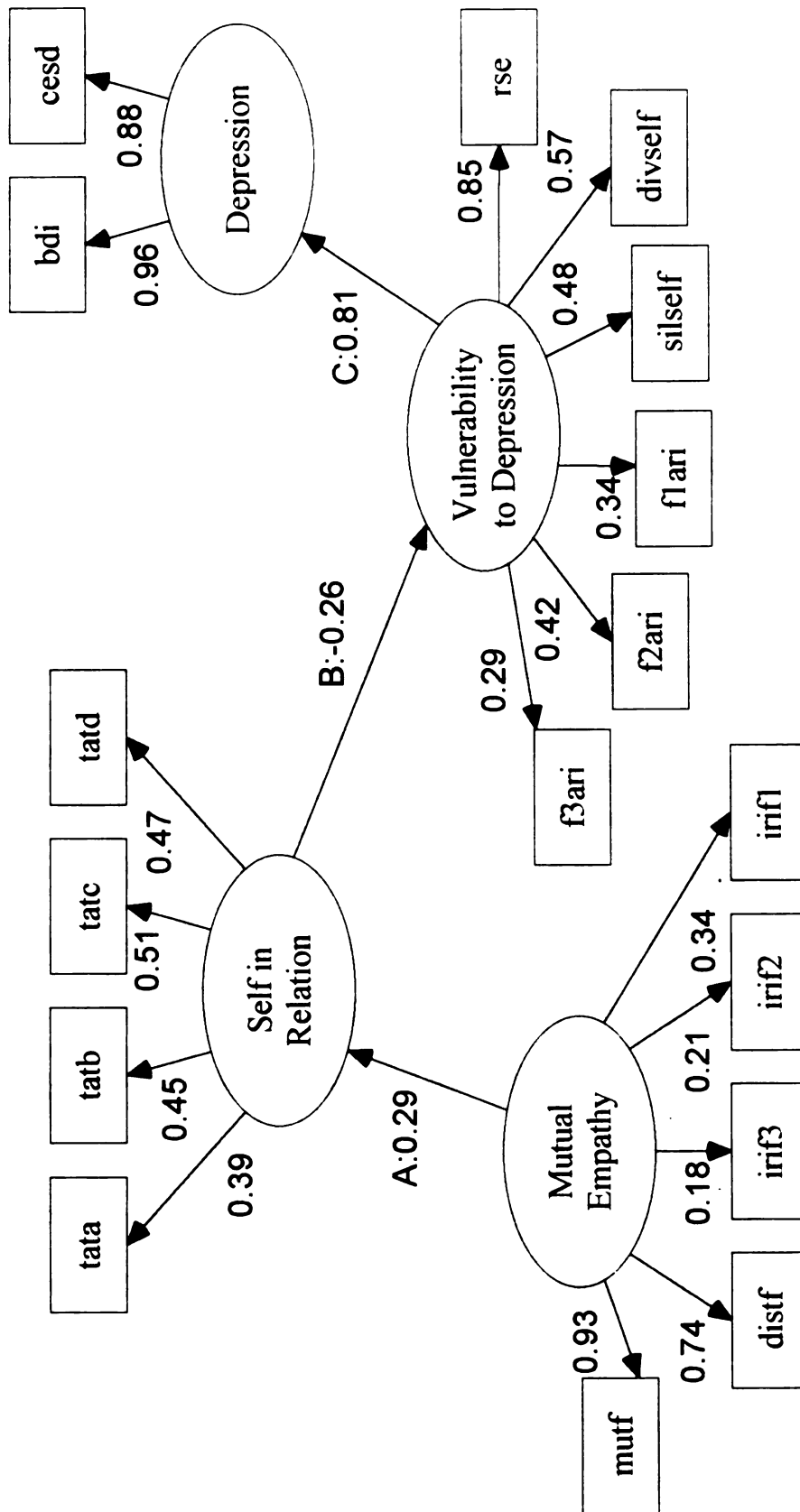


Figure 8. Self-in-Relation Measurement Model
Fathers

one-tailed test; Figure 7). The relationship between self-in-relation and vulnerability to depression was slightly stronger for the father data (standardized $\beta = -0.26$, $z = -2.72$, $p < .01$, one-tailed test; Figure 8). This finding suggests that individuals with a strong sense of self-in-relation are less likely to be vulnerable to depression.

Hypothesis 3

A direct, significant positive relationship was demonstrated between vulnerability to depression and depression (Path C, Figures 7 and 8). The standardized regression weight was 0.81 ($z = 13.30$, $p < .001$, one-tailed test) for both the mother (Figure 7) and father (Figure 8) Self-in-Relation models. Those individuals who were vulnerable to depression were significantly more likely to report depressive symptoms compared to those individuals who were not vulnerable to depression.

Attachment-Vulnerability Model

Hypothesis 4

For the respondents' ratings of their mothers, a direct, significant negative relationship was found between the parent-child relationship and personality vulnerability (standardized $\beta = -0.46$, $z = -5.67$, $p < .001$, one-tailed test; Path A, Figure 9). When analyzing the respondents' ratings of their fathers, there was a similar direct, significant negative relationship between the parent-child relationship and personality vulnerability, albeit this relationship was less robust (standardized $\beta = -0.24$, $z = -3.59$, $p < .001$, one-tailed test; Path A, Figure 10). These results indicate that a relatively warm, caring, and open parent-child relationship leads to a personality invulnerability (e.g., does not lead to a self-evaluative or interpersonal personality vulnerability). This finding was true for the daughters' perceived relationship with both their mothers and fathers.

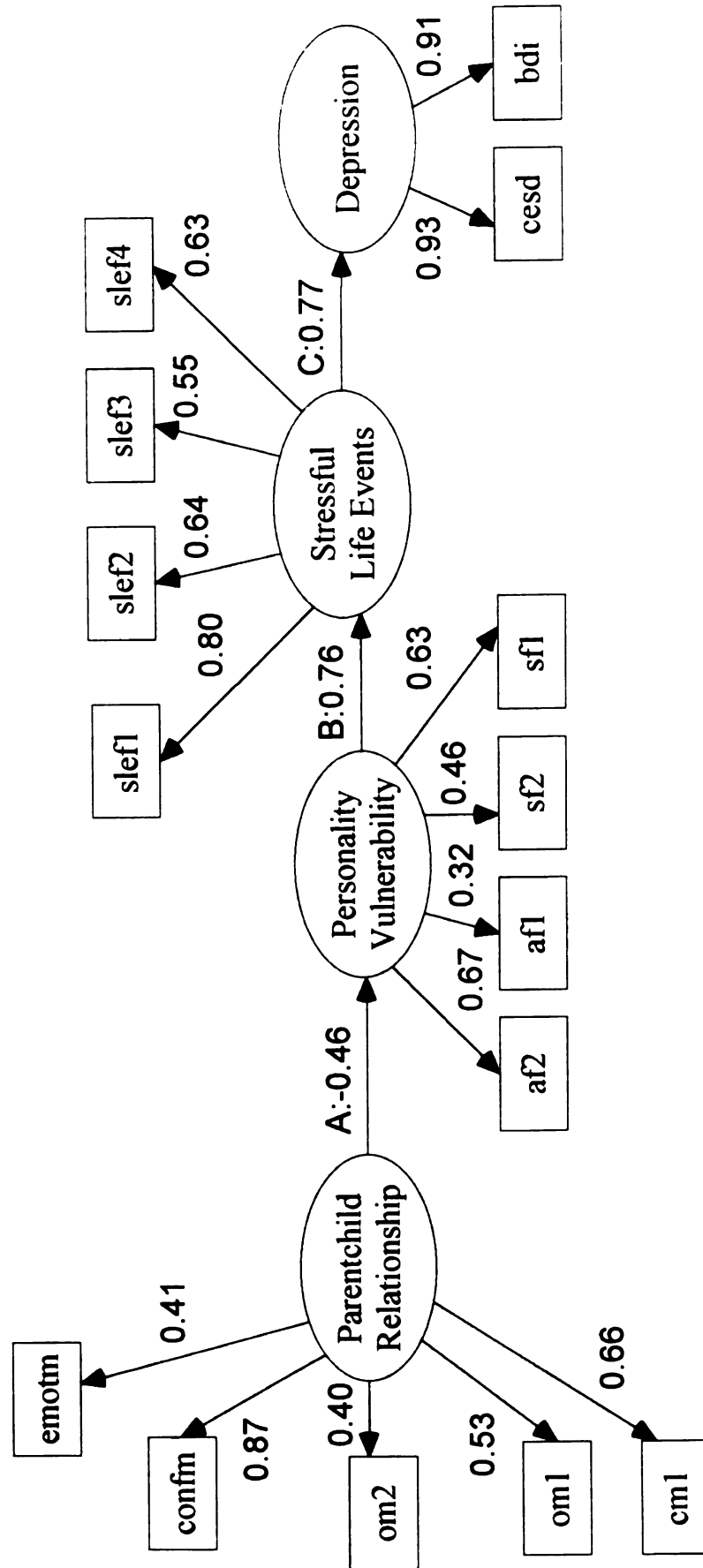


Figure 9. Attachment-Vulnerability Measurement Model
Mothers

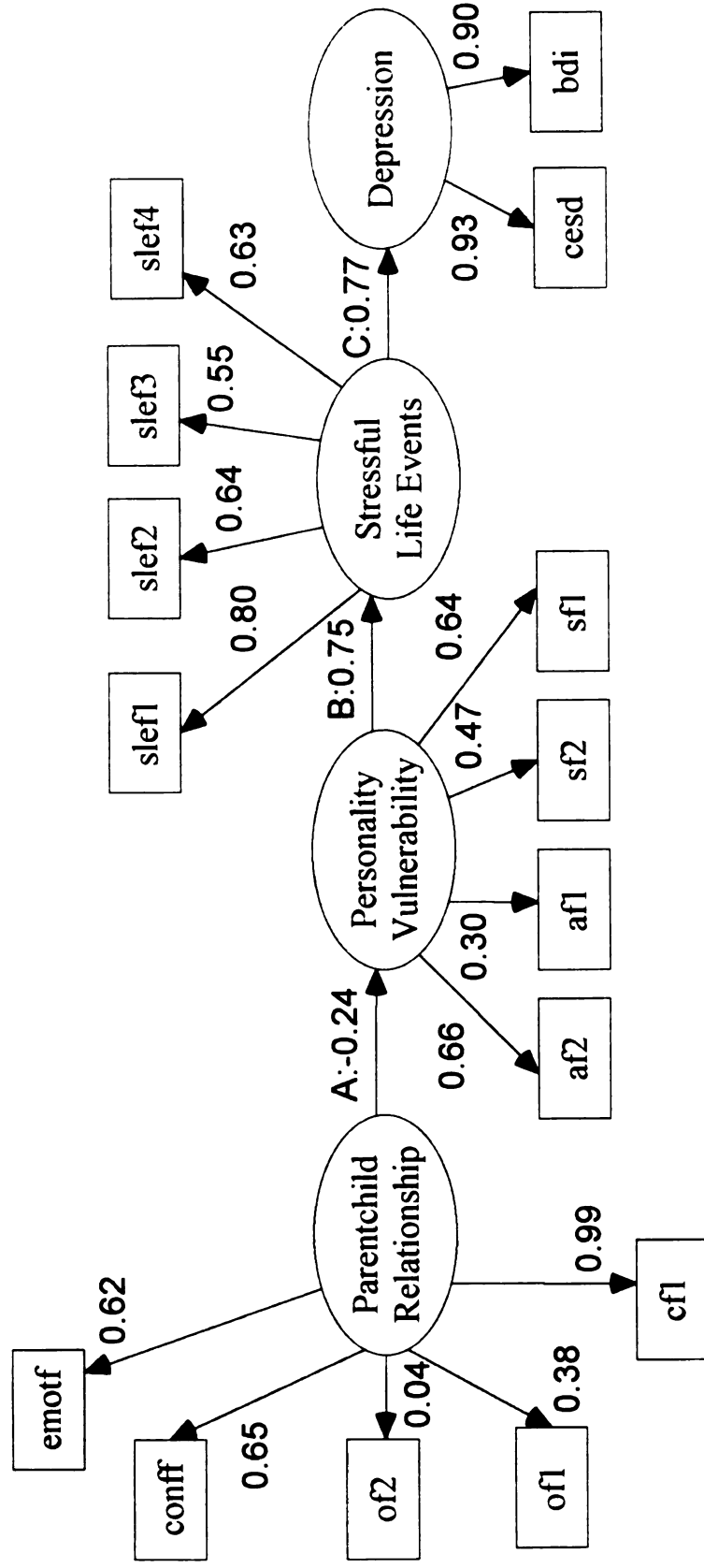


Figure 10. Attachment-Vulnerability Measurement Model
Fathers

Hypothesis 5

As predicted, personality vulnerability had a direct, significant positive association with stressful life events (Path B, Figures 9 and 10). For the Attachment-Vulnerability Model utilizing only the mother data, the standardized regression weight for this relationship was 0.76 ($z = 8.19$, $p < .001$, one-tailed test; Figure 9). Similar findings were demonstrated for this model with the father data (standardized $\beta = 0.75$, $z = 8.07$, $p < .001$, one-tailed test; Figure 10). This outcome supports the hypothesis that individuals with a personality vulnerability are more likely to experience stressful life events.

Hypothesis 6

A direct, significant positive relationship was demonstrated between stressful life events and depression for both mother and father Attachment-Vulnerability models (standardized $\beta = 0.77$, $z = 12.20$, $p < .001$, one-tailed test; Path C, Figures 9 and 10). In other words, those respondents who endorsed more stressful life events were more likely to experience depressive symptoms.

Combination Model

Hypothesis 7

For both mother and father Combination models (Figures 11 and 12), parent-child relationship was demonstrated to have a direct, significant negative association with personality vulnerability. This association was more robust for the mothers (standardized $\beta = -0.43$, $z = -5.72$, $p < .001$, one-tailed test; Path A, Figure 11) compared to the fathers (standardized $\beta = -0.23$, $z = -3.69$, $p < .001$, one-tailed test; Path A, Figure 12).

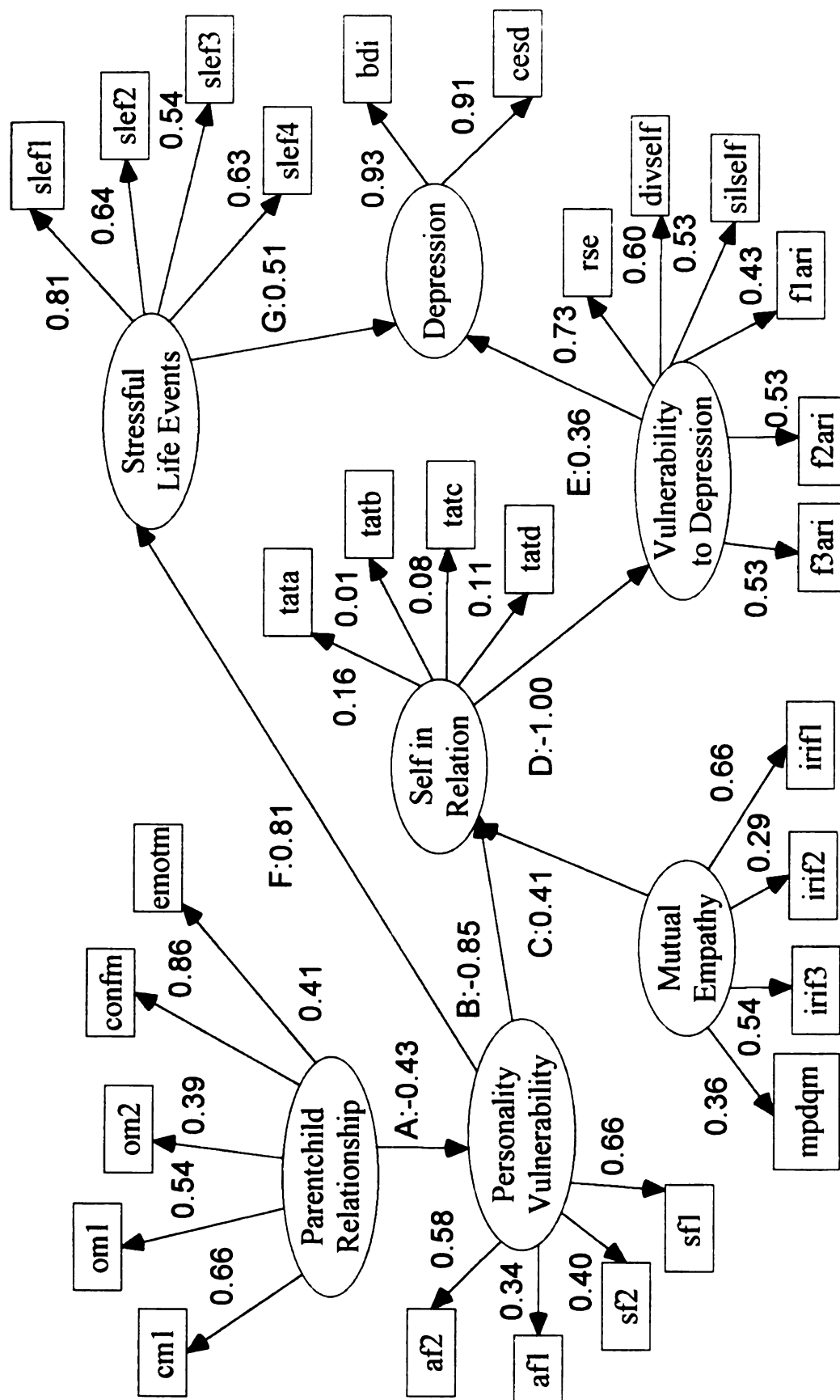


Figure 11. Combination Measurement Model
Mothers

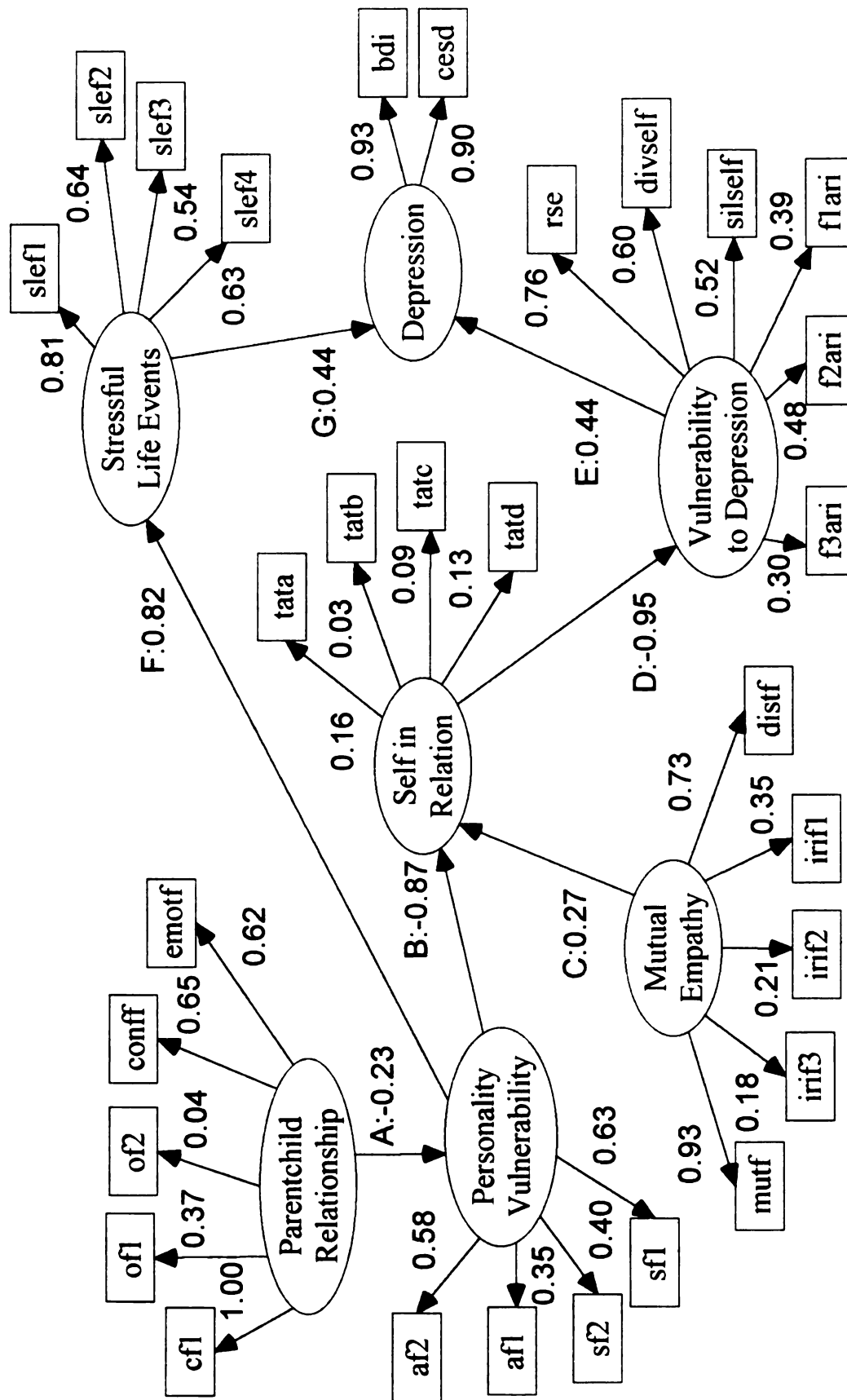


Figure 12. Combination Measurement Model
Fathers

Hypothesis 8

Personality vulnerability had a direct, significant negative relationship with self-in-relation (Path B, Figures 11 and 12). For the Combination model, using the respondents' ratings of their mothers, the standardized regression weight between personality vulnerability and self-in-relation was -0.85 ($z = -2.68$, $p < .01$, one-tailed test; Path B, Figure 11). Similar results were found for the father data as well (standardized $\beta = -0.87$, $z = -2.42$, $p < .01$, one-tailed test; Path B, Figure 12). These results indicate that those individuals who endorsed a personality vulnerability (e.g., self-evaluative or interpersonal vulnerability) were more likely to have a weak sense of self-in-relation.

Hypothesis 9

Contrary to the Self-in-Relation model for mothers, the Combination model for mothers yielded a direct, significant positive relationship between mutual empathy and self-in-relation (standardized $\beta = 0.41$, $z = 2.44$, $p < .01$, one-tailed test; Path C, Figure 11). A similar finding was demonstrated for the Combination model using the respondents' ratings of their fathers (standardized $\beta = 0.27$, $z = 2.12$, $p < .03$, one-tailed test; Path C, Figure 12).

Hypothesis 10

As predicted, a direct, significant negative association was shown between self-in-relation and vulnerability to depression (Path D, Figures 11 and 12). For the Combination model, using the respondents' ratings of their mothers, the standardized regression weight for this relationship was -1.00 ($z = -2.72$, $p < .01$, one-tailed test; Path D, Figure 11). The finding for the Combination model for fathers was similar, although it was somewhat less robust (standardized $\beta = -0.95$, $z = -2.45$, $p < .01$, one-tailed test; Path D, Figure 12).

Hypothesis 11

Comparable to the findings for the Self-in-Relation model for both mothers and fathers, a direct, significant positive association was found between vulnerability to depression and depression for both mother and father Combination models (Path E, Figures 11 and 12). The standardized regression weight for this association for the mothers' Combination model was 0.36 ($z = 4.55$, $p < .001$, one-tailed test; Path E, Figure 11). The result was somewhat more robust for the Combination model using respondents' ratings of their fathers (standardized $\beta = 0.44$, $z = 5.51$, $p < .001$, one-tailed test; Path E, Figure 12).

Hypothesis 12

A direct, significant positive relationship was demonstrated between personality vulnerability and stressful life events (Path F, Figures 11 and 12). The results were analogous for both the mothers (standardized $\beta = 0.81$, $z = 9.85$, $p < .001$, one-tailed test; Path F, Figure 11) and fathers (standardized $\beta = 0.82$, $z = 9.42$, $p < .001$, one-tailed test; Path F, Figure 12) in this model.

Hypothesis 13

Stressful life events was shown to have a direct, significant positive relationship with depression (Path G, Figures 11 and 12). This finding was somewhat more robust for the Combination model for the mothers (standardized $\beta = 0.51$, $z = 6.32$, $p < .001$, one-tailed test; Path G, Figure 11) compared to the fathers (standardized $\beta = 0.44$, $z = 5.63$, $p < .001$, one-tailed test; Path G, Figure 12).

Hypothesis 14

For the mothers, a comparison of the Self-in-Relation model to the Combination model suggested that the Combination model provided a better fit for the data (χ^2 difference (4, N = 338) = 392.41, $p < .001$). The decline in fit between the Combination and Self-in-Relation model is significant, as these models are significantly different from each other. Similar results were demonstrated for the fathers' Self-in-Relation and Combination models (χ^2 difference (4, N = 338) = 297.25, $p < .001$).

Analyses comparing the Attachment-Vulnerability and Combination models for the mothers indicated that the chi-square difference was significant (χ^2 difference (4, N = 338) = 186.24, $p < .001$) suggesting that the Combination model is the preferred model. Likewise, the Combination model was superior to the Attachment-Vulnerability model for the fathers (χ^2 difference (4, N = 338) = 173.40, $p < .001$).

The following section reports the results of the Self-in-Relation, Attachment-Vulnerability, and Combination models and attempts made to improve the overall fit of these models. Once again, these analyses were conducted using the statistical package, AMOS (Arbuckle, 1994). The chi-square statistic, degrees of freedom, level of probability, Goodness-of-Fit Index (GFI), and Root Mean Square Error of Approximation (RMSEA) are reported and examined to determine the overall degree of fit of the models. Each model is considered twice; once using the data of the respondents' ratings of their mothers, then with the data of the respondents' ratings of their fathers.

Results of the Overall Models

Self-in-Relation Model

Self-in-Relation Model for Mothers

The Self-in-Relation model for mothers yielded a chi-square statistic of 348.03 ($df = 101$, $N = 338$, $p < .001$; Figure 7). The indices of fit suggested that the fit of the model, that is how well the observed variables fit the latent variables, was average and could be improved ($GFI = 0.88$, $RMSEA = 0.09$).

One way of attempting to improve the overall fit of the model is to add direct effects between latent variables that were not initially specified (Bollen, 1989; e.g., a link between mutual empathy and vulnerability to depression; see Paths D and E, Figure 13). A direct, significant relationship was found between mutual empathy and vulnerability to depression (standardized $\beta = -0.54$, $z = -4.96$, $p < .001$, one-tailed test; Path D, Figure 13). This association suggested that individuals who perceived their relationships to be mutual and empathic were less likely to be vulnerable to depression. The added link between mutual empathy and depression (Path E, Figure 13) was also significant, but in a positive direction (standardized $\beta = 0.33$, $z = 3.16$, $p < .01$, one-tailed test). These additions slightly improved the overall fit of the model ($\chi^2 (99, N = 338) = 310.60$, $p < .001$, $GFI = 0.89$, $RMSEA = 0.08$). Analyses comparing the revised model (with these additions) with the original model suggested that the revised model was superior (χ^2 difference (2, $N = 338$) = 37.43, $p < .001$) and should be accepted.

Self-in-Relation Model for Fathers

The chi-square statistic for the Self-in-Relation model using the respondents' ratings of their fathers was 409.54 ($df = 116$, $N = 338$, $p < .001$; Figure 8). The fit indices

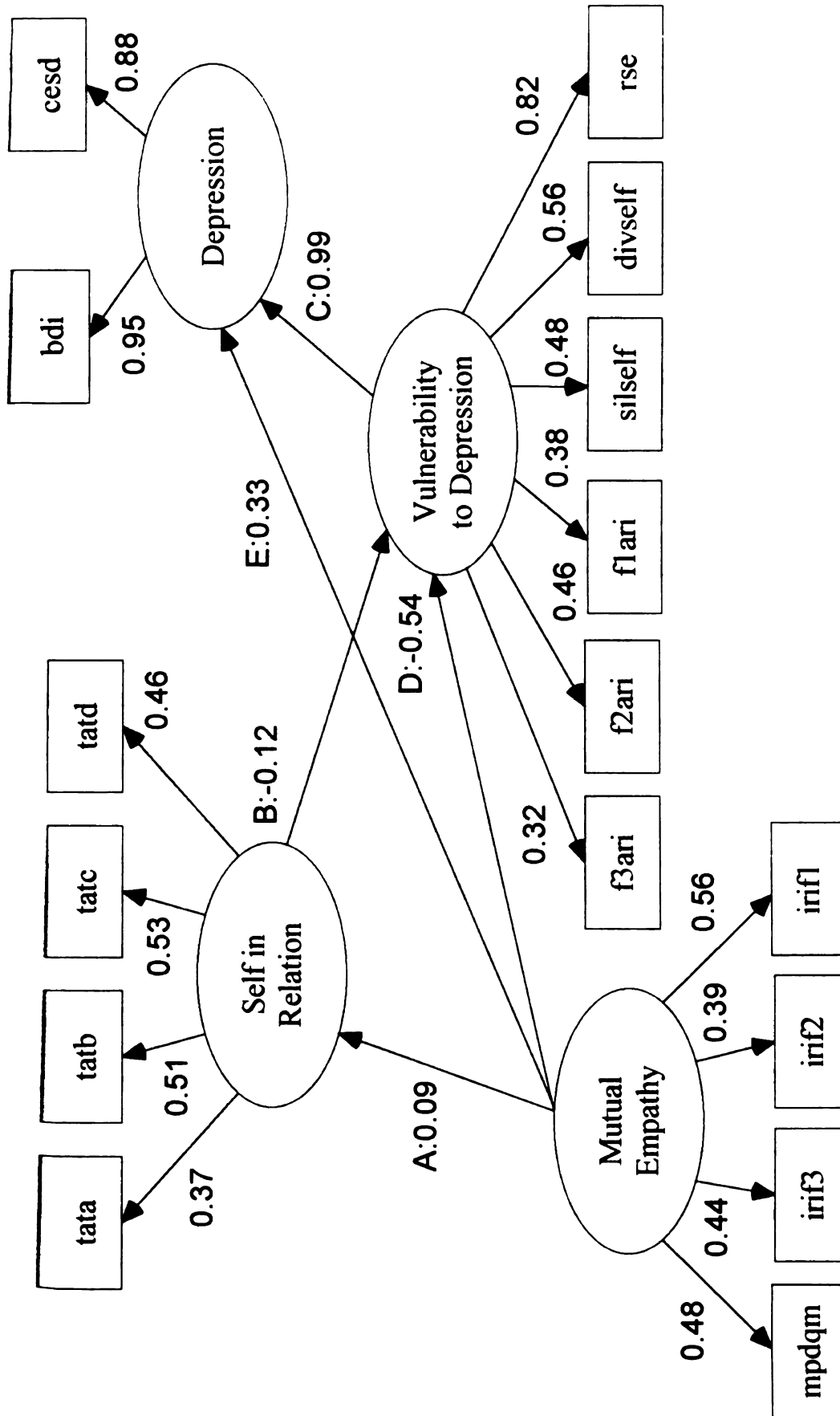


Figure 13. Self-in-Relation Measurement Model
Mothers with Added Direct Effects

indicated that the overall fit of the model could be improved (GFI = 0.87, RMSEA = 0.09). These results are somewhat comparable to the findings of the overall fit for the Self-in-Relation model for mothers.

In an effort to improve this model, additional direct effects that were not initially specified were added between latent variables (see Path D, Figure 14). The added path of mutual empathy to vulnerability to depression was significant (standardized $\beta = -0.36$, $z = -4.09$, $p < .001$, one-tailed test). This supplementary path suggested that individuals who perceived themselves as empathic and having mutual relationships with their fathers were less likely to be vulnerable to depression. Furthermore, this path improved the overall fit of the model somewhat ($\chi^2 (115, N = 338) = 383.81$, $p < .001$, GFI = 0.88, RMSEA = 0.08). Analyses comparing the revised model with the original model suggested that the revised model was superior (χ^2 difference (1, $N = 338$) = 25.73, $p < .001$) and should be accepted.

Attachment-Vulnerability Model

Attachment-Vulnerability Model for Mothers

Using structural equation modeling and AMOS, the chi-square statistic for this Attachment-Vulnerability model was 314.98 (df = 87, $N = 338$, $p < .001$; Figure 9). The following indices of fit suggested that the fit of the model was average (GFI = 0.89, RMSEA = 0.09). Although these results indicated that the fit of the model could be improved, incorporating additional direct effects between latent variables did not

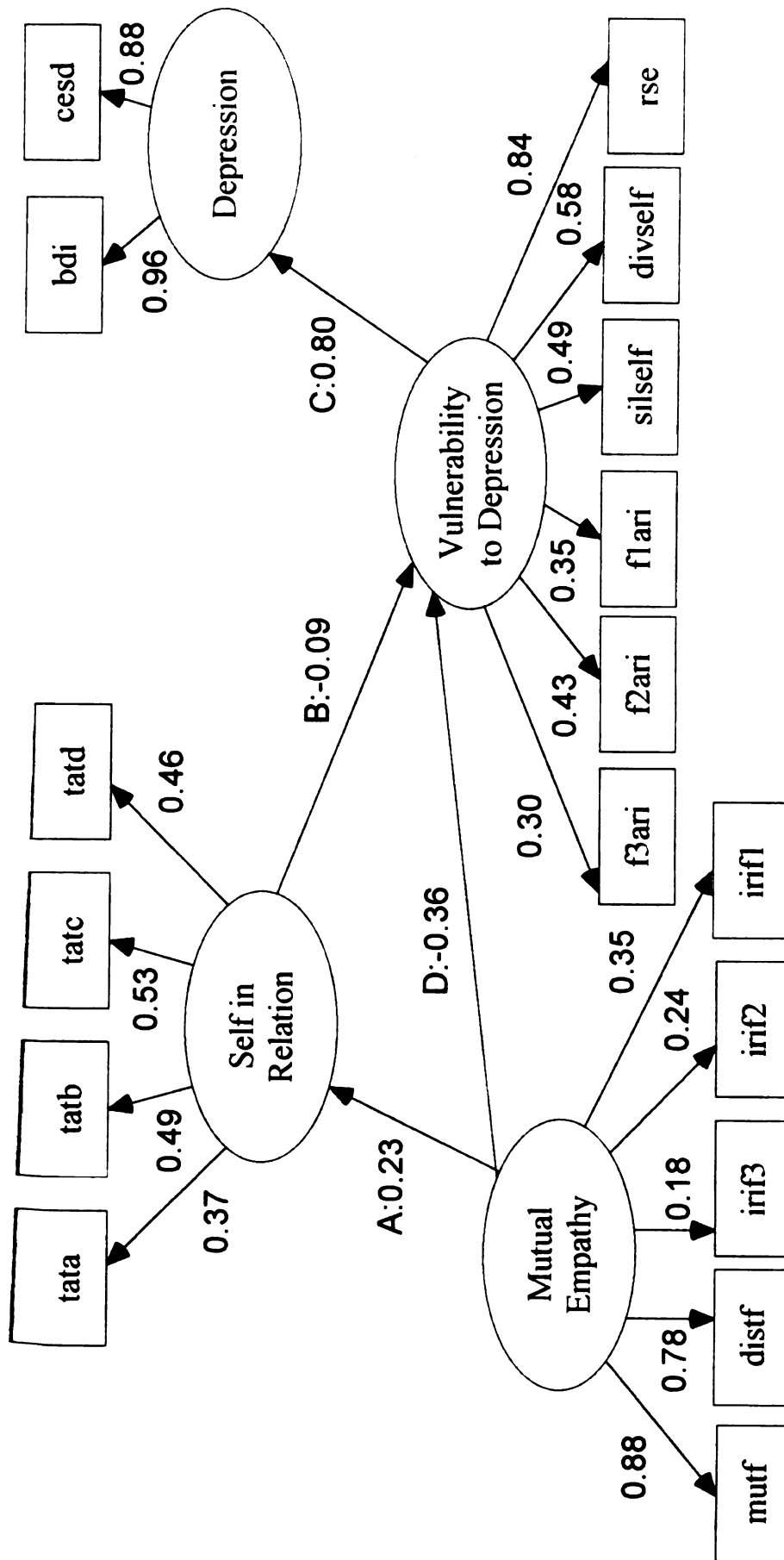


Figure 14. Self-in-Relation Measurement Model
Fathers with Added Direct Effects

significantly improve the model (χ^2 difference (2, N = 338) = 0.61, $p < .74$).³

Attachment-Vulnerability Model for Fathers

The chi-square statistic of the Attachment-Vulnerability model for the fathers was 377.76 (df = 87, N = 338, $p < .001$; Figure 10). The results of the Goodness of Fit Index and Root Mean Square Error of Approximation indicated that the fit of the overall model could be improved (GFI = 0.87, RMSEA = 0.10). Based on the minimal effect the Parent-Child Relationship had on the second Overprotection factor ($of2$ standardized $\beta = 0.04$, $z = 0.69$, $p > .10$, one-tailed test; Figure 10), it was removed from the model. This revision yielded a chi-square statistic of 278.18 (df = 88, N = 338, $p < .001$, GFI = 0.87, $p < .001$) which improved the model slightly and was superior to the original model (χ^2 difference (1, N = 338) = 0.41, $p < .52$).

The addition of other direct effects was also analyzed to determine if the fit of the model could be improved (e.g., the path between parent-child relationship and stressful life events). The only significant direct effect was the relationship between parent-child relationship to depression (standardized $\beta = -0.09$, $z = -2.03$, $p < .03$, one-tailed test; Path D, Figure 15). This finding suggested that respondents who reported a warm, caring, open relationship with their fathers were less likely to report feelings of depression. These revisions resulted in a chi-square statistic of 374.05 (df = 87, N = 338, $p < .001$, GFI = 0.87, RMSEA = 0.10). A comparison of this model (with both revisions)

³ Due to the similar findings for the paths before and after the endogenous variable Stressful Life Events, an alternative model with Stressful Life Events as an exogenous variable was considered. This alternative model did not improve the fit of this model; in fact, the fit of the model declined (χ^2 (87, N = 338) = 437.26, $p < .001$, GFI = 0.85, RMSEA = 0.11).

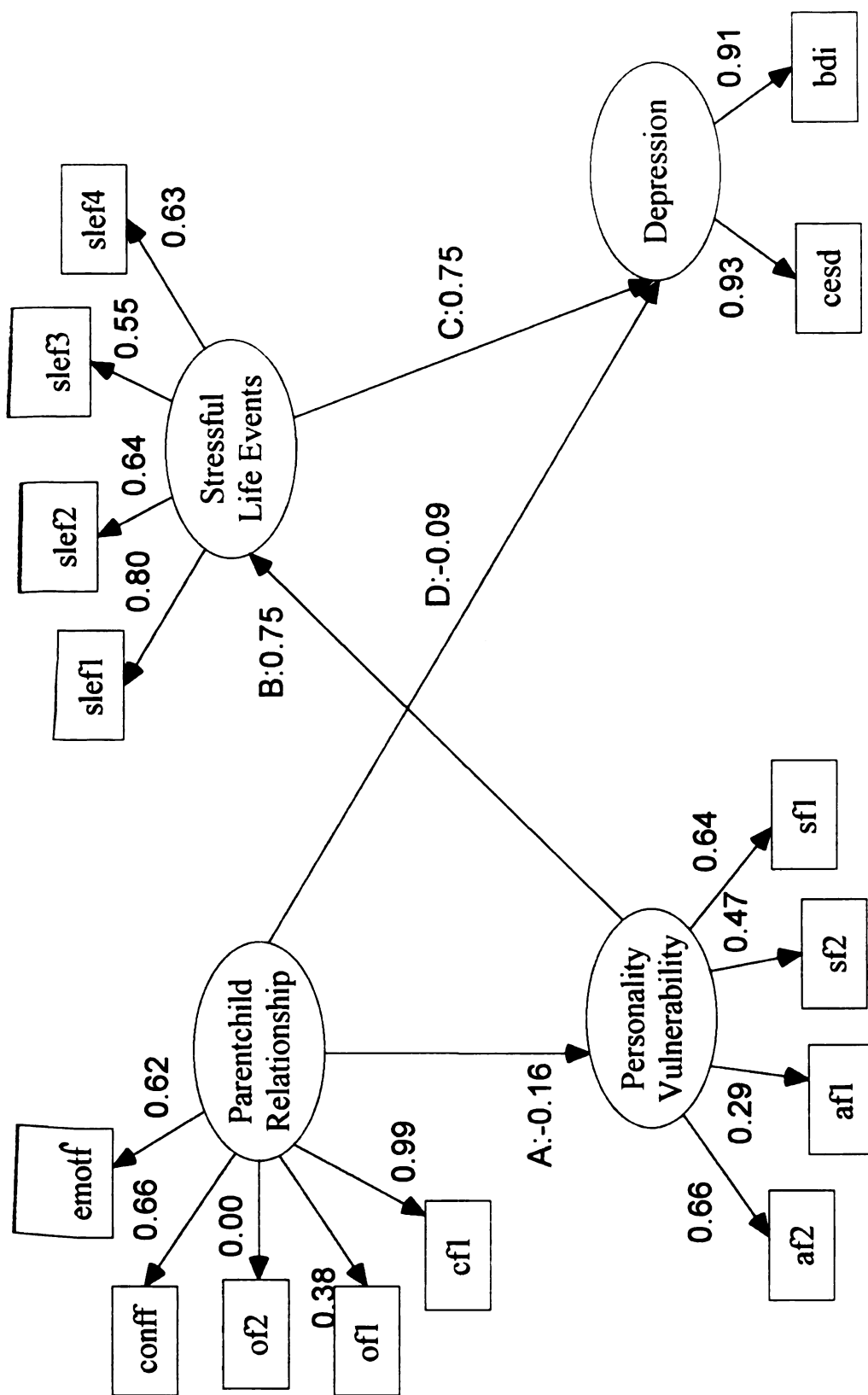


Figure 15. Attachment-Vulnerability Measurement Model
Fathers with Added Direct Effects

was a better fit for the data than only removing the *of2* path (χ^2 difference (1, N = 338) = 4.10, $p < .04$, one-tailed test) and should be accepted.⁴

Combination Model

Combination Model for Mothers

The chi-square statistic for this hypothesized model was 1428.51 (df = 371, N = 338, $p < .001$; Figure 11). The fit indices suggested that the overall fit of this model was below average (GFI = 0.78, RMSEA = 0.09). These results indicated that the model could be improved to achieve a better overall fit.

Additional direct effects that were not initially specified were added between latent variables in an effort to improve this model (see Paths H and I, Figure 16). A direct, significant relationship was found between personality vulnerability and vulnerability to depression (standardized $\beta = 0.89$, $z = 10.25$, $p < .001$, one-tailed test; Path H, Figure 16). This association suggested that individuals who endorsed a personality vulnerability were more likely to be vulnerable to depression. The added link between mutual empathy and vulnerability to depression (Path I, Figure 16) was also significant, but in a negative direction (standardized $\beta = -0.44$, $z = -5.66$, $p < .001$, one-tailed test). This finding suggested that individuals who perceived their relationships to be mutual and empathic were less likely to be vulnerable to depression. These additions slightly improved the overall fit of the model (χ^2 (369, N = 338) = 1358.70, $p < .001$, GFI = 0.79, RMSEA = 0.09). Analyses comparing the revised model (with these additions) with the

⁴ Due to the similar findings for the paths before and after the endogenous variable Stressful Life Events, an alternative model with Stressful Life Events as an exogenous variable was considered. This alternative model did not improve the fit of this model; in fact, the fit of the model declined (χ^2 (87, N = 338) = 495.01, $p < .001$, GFI = 0.83, RMSEA = 0.12).

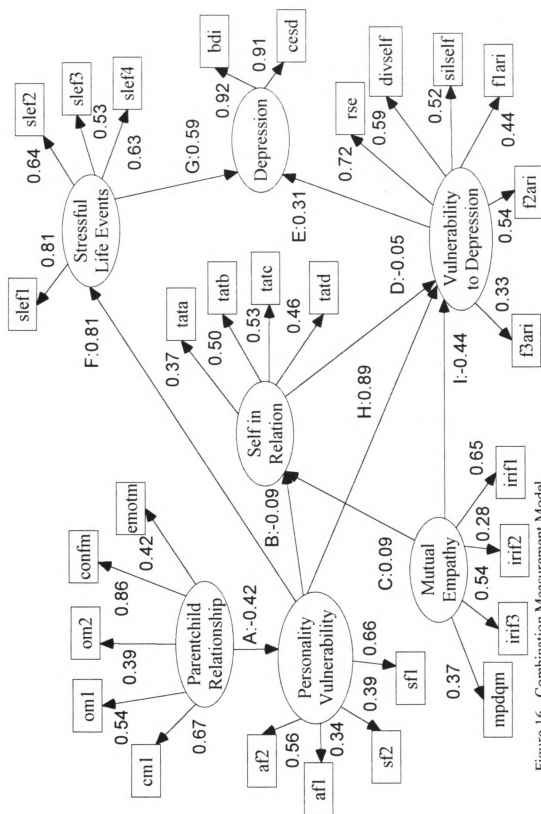


Figure 16. Combination Measurement Model
Mothers with Added Direct Effects

original model suggested that the revised model was superior (χ^2 difference (2, N = 338) = 69.80, $p < .001$) and should be accepted.

Combination Model for Fathers

Analysis of the Combination model for fathers yielded a chi-square statistic of 1729.43 (df = 399, N = 338, $p < .001$; Figure 12). Similar to the findings of the Combination model for the mothers, the overall fit of this model was below average (GFI = 0.76, RMSEA = 0.10). This suggested that the model could be improved to achieve a better overall fit.

In an effort to improve this model, additional direct effects that were not initially specified were added between latent variables (see Paths H, I, and J, Figure 17). The added path of personality vulnerability to vulnerability to depression was significant (standardized $\beta = 0.83$, $z = 9.78$, $p < .001$, one-tailed test; Path H, Figure 17). This supplementary path suggested that individuals who endorsed a personality vulnerability were more likely to be vulnerable to depression. A direct, significant relationship was found between personality vulnerability and depression, but in a negative direction (standardized $\beta = -0.87$, $z = -3.69$, $p < .001$, one-tailed test; Path I, Figure 17). Likewise, the added path between mutual empathy and vulnerability to depression was significant and in the negative direction (standardized $\beta = -0.19$, $z = -3.33$, $p < .001$, one-tailed test; Path J, Figure 17). This finding suggested that individuals who perceived their relationships to be mutual and empathic were less likely to be vulnerable to depression. The overall fit of the model was slightly improved with these additions (χ^2 (396, N = 338) = 1636.66, $p < .001$, GFI = 0.77, RMSEA = 0.10). Analyses comparing the revised model (with these additions) with the original model suggested that

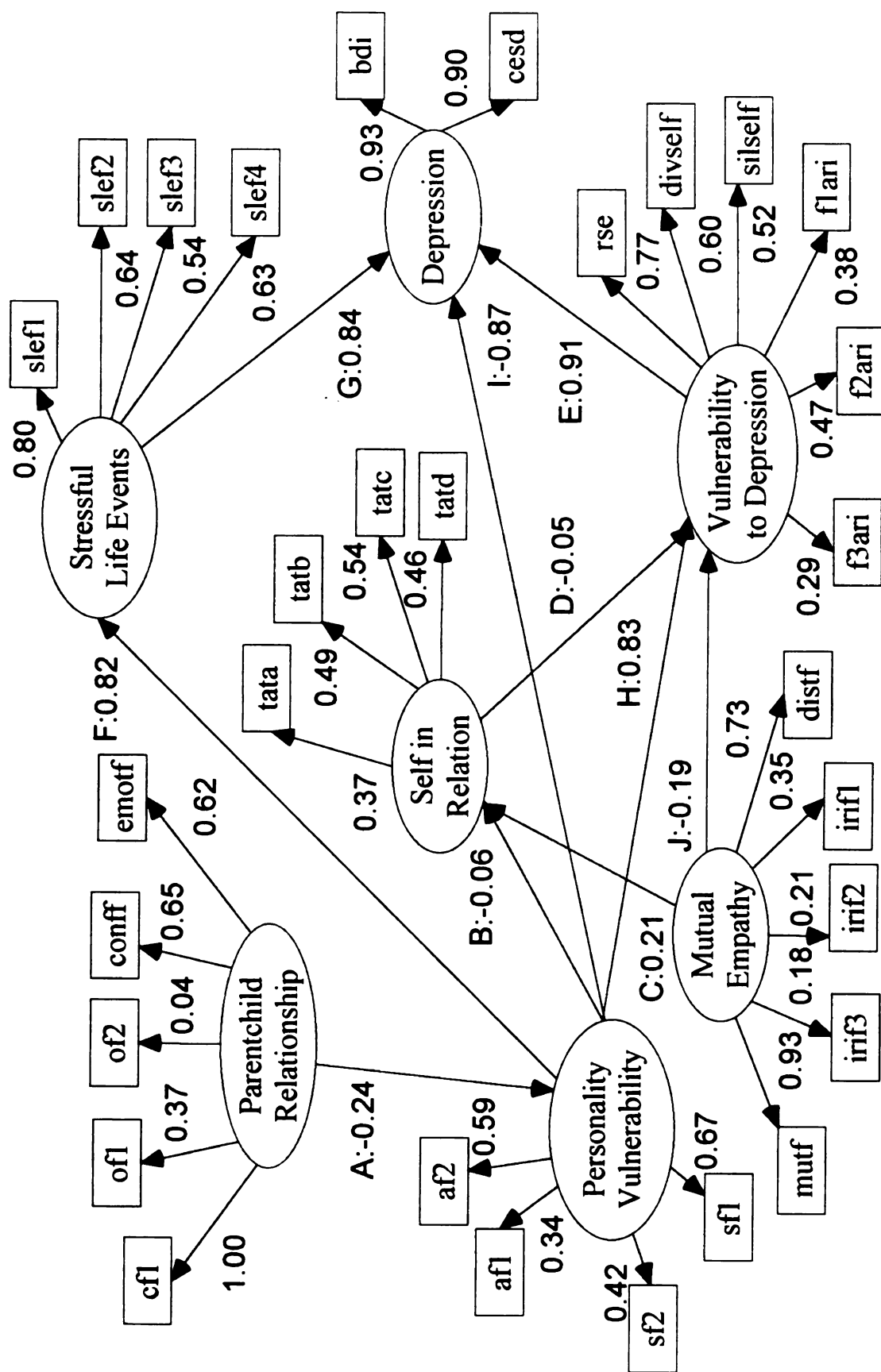


Figure 17. Combination Measurement Model
Fathers with Added Direct Effects

the revised model was superior (χ^2 difference (3, N = 338) = 92.77, $p < .001$) and should be accepted.

Post-Hoc Analyses

Combination Model

The overall fit of the Combination model for both mothers and fathers indicated below average fit (average GFI = 0.77, average RMSEA = 0.10), even though the Combination model was superior compared to the nested Self-in-Relation and Attachment-Vulnerability models. The fit indices for the Self-in-Relation and Attachment-Vulnerability models (GFI's range from 0.87 to 0.89, RMSEA's range from 0.09 to 0.10) suggested that the models equally explained the occurrence of depressive symptoms in undergraduate women. Although each of these models is unique theoretically, one interpretation of this finding could be that the latent variables in these models may be measuring the same construct, as perceived by the participants. To test this interpretation, structural equation modeling was used to examine the relationships between the following pairs of latent variables: parent-child relationship and mutual empathy; self-in-relation and personality vulnerability; and vulnerability to depression and stressful life events (see Figures 18 and 19). The first step in this analysis is to determine the correlations between these latent variables. If these correlations are high (e.g., 0.90 or greater), then a comparison of models is required. Two models are compared; one model in which the correlation is set to one (e.g., assumes a perfect relationship between the two latent variables) and the original model (e.g., assumes the latent variables are significantly different from each other).

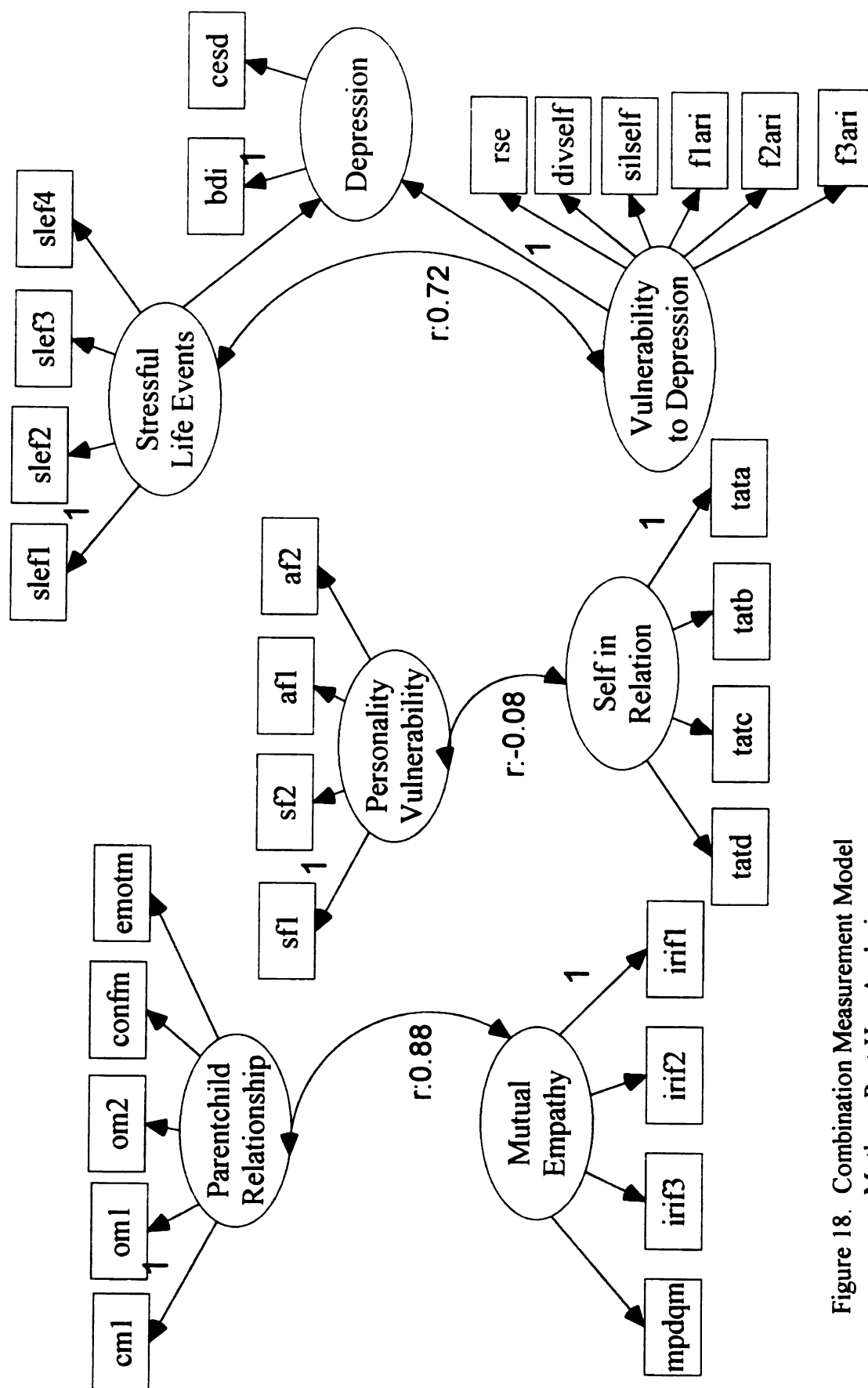


Figure 18. Combination Measurement Model
Mothers-Post Hoc Analysis

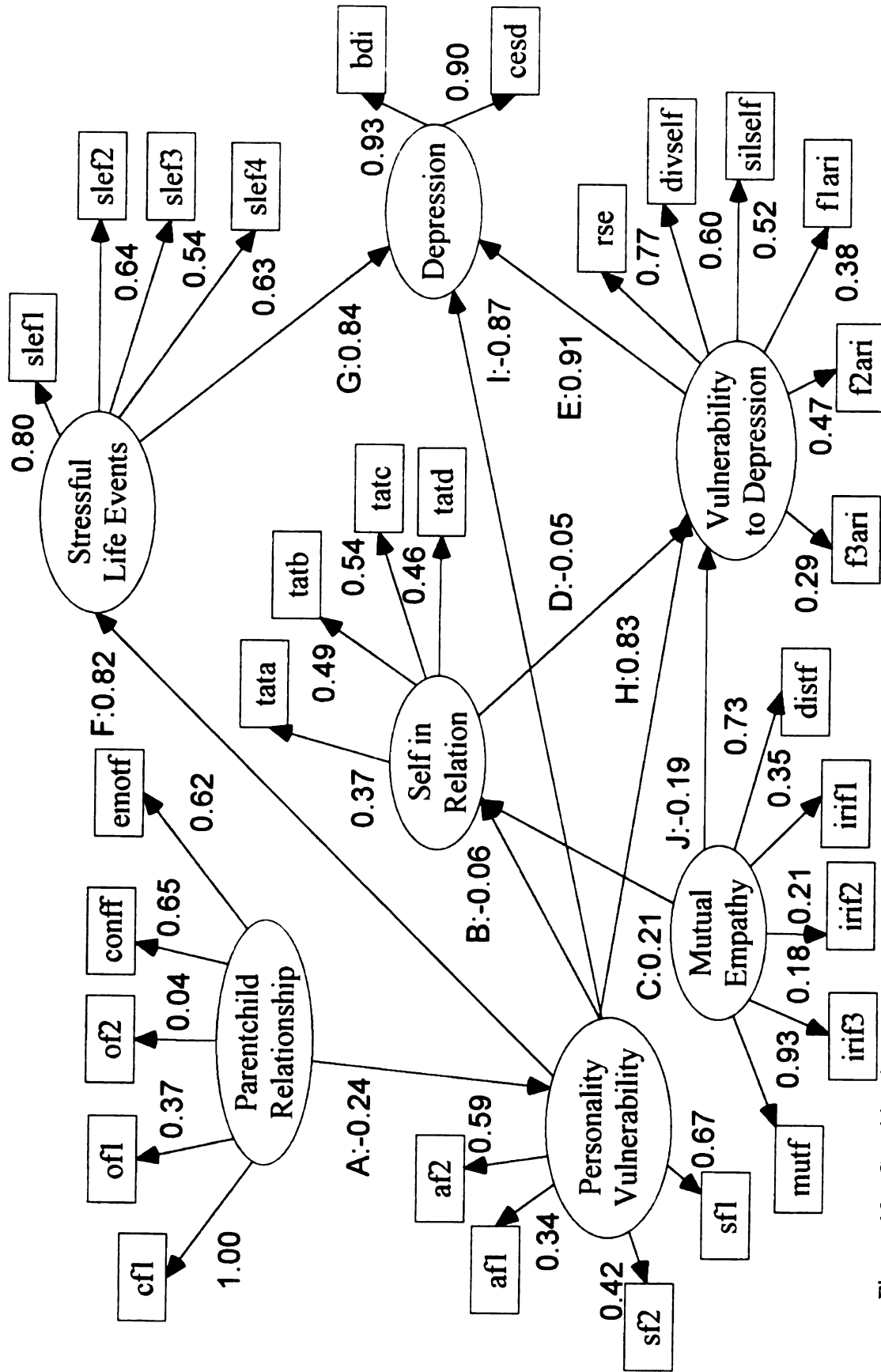


Figure 19. Combination Measurement Model
Fathers-Post Hoc Analysis

Combination Model for Mothers

In this model (Figure 18), the correlation between parent-child relationship and mutual empathy was large ($r = 0.88$, $p < .001$). The correlations between personality vulnerability and self-in-relation and stressful life events and vulnerability to depression were low, but moderate (r 's = -0.08 and 0.72 , respectively). A comparison of the original Combination model with the revised model, that set the association between parent-child relationship and mutual empathy to one, indicated that there was a significant decline in fit (χ^2 difference (1, $N = 338$) = 8.37 , $p < .004$). Hence, the two latent variables (parent-child relationship and mutual empathy) are significantly different from each other.

Combination Model for Fathers

Similar to the associations between the latent variables for the Combination model for mothers, the relationship between parent-child relationship and mutual empathy was significant for fathers ($r = 0.95$, $p < .001$; Figure 19). The correlations between the remaining pairs of latent variables were less robust (r personality vulnerability and self-in-relation = -0.08 and r stressful life events and vulnerability to depression = 0.72). When the original Combination model was compared with the revised model that set the relationship between parent-child relationship and mutual empathy to one, there was a significant decline in fit (χ^2 difference (1, $N = 338$) = 16.47 , $p < .001$). This finding suggested that the two latent variables in the Combination model for fathers were indeed perceived as two different constructs.

DISCUSSION

The purpose of this research project was to empirically test the constructs and pathways found in the Self-in-Relation (Kaplan, 1986, 1991) and Attachment-Vulnerability (Blatt, 1974; Blatt & Zuroff, 1992) models of depression. I hypothesized that a combination of these two models would capitalize on the strengths and offset the disadvantages of each of these models, leading to a more comprehensive explanation of why women are more than twice as likely to experience unipolar depression. The following sections will discuss the results and implications of this study.

Support of Original Hypotheses

Self-in-Relation Model

This model was developed to address the deficiencies of male-centered theories of personality, and to offer alternative ideas concerning how women develop depression by focusing on the salient aspects of describing women's experiences. Although some empirical work has examined aspects of this model (e.g., attempts to measure mutually empathic relationships, qualitative research validating the impact of self-in-relation on vulnerability factors, and influence of vulnerability factors on depressive symptoms), there has not been any empirical data examining the self-in-relation construct and the implied pathways of the Self-in-Relation model. The results from this study are among the first to lend empirical support to this theory. All of the relationships outlined in this model reached statistical significance (with the exception of the association between mutual empathy and self-in-relation for the mother data, which only approached significance) and the overall fit of this model was acceptable.

The results of this study support the importance of empathy as the central

organizing experience for women's interpersonal interactions and the impact of mutually empathic relationships on the development of a relational core self-structure (Surrey, 1991). Women who endorsed empathic attitudes and a mutually/close relationship with their father were significantly more likely to have a strong sense of self-in-relation. That is, these women felt that their relational qualities and self-image as a relational being were acknowledged, validated, and appreciated (Kaplan, 1986, 1991). This finding lends support to the "relational ego" and the "connected" aspect of women's personality development described in the literature (Chodorow, 1978, Gilligan, 1982).

According to the Self-in-Relation theory, early relationship experiences and failures in mutual empathy can contribute to a relatively weak sense of self-in-relation and doubt in one's ability to facilitate and maintain mutually empathic and rewarding relationships with significant others. This weak foundation can contribute to women being vulnerable to depression (Kaplan et al., 1983). Results from this empirical study lend convincing support to this theory, as individuals with a weak sense of self-in-relation were significantly more likely to be vulnerable to depression compared to those individuals who endorsed a strong sense of self-in-relation.

The risk factors that constitute the vulnerability to depression constellation include: vulnerability to loss; inhibition of action and assertion; inhibition of anger and aggression; and low self-esteem (Bernardez-Bonesatti, 1978; Kaplan, 1986, 1991; Lerner, 1980; Notman, 1989; Thompson, 1995). Respondents who reported experiencing these risk factors were significantly more likely to endorse depressive symptoms. This result provides additional support for the relationship between vulnerability to depression and the development of depression that is cited in the literature (Bernardez-Bonesatti, 1978;

Brown, Andrews, et al., 1990; Jack, 1991; Kaplan et al., 1983; Kopper & Epperson, 1991).

It is unclear as to why the relationship between mutual empathy and self-in-relation only approached significance for the mother data, but was significant for the father data. It may be attributable, in part, to the measure used to assess mutuality of relationships (Mutual Psychological Developmental Questionnaire; Genero et al., 1990). The MPDQ was originally developed to measure the qualities of a particular relationship, specifically relationships with friends and spouses/partners (Genero et al., 1992). For the purpose of this study, this measure was adapted to examine the perceived mutuality of the relationship between daughters with their mothers and fathers. It may be that the qualities of parent-daughter relationships are different from those qualities cultivated in friend and spouse/partner relationships. The first 11 items of the MPDQ ask the respondent how she feels when she is talking about things that matter to her mother and father. For this sample of relatively young college women, their parental relationships may be characterized by issues of developing their own identity, separate from their parents (Grotevant & Cooper, 1986). This developmental struggle, which may be more salient at the present time, might affect how these women responded to the first set of questions (e.g., being less likely to share similar experiences, respect mother's/father's point of view; or being more likely to change the subject, get frustrated, feel like we're not getting anywhere). As parent-child relationships become more balanced (e.g., when children begin families of their own), the qualities of friend and spouse/partner relationships may be as equally applicable to parent-child relationships.

In addition, since respondents answered this questionnaire about both their

mothers and fathers, a similar factor structure was desired for both sets of responses. However, this was not supported by the exploratory factor analyses. A two-factor structure was clearly evident for the father data; one factor addressed mutuality and the second factor represented distance. In contrast, for the mother data, a one-factor solution of mutuality was indicated. Furthermore, when the one-factor solution of mutuality for the mothers was removed from the Self-in-Relation model, the overall fit of the model improved slightly. Whereas, the overall fit of the Self-in-Relation model for the fathers was greatly reduced when the mutuality and distance factors were removed. These findings propose an interesting question that needs to be addressed: Why are there such disparate results for respondents' perceived mutuality of their parental relationships? The answer may be found in how respondents think about the construct of mutual empathy when reflecting about their relationships with their mothers and fathers.

According to Surrey (1991), the mother-daughter relationship fosters the experience of mutually empathic relationships that is critical for the development of a strong self-in-relation for women. [It is important to note that this process can also occur in the daughter-father relationship; however, Surrey focuses more on the mother-daughter relationship.] Mutually empathic relationships are based on the ongoing interest in and emotional desire for daughters to be connected with their mothers. Although a sense of separate self develops simultaneously with the development of a sense of basic relatedness for women (Chodorow, 1978; Surrey, 1991); it may be that for daughters it is more difficult to recognize where the boundaries between themselves and the other, specifically their mother, begin and end. In other words, daughters may experience their relationships with their mothers as being more blurred and less distinct. In contrast, daughters may

experience their relationships with their father as being more distinct and clearly defined. This does not mean that the development of mutual empathy (i.e., the development of the self and a sense of basic relatedness) can not occur in the father-daughter relationship. In fact, the results from this study suggest that women are capable of developing mutually empathic relationships which lead to a strong sense of self-in-relation within the context of their relationships with their fathers. This finding supports the feminist postmodern criticism that the Self-in-Relation theory neglects the impact fathers have on female development (Douglas, 1995). Furthermore, these findings suggest that as long as a woman is able to experience a mutually empathic relationship with at least one parent, and develop a strong self-in-relation, she is less likely to be vulnerable to experiencing depressive symptoms.

It may be that mother-daughter and father-daughter relationships contain unique qualities that contributed to the contradictory results in this study. Literature examining the process of individuation and socialization suggests that adolescent development be viewed in terms of a reciprocal nature of the parent-child relationship that changes over time. The relationship between adolescent and parent is continuously renegotiated in terms of individuality and connectedness for the adolescent (Grotevant & Cooper, 1986). This definition is fairly similar to the bidirectionality and reciprocity characterized in mutually empathic relationships (Jordan, 1991; Surrey, 1991). The shifts in the relationship between daughters with each parent during adolescence may have influenced the perceived mutuality of these relationships. Grotevant and Cooper (1986) cite evidence that women who were older, married, and endorsed higher scores on an identity measure were significantly more likely to report an improved quality of relationship with their

mothers. This finding suggests that the qualities of individuals may influence the perceived qualities of relationships. Perhaps the individual qualities of this population sample (relatively young, single women) influenced their perceptions of the mutuality (or lack thereof) in their maternal relationships. Yet an alternative explanation to be considered is the possibility of respondents compensating for an unsatisfactory relationship with one parent by reporting a satisfactory relationship with the other parent (Brewin, Firth-Cozens, Furnham, & McManus, 1992).

Additional Relationships between Latent Variables

In an effort to improve the overall fit of the Self-in-Relation model, the direct, significant association was found between mutual empathy and vulnerability to depression for both the mother and father data. Although this relationship was not originally implied in the model, it suggests that individuals who perceived their relationships to be mutual and empathic (with both their mothers and fathers) were less likely to be vulnerable to depression. This finding makes intuitive sense and is in concert with Self-in-Relation theory. Surrey (1991) describes the experience of a mutually empathic relationship as feeling collectively empowered and motivated to take an active role in the relationship to care for and respond to the well-being and development of the other. This active, energized approach to relationships is contradictory to feelings of inhibition of action, assertion, anger, and aggression, that constitute some of the vulnerability factors of depression (Bernardez-Bonesatti, 1978; Kaplan, 1986, 1991). Relationships that are mutually empathic and rewarding contribute to women's sense of well-being and esteem as "relational beings" (Jack, 1991; Kaplan, 1986, 1991; Notman, 1989). Subsequently, there would be a negative association between the mutual empathy and vulnerability to

depression latent variables in the Self-in-Relation model.

A direct, significant positive relationship between mutual empathy and depression for the mother data was also indicated. This finding suggests that daughters who perceived their relationships with their mothers as being mutually empathic were more likely to report feeling depressed. One would expect the exact opposite to occur (a significant, negative association between mutual empathy and depression) based on Self-in-Relation theory. How can we understand this contradictory result?

Perhaps mutually empathic relationships are not always healthy or beneficial. Imbalances in mutuality can occur in any interaction, especially when one member of the relationship is distant and disconnected (Jordan, 1991). For instance, an individual who is more attuned to someone else's needs at a particular moment may develop feelings of depression if their own dominant or urgent needs at that moment are not being met. When most of the accommodating and giving in a relationship is taken on by one member, that member may expect less and less in return (Jordan, 1991). Likewise, some women may feel that being attuned to other individuals in their lives leaves little time for their own needs to be met. Societal pressures on women contribute to this dynamic to give more to the other rather than receive for themselves (Lemkau & Landau, 1986). Continued participation in a relationship is contingent upon feeling perceived mutuality in salient, but not all, aspects of the relationship, specific to each woman (Jordan, 1991). Given the imbalances of mutuality that can occur in the mother-daughter relationship (Jordan, 1991), it may be that daughters' perceived mutual relationships with their mothers is not enough to protect them from developing some symptoms of depression.

There is evidence in the literature to suggest that conflicts in intimate relationships

develop as a result of different methods of self-expression (Jordan, 1991). Men are more likely to be moved to action within relationships, whereas women tend to be more focused on the expression of feelings. Although both may be attempting to achieve mutuality within the relationship, conflicts in the relationship may arise. Failures in mutuality and the relationship may predispose women to experience depression (Jordan, 1991; Kaplan, 1986). Mutual empathy seems to be a multi-faceted concept that has complex connections with the presence or absence of depressive symptoms in women. Notably, this is a secondary path that was implied from the data and is not present in the original Self-in-Relation model. There may be possible theoretical underpinnings to support the relationship between mutual empathy and depression; however, the qualitative data need to be examined further, as well as additional empirical support, to determine if this path should remain in the Self-in-Relation model.

Attachment-Vulnerability Model

This model of depression incorporates aspects of the parent-child attachment relationship that influences the development of a personality organization vulnerability. The impact of life events is proposed to interact with a personality vulnerability to lead to the development of depressive symptoms in women. One of the major limitations of the Attachment-Vulnerability model is the manner in which it has been studied. Although specific components of the model have been extensively researched (Blatt et al., 1982; Blatt & Homann, 1992; Blatt & Zuroff, 1992; Clark & Oates, 1995; Hammen et al., 1985; Leadbeater et al., 1995; Rude & Burnham, 1993; Zuroff & Mongrain, 1987), the entire model as a whole has not been empirically examined. The results from this study are the first to lend empirical support to the Attachment-Vulnerability model in its entirety. All of

the relationships outlined in this model reached statistical significance and were in the predicted direction. Furthermore, the overall fit of this model was acceptable.

The Attachment-Vulnerability model suggests that the parent-child relationship has a profound influence on the development of personality organization. Aspects of the parent-child relationship that are believed to be the most important include the attachment relationship, as well as the quality of care in this relationship as defined by lack of parental care, parental rejection, and parental control (Bowlby, 1973a, 1980; Egeland & Sroufe, 1981; Parker, 1983, 1984; Zemore & Rinholm, 1989). Disturbed patterns of caring relationships are internalized by the child and may result in affective and cognitive consequences that can create a vulnerability to later depression; whereas secure patterns of an attachment relationship may have opposite effects (Blatt & Homann, 1992). Results from this study provide strong empirical support for the association between parent-child relationship and personality vulnerability, as respondents who reported a relatively warm, caring, and open relationship with either their mother or father were less likely to endorse a personality vulnerability (self-evaluative or interpersonal vulnerability).

This model proposes that an individual's personality organization vulnerability may create a differential sensitivity to certain types of stressful life events (Blatt & Zuroff, 1992; Coyne & Whiffen, 1995). Findings from this study provide substantial evidence that individuals with a personality vulnerability were significantly more likely to experience life events as stressful. The final pathway in the Attachment-Vulnerability model implies that life events are associated with the development of depressive symptoms. There is ample evidence in the life events literature outlining the impact these events have on the development of psychiatric symptoms (Lloyd, 1980; Paykel et al., 1969; Thoits, 1983).

Indeed, respondents in this study who endorsed life events as more stressful were significantly more likely to experience depressive symptoms.

Additional Relationships between Latent Variables

In an effort to improve the overall fit of the model, a significant, negative association between parent-child relationship and depression for only the father data was indicated. This finding suggests that respondents who reported a warm, caring, open relationship with their fathers were less likely to report feelings of depression. This result makes intuitive sense and is in agreement with Attachment-Vulnerability theory. Notably, this finding was not found for the mother data, intimating that daughters' relationships with both their mothers and fathers may contain different qualities that influence whether or not depressive symptoms may develop.

There is evidence in the literature that supports distinct daughter-parent relationships which impact psychological health differentially (Lopez, Campbell, & Watkins, Jr., 1986; Youniss & Ketterlinus, 1987; Zemore & Rinholm, 1989). Adolescents seem to have differing views of their mothers and fathers in terms of caring and knowing. Daughters typically report feeling cared about and known more by their mothers compared to their fathers (Youniss & Ketterlinus, 1987). Zemore & Rinholm reported that women were significantly more likely to experience depression in later life when they rated their mothers as being uncaring and overprotective. In a sample of medical students, respondents with high levels of self-criticism reported worse relationships with their mothers on all scales (Brewin et al., 1992). In a study of college women examining the relationships between depression, psychological separation, and college adjustment, a significantly stronger, negative relationship existed between the scores of the

father-conflictual independence and depression scales (Lopez et al., 1986). In other words, for the women that were reporting conflictual relationships with their fathers, they were more likely to endorse symptoms of depression. Daughters tended to report more feelings of depression when they experienced inconsistent love from their father, parental conflict, and lived in paternally dominated homes (Schwarz & Zuroff, 1979). Further research needs to be conducted to determine if this path should remain in the Attachment-Vulnerability model for fathers.

Combination Model

These two models were merged to provide a more comprehensive explanation of the development of depression in women. The Self-in-Relation model adds an unique perspective as it is derived from women's developmental history, whereas the Attachment-Vulnerability model is well-defined and empirically-validated. The results of this study indicate that the distinctive strengths of each model are complementary to each other; all of the implied relationships were significant and in the predicted direction. Furthermore, the Combination model was superior to the nested Self-in-Relation and Attachment-Vulnerability models, as predicted.

Notably, the negative relationship between the constructs of personality organization vulnerability and self-in-relation was especially robust (standardized regression weight for both mother and father data averaging -0.86). This relationship is unique compared to the other relationships in the model, as this is where the Self-in-Relation and Attachment-Vulnerability models are connected. How one feels about oneself, as well as other potential attachment figures, is greatly influenced by the mental representations of early relationships with parents (Sperling et al., 1992). Secure

attachments contribute to an internal working model that the self is capable of achieving rewarding relationships with esteemed, responsive others, as well as being worthy of being cared for and loved (Pistole, 1994). Individuals with this positive internal working model are likely to have a strong self-in-relation as they strive to achieve involved, mutual, intimate, and interdependent relationships (Bartholomew & Horowitz, 1991; Genero et al., 1992; Kaplan, 1986, 1991; Surrey, 1991). For those individuals with an internal working model that does not value the self and holds the other in high esteem, attachment and interpersonal relationships preoccupy their thoughts, feelings, and behavior (Blatt & Zuroff, 1992; Pistole, 1994; Simpson, 1990). Findings suggest that respondents who endorsed a personality organization vulnerability were more likely to support a relatively weak relational core self-structure. This result provides strong evidence that women who endorse a personality organization vulnerability are likely to view themselves as falling short of their ideal self (Blatt et al., 1976) and have difficulties in maintaining and building mutually empathic relationships (Genero et al., 1992; Kaplan, 1986; Surrey, 1991) leading to a weak sense of self.

Another interesting finding of the Combination model is the significant relationship between mutual empathy and self-in-relation for the mother data. This relationship only approached significance in the Self-in-Relation model for the mothers. Why this discrepancy exists between the two models is unclear. It is possible that the additional constructs in the Combination model (perhaps the inclusion of the parent-child relationship) help to delineate the effects of mutual empathy on self-in-relation, especially with respect to the respondents' ratings of their mothers. In a study of the mother-daughter relationship and psychological separation in adolescence, maternal

empathy was found to be significantly related to psychological separation, as measured by the Conflictual and Emotional Independence subscales of the Psychological Separation Inventory (Hoffman, 1984; Ruebush, 1994). The Combination model is a more inclusive model that measures additional qualities of the parent-child relationship compared to either the Self-in-Relation or Attachment-Vulnerability models.

Finally, the hypothesis that the constructs of the Self-in-Relation and Attachment-Vulnerability models were measuring the same underlying constructs, but were only labeled differently needed to be addressed. If this was the case, a more parsimonious Combination model would be recommended. Findings indicated that the constructs of each model are indeed perceived as being different by the respondents (especially the parent-child relationship and mutual empathy constructs and the self-in-relation and personality organization vulnerability constructs). Thus, all of the constructs found in the Self-in-Relation and Attachment-Vulnerability models should be included in the Combination model.

Additional Relationships between Latent Variables

As the fit indices for the Combination model were lower than expected, it was strongly desired to improve the overall fit of this model. For the mother data, two additional paths were indicated: a significant relationship between personality vulnerability and vulnerability to depression; and a significant relationship between mutual empathy and vulnerability to depression. The association between personality vulnerability and vulnerability to depression was positive, suggesting that individuals who endorsed either an interpersonal or self-evaluative vulnerability were also more likely to be vulnerable to depression. As previously reviewed, individuals with a personality vulnerability have

impaired mental representations concerning relationships based on their early attachment relationships with their parents (Pistole, 1994; Sperling et al., 1992). Research has demonstrated that individuals who have anxious and preoccupied attachment styles are more likely to be dependent, affectively labile, hyper vigilant toward distress and separation cues, experience more frequent negative emotions in the relationships, and tend to be preoccupied with attachment and interpersonal relationships (Blatt & Zuroff, 1992; Pistole, 1994; Simpson, 1990). These behaviors are fairly similar to the risk factors that encompass the vulnerability to depression constellation: vulnerability to loss; inhibition of action and assertion; inhibition of anger and aggression; and low self-esteem (Bernardez-Bonesatti, 1978; Boggiano & Barrett, 1991; Brown, Andrews, et al., 1990; Jack, 1991; Kaplan, 1986; Miller, 1976). Subsequently, personality vulnerability and vulnerability to depression would be positively related latent variables in the revised Combination model for mothers.

The second path between mutual empathy and vulnerability to depression revealed a negative relationship between these two constructs. In other words, those individuals who reported mutually empathic relationships with their mothers were less likely to be vulnerable to depression. As discussed earlier, mutually empathic relationships feel motivating, empowering, and energizing (Jordan, 1991; Surrey, 1991). The risk factors that predispose women to future depressive experiences are not present in mutually empathic relationships. For instance, the experiences of “silencing the self,” inhibiting action, assertion, anger, and aggression are antithetical to these relationships (Bernardez-Bonesatti, 1978; Jack, 1991; Kaplan, 1986, 1991). Relationships that are mutually empathic and rewarding contribute to women’s level of self esteem, especially as

“relational beings” (Jack, 1991; Kaplan, 1986, 1991; Notman, 1989). Subsequently, one might expect to find a negative association between mutual empathy and vulnerability to depression, which is supported by the results found for the revised Combination model for mothers.

Once again, the Combination model seems to provide a more complete context for the constructs of the Self-in-Relation model, allowing implied relationships and theory to be supported. However, these are additional paths that were not originally specified in the Combination model; further empirical research and theoretical support need to be collected to determine if these paths should remain in the Combination model for mothers.

The father data for the Combination model suggested three additional paths to improve the overall fit of the model. Two of the findings were similar to the mother data; that is, the significant, positive relationship between personality vulnerability and vulnerability to depression and the significant, negative relationship among mutual empathy and vulnerability to depression. The third path suggested to improve the model was a significant, negative association between personality vulnerability and depression indicating that individuals who endorsed an interpersonal or self-evaluative vulnerability were less likely to be depressed. Although this finding initially seems counterintuitive, the Attachment-Vulnerability theory and model argues that it is within the presence of stressful life events that individuals with a personality vulnerability will be more likely to experience symptoms of depression (Blatt & Zuroff, 1992; Clark & Oates, 1995; Coyne & Whiffen, 1995; Hammen et al., 1985; Robins, 1990; Rude & Burnham, 1993; Zuroff & Mongrain, 1987). Having a personality vulnerability, in and of itself, may not be enough to elicit depression in individuals.

Shortcomings

One of the major shortcomings of this study is the overall fit of the Combination model. Even with additional paths specified, the general fit indices of this model fell below expectations (GFI's = 0.78, RMSEA's = 0.09). The lack of adequate fit for the Combination model is confusing since the individual components (e.g., standardized regression weights for specified paths) were significant and in the predicted direction (Bollen, 1989). An additional ad-hoc rule for determining whether a model should be retained is to examine the ratio of the chi-square test statistic for a given model to the model's degrees of freedom. Although a ratio of 1.0 is expected for well-fitting models, ratios between 2.0 and 5.0 have also been supported in the literature (Tanaka, 1987). For the Combination model for the mother data, this statistic is 3.85 and 4.33 for the father data. Even though these ratios are not ideal, they do fall within previously reported ranges. But how can we make sense of the Combination model with respect to these disparate findings? One of the reasons why the fit indices did not support the model may be attributed, in part, to the ratio of the number of subjects to the number of parameters to be estimated (Tanaka, 1987). Although no definite guidelines are available, Bentler and Chou (1987) recommend a ratio of 5:1 for the relationship between sample size and number of free parameters. Likewise, Bollen (1989) loosely suggests that "at least several cases per free parameter" (p. 268) is one guideline to use in determining how large of a sample size is needed. The number of free parameters for the Combination model for the mother data is 70 and for the father data is 72. Using five cases for each free parameter, the minimum sample size for the Combination model is 350 and 362 for the mother and father data, respectively. The current sample size of this study ($N = 338$) fell short of this

ideal, which may have contributed to the lower than expected fit indices. To explore this possibility, the Combination models were analyzed with a reduced number of free parameters (46 for the mother data, 42 for the father data). The overall fit for these models improved, suggesting that the sample size was inadequate for the original number of parameters estimated. Furthermore, some studies suggest that the Goodness of Fit Index (GFI) is not independent of sample size (Marsh, Balla, & McDonald, 1988; Raykov et al., 1991). Future research exploring these models should attempt to either increase sample size or create a measurement model with fewer indicators.

Another weakness of this research study involves the questionnaires used to measure the latent constructs found in the Self-in-Relation and Attachment-Vulnerability models. The Self-in-Relation model was the most difficult to operationally define due to the somewhat ambiguous description of the theoretical constructs, specifically mutual empathy and self-in-relation. Finding measures that would tap these constructs as defined by Self-in-Relation theory was challenging (Kaplan, 1986, 1991). This difficulty became clearly apparent in the disparate findings for some of the relationships for the mother data (e.g., the lack of a significant relationship between mutual empathy and self-in-relation), but not for the father data. As discussed earlier, the factor structure for the Mutual Psychological Developmental Questionnaire (MPDQ; Genero et al., 1990) was not the same for the mother and father data, although similar factor structures were desired. Exploratory factor analyses indicated a two-factor structure for the father data, but only a single factor for the mother data for the MPDQ. Likewise, the measures used to assess empathy (Interpersonal Reactivity Index; Davis, 1980) and the vulnerability to depression factor inhibition of anger and aggression (Anger Response Inventory; Tangney et al.,

1991) required exploratory factor analyses because the reported factor structure in the literature did not adequately fit the data. Although these measures were initially chosen because of their perceived suitability to assessing the latent constructs, the necessity of exploratory factor analyses suggests that the measures may not have been as suitable as originally believed.

Based on the findings of this study, the most troublesome construct to assess for this model seems to be the mutual empathy latent variable. The procedure was to measure the respondents' perceived mutuality of current relationships with each of their parents and the respondents' capacity for empathy. Jordan (1991) herself notes that the wording and language we use to describe mutuality is inexact at best and this process could be captured more accurately with different words. There may be some alternative means to measuring this variable that would more clearly define its relationship with other variables in the Self-in-Relation model. Semi-structured interview methods that elicit personal memories to general or specific cues about the perceived mutuality of parental relationships may help delineate the unique qualities of perceived mutuality or disconnectedness in daughters' relationships with each parent (Brewin, Andrews, & Gotlib, 1993). These interview methods combined with the ratings previously developed by Genero and her colleagues at the Stone Center (Genero et al., 1990) about the characteristics of mutually empathic relationships may provide specific, additional information that is more useful for empirically validating the Self-in-Relation model.

Nevertheless, several of the questionnaires and their factor structures that were used for this model did fit the data well (e.g., the Silencing the Self Scale, Rosenberg Self-Esteem Scale, Beck Depression Inventory, and the Center for Epidemiologic Studies

Depression Scale). Notably, the use of an objective scoring method (SCORS; Westen, 1985) for a projective measure (the Thematic Apperception Test) to assess the self-in-relation construct yielded the best fit indices, suggesting that this method was just as reliable and useful as the comparative objective measures that were included.

Although the Attachment-Vulnerability model has been more extensively researched, similar difficulties with the factor structure of the measures used to assess the latent constructs became apparent. A careful review of the instruments that have been used to measure these constructs in the past contributed to which instruments would be included. For the parent-child relationship latent variable, the Parental Bonding Instrument and the Psychological Separation Inventory required exploratory factor analyses because the original factor structure did not fit the data well. However, similar factor structures were found for both the mother and father data (which was desired), and the revised factor structures were similar to the reported factor structures in the literature. Exploratory factor analyses were also required for the Personal Style Inventory-Revised and the Inventory of College Students' Recent Life Events, but not for the depression measures. Alternative measures to assess the latent constructs found in the Self-in-Relation and Attachment-Vulnerability models may lead to a clearer understanding of the implied pathways and improve overall results.

Another limitation of this study is the reliance on mostly self-report questionnaires to assess the constructs found in the Self-in-Relation and Attachment-Vulnerability models (with the exception of the self-in-relation construct). Certain experiences are endorsed readily in a general sample, whereas other experiences are more likely to be downplayed. For instance, negative life events are more likely to be minimized compared to more

positive life events in this type of sample (Brewin et al., 1993; Coyne & Whiffen, 1995). Clinical interviewing is an alternative data gathering method that may elicit respondents to endorse negative, shameful events if the respondents feel comfortable and supported in the interviewing relationship. This type of setting also allows for a diagnosis of depression to be made, which allows for more reliable tests of hypothesized relationships among variables (Coyne & Whiffen, 1995). The data that are obtained through clinical interviewing and semi-structured interviews provides qualitatively rich information that may otherwise be missed in self-report measures. Interestingly, this is the type of data gathering methods that were initially used by the Stone Center and other researchers to develop the Self-in-Relation theory (Jack, 1991; Jordan et al., 1991). Since clinical interviewing is more time-intensive and based on the large scope of this study, as well as the large sample size needed to adequately test the Combination model, self-report measures seemed to be the best compromise.

In addition, some of the measures, specifically the Parental Bonding Instrument (Parker et al., 1979) and the Psychological Separation Inventory (Hoffman, 1984) are based on retrospective reports of college age women recalling experiences about their relationships with their parents when they were younger. Criticism of retrospective reports cite the influence mood, specifically depression, has on reports of childhood memories. Evidence from mood-memory studies suggests that depression may temporarily increase the number of negative childhood memories, while simultaneously decreasing the number of positive childhood memories (Brewin et al., 1992). Although self-report measures seem to cover an infinite number of relevant memories to a particular construct, studies indicate highly consistent reliability and validity results (Brewin et al.,

1993). This seems to be especially true for the Parental Bonding Instrument (Brewin et al., 1993; Parker et al., 1979). Despite these possible drawbacks, the central features of the retrospective reports in this study are likely to be reasonably accurate, especially given the global ratings of constructs that were chosen to be assessed in each of the models.

Increased variability in the reports of childhood attachments and levels of depression are more likely to be found in a clinical sample of respondents compared to a sample of female college students (Brewin et al., 1992). Notably, only 10.7% of this sample (36 women) met the criteria for clinical depression (moderate to severe) as measured by the Beck Depression Inventory. Over half of the women (55.6%) did not meet any criteria for depression, whereas approximately one-third (32.8%) could be classified with minimal to moderate depression. Notably, the dimensions of the personality organization vulnerability construct (i.e., interpersonal and self-evaluative vulnerabilities) were originally established in nonclinical samples and further developed with clinically depressed populations (Blatt et al., 1976; Blatt et al., 1982; Blatt & Zuroff, 1992; Zuroff et al., 1990). However, findings are more robust and significantly different for clinical samples (e.g., inpatient populations) compared to undergraduate samples (Blatt et al., 1982; Frank, S. J. et al., 1997; Robins et al., 1994). The small subset of clinically depressed women in this sample may have contributed to the lower than expected fit for the Combination model. Subsequent research should consider empirically testing these models with clinically depressed samples of women. Perhaps the relationships among variables would be further delineated in women who seek treatment for their depression. Furthermore, this sample consisted predominantly of Caucasian college women which limits the generalizability of these findings to other ethnic groups of women, as well as to

men. Exploring whether the Self-in-Relation, Attachment-Vulnerability, or Combination models apply to different cultures, as well as to men, would be interesting and possibly lead to further insight into the increased prevalence of depression in women.

Conclusions and Implications

It is well documented that women are twice as likely to experience unipolar depression compared to men (Chino & Funabiki, 1984; O'Neil et al., 1985; Weissman & Klerman, 1977). Theoretical models from different disciplines have been proposed to explain this difference, but only tend to explain a portion of the increased prevalence (Landrine, 1988; Nolen-Hoeksema, 1990; Warr & Parry, 1982; Weissman & Klerman, 1977, 1985). Two such models, Self-in-Relation and Attachment-Vulnerability, both seem to explain the development of depressive symptoms in women equally as well, based on the overall fit of each model. Although each of the theories are unique in their conceptualization of depression and implied relationships among constructs, both contribute to our understanding of how depressive symptoms can develop in women.

It was originally proposed that a combination of these two models would capitalize on the strengths inherent in the Self-in-Relation and Attachment-Vulnerability models and, at the same time, limit each of their disadvantages. The results do suggest that the Combination model is superior to each of the separate models, as evidenced by the comparison of the Combination model with each of the nested models. One benefit of this model is the convergence of empirical evidence (Blatt et al., 1982; Blatt & Homann, 1992; Blatt & Zuroff, 1992; Clark & Oates, 1995; Hammen et al., 1985; Leadbeater et al., 1995; Rude & Burnham, 1993; Zuroff & Mongrain, 1987) with qualitative data (Jack et al., 1991; Jordan et al., 1991). Evidently, data from both of these sources appear to

complement each other allowing for the elucidation of the relationships between latent variables.

The superiority of the Combination model may result because it captures the influence of both the importance of relationships and independence and autonomy in the same individual and their respective contributions to women's psychological health. The Self-in-Relation model strongly emphasizes the importance of building and maintaining mutually rewarding and empathic relationships as leading to psychological health and well-being for women (Kaplan, 1986). This theory is analogous to an interdependent self structure that is grounded in being connected to others (Cross & Madson, 1997). The Attachment-Vulnerability model, on the other hand, stresses independence and autonomy as desired characteristics (Blatt & Zuroff, 1992). The personality organization vulnerability construct is often differentiated into an interpersonal or self-evaluative vulnerability. Reliance on relationships for self-esteem are seen as creating an interpersonal vulnerability; whereas a perceived sense of failure and a low sense of self-worth create a self-evaluative vulnerability. These vulnerabilities can lead to the development of an anaclitic or introjective depression (respectively) in the presence of congruent negative life events (Blatt & Zuroff, 1992).

The Combination model allows for both of these attributes to co-exist. The results suggest that the self-in-relation and personality organization vulnerability constructs are unique, but complementary to each other in the Combination model. For instance, an individual who endorses an interpersonal vulnerability is likely to have a relatively weak sense of self-in-relation; that is, she questions her ability to be able to build and maintain mutually empathic relationships and, despite a desire to be involved in relationships, she

tends to perceive relationships as being hurtful and harmful. Women who endorse a self-evaluative vulnerability are likely to feel that they have failed in being able to develop rewarding connections and may have a relatively low sense of self-worth, which is also associated with a relatively weak sense of self-in-relation. The results of this research study intimate that it is not necessary to dichotomize the personality organization vulnerability construct, as both vulnerabilities lead to a relatively weak self-in-relation, whereas a personality invulnerability leads to a relatively strong self-in-relation.

Furthermore, this finding challenges the notion that a reliance on relationships and independence are mutually exclusive and both may contribute to psychological well-being. The Self-in-Relation model emphasizes the importance of women's relationships to their sense of self, whereas the Attachment-Vulnerability model stresses independence and autonomy as desired traits. The finding that the Combination model was superior to both the Self-in-Relation or Attachment-Vulnerability models suggests that a reliance on relationships and independence may actually be complementary to each other. An emphasis on connecting with others can buffer feelings of loneliness and alienation that can occur in autonomous, independent striving women. At the same time, being assertive and drawing self-other boundaries can lessen experiences of being lost within relationships (Blatt, 1998).

In fact, the results from this study suggest that it may be more healthy for women to recognize both their need for independence and autonomy and, at the same time, actively work to build and maintain mutually empathic relationships with significant others. Within the social, institutional, and cultural context of the United States, the development of interrelatedness and connection in women is strongly promoted (Cross &

Madson, 1997). It does not make sense to ignore this strong cultural force, as well as developmental theories and empirical research that support this belief (Chodorow, 1978; Gilligan, 1982, 1988; Kaplan, 1986; Miller, 1976). Exploring women's beliefs about their sense of self within the context of their relationships, as well as their early relationships with their parents may be helpful in elucidating how depressive symptoms develop. As Jordan states "... we know ourselves through relationship" (1991, p. 96). Relationship-based interventions for depression stress the importance of connections to others to reduce the risk of experiencing depressive symptoms (Genero et al., 1992). However, the challenge is to encourage women to develop a sense of individuality within the context of building and maintaining rewarding relationships. This may include teaching women how to effectively assert themselves within relationships in ways that do not jeopardize the status of their relationship, but enhance the quality of their relationship (e.g., a mother being able to return to school to finish a degree). Therapeutic interventions may involve identifying and developing communication skills that express anger and discomfort arising from interpersonal interactions without alienating the other person in the relationship (Bernardez-Bonesatti, 1978; Jack, 1991). Women who are able to balance and incorporate these seemingly opposite qualities may be the least likely to develop symptoms of depression.

Support for this concept is found in the feminist literature, specifically from theorists and practicing psychotherapists from object-relational and interpersonal perspectives (Chodorow, 1989). Therapy, especially from a feminist orientation, provides a context for women to explore thoughts, feelings, and meanings of an individual's behavior, as well as one's relationships and experiences with others. Therapy from this

perspective is similar to other theoretical orientations, as the therapeutic relationship is characterized by nonjudgmental listening and understanding (Jordan, 1991), but feminist therapy is unique since gender identity and gender development within a male dominated culture is strongly considered in the conceptualization of women's psychiatric symptoms and in the treatment process (Chodorow, 1989). Chodorow (1989) notes that the positive qualities of a woman's relational self can be both a strength and a shortcoming. The relational self enables women to demonstrate empathy, nurturance, and achieve intimacy with others (Kaplan, 1991). At the same time, the relational self can threaten a lack of autonomy and a loss of self (Blatt, 1998; Chodorow, 1989). This progression in psychoanalysis of focusing on the "... experiences of the self in both internal and external relationship. . ." (Chodorow, 1989, p. 161) allows for a movement away from "... autonomous separateness toward a relational individualism" (Chodorow, 1989, p. 162). This movement in psychoanalysis, in addition to the results of this study, appear to be a step in the right direction in providing a more comprehensive framework to conceptualize and treat depressive symptoms in women.

APPENDIX A

APPENDIX A

Demographic Questionnaire

For the following items, please circle the appropriate category or fill-in the space provided with the appropriate answer as specified. NOTE: Write Your Answers **ON** the Following Pages.

1. **Current Age:** _____ (specify your current age)
2. **Ethnicity/Race:** (circle one)
 - a) Caucasian/European-American
 - b) African-American
 - c) Latino/Hispanic/Chicano
 - d) Asian/Pacific Islander
 - e) Native American
 - f) Other (please specify: _____)
3. **Current Marital Status:** (circle one)
 - a) Never Married/Single
 - b) Married
 - c) Separated
 - d) Divorced
 - e) Widowed
4. **What is your father's current age?** _____ (specify)
5. **What is your mother's current age?** _____ (specify)
6. **Are your parents currently married?** (circle one) Yes No
 - 6a. **If Yes,** how long have your parents been married? _____ (specify & go to question 7)
 - 6b. **If No, are your parents:** (circle one)
 - a) Divorced (if yes, how old were you? _____)
 - b) Separated (if yes, how old were you? _____)
 - c) Deceased (if yes, specify which parent _____ & how old were you? _____)

APPENDIX A (cont'd).

Education: Use the following scale to determine completed years of education.

- 1 = less than 12 years
- 2 = high school diploma/GED
- 3 = completed some college
- 4 = completed Associate's degree
- 5 = completed Bachelor's degree
- 6 = completed Master's Degree
- 7 = completed Doctorate, Medical, or Professional degree (e.g., Ph.D., M.D., etc.)

7. **Your level of education:** 1 2 3 4 5 6 7 (circle one)

8. **Your father's level of education:** 1 2 3 4 5 6 7 (circle one)

9. **Your mother's level of education:** 1 2 3 4 5 6 7 (circle one)

10. **Now, I'd like you to think about the relationships you have had with significant adults while you were growing up.** From the following list, who do you think listened to you, tried to understand what you were going through, and respected your thoughts and ideas the most? In other words, who do you think understood you the best and supported your endeavors? (circle one)

- | | |
|------------------------|-----------------------------------|
| a) mother (biological) | h) grandfather |
| b) father (biological) | i) aunt |
| c) step-father | j) uncle |
| d) step-mother | k) adoptive mother |
| e) foster mother | l) adoptive father |
| f) foster father | m) other : _____ (please specify) |
| g) grandmother | |

APPENDIX B

APPENDIX B

The Mutual Psychological Development Questionnaire (Genero, Miller, & Surrey, 1990)

Instructions: We would like to explore certain aspects of your relationship with your mother/father. Using the scale below, please fill in the number on the answer sheet that is your best estimate of how often you and your mother/father experience each of the following:

1	2	3	4	5	6
<hr/>					
Never	Rarely	Occasionally	More often than not	Most of the time	All of the time

When we talk about things that matter to my mother/father, I am likely to.....

1. pick up on my mother's/father's feelings
2. feel like we're not getting anywhere
3. show an interest
4. get frustrated
5. share similar experiences
6. keep feelings inside
7. respect my mother's/father's point of view
8. change the subject
9. see the humor in things
10. feel down
11. express an opinion clearly

When we talk about things that matter to me, my mother/father is likely to...

12. be receptive
13. get impatient
14. try to understand me
15. get bored
16. feel moved
17. avoid being honest
18. be open-minded
19. get discouraged
20. get involved
21. have difficulty listening to me
22. feel energized by our conversation

APPENDIX C

APPENDIX C

Interpersonal Reactivity Index (Davis, 1980)

Instructions: The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate number on the scale at the top of the page: 1, 2, 3, 4, or 5. When you have decided on your answer, fill in the circle on the answer sheet that corresponds to your answer. **READ EACH ITEM CAREFULLY BEFORE RESPONDING.** Answer as honestly as you can.

1	2	3	4	5
<hr/>				
Does not describe me well	Describes me somewhat		Describes me very well	

Dimensions of the Interpersonal Reactivity Index:

Note: The numbers refer to item numbers as they appear in the Interpersonal Reactivity Index.

Perspective Taking Scale

- 3. I sometimes find it difficult to see things from the “other guy’s” point of view.
- 8. I try to look at everybody’s side of a disagreement before I make a decision.
- 11. I sometimes try to understand my friends better by imagining how things look from their perspective.
- 15. If I’m sure I’m right about something, I don’t waste much time listening to other people’s arguments.
- 21. I believe that there are two sides to every question and try to look at them both.
- 25. When I’m upset at someone, I usually try to “put myself in his/her shoes” for awhile.
- 28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

Empathic Concern

- 2. I often have tender, concerned feelings for people less fortunate than me.
- 4. Sometimes I don’t feel very sorry for other people when they are having problems.
- 9. When I see someone being taken advantage of, I feel kind of protective towards them.

APPENEDIX C (cont`d).

- 14. Other people's misfortunes do not usually disturb me a great deal.
- 18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
- 20. I am often quite touched by things that I see happen.
- 22. I would describe myself as a pretty soft-hearted person.

Personal Distress Scale

- 6. In emergency situations, I feel apprehensive and ill-at-ease.
- 10. I sometimes feel helpless when I am in the middle of a very emotional situation.
- 13. When I see someone get hurt, I tend to remain calm.
- 17. Being in a tense emotional situation scares me.
- 19. I am usually pretty effective in dealing with emergencies.
- 24. I tend to lose control during emergencies.
- 27. When I see someone who badly needs help in an emergency, I go to pieces.

APPENDIX D

APPENDIX D

Silencing the Self Scale (Jack, 1991)

Instructions: Please fill in the number on the answer sheet that best describes how you feel about each of the statements listed below. Please use the following scale:

1	2	3	4	5
<hr/>				
Strongly disagree	Neither agree nor disagree			Strongly agree

Dimensions of the Silencing the Self Scale:

Note: The numbers refer to item numbers as they appear in the Silencing the Self Scale.

Silencing the Self

- 2. I don't speak my feelings in an intimate relationship when I know they will cause disagreement.
- 8. When my partner's needs and feelings conflict with my own, I always state mine clearly.
- 14. Instead of risking confrontations in close relationships, I would rather not rock the boat.
- 15. I speak my feelings with my partner, even when it leads to problems or disagreements.
- 18. When my partner's needs or opinions conflict with mine, rather than asserting my own point of view, I usually end up agreeing with him/her.
- 20. When it looks as though certain of my needs can't be met in a relationship, I usually realize that they weren't very important anyway.
- 24. I rarely express my anger at those close to me.
- 26. I think it's better to keep my feelings to myself when they do conflict with my partner's.
- 30. I try to bury my feelings when I think they will cause trouble in my close relationship(s).

Divided Self

- 5. I find it is harder to be myself when I am in a close relationship than when I am on my own.
- 13. I feel I have to act in a certain way to please my partner.
- 16. Often I look happy enough on the outside, but inwardly I feel angry and rebellious.

APPENDIX D (cont'd).

- 17. In order for my partner to love me, I cannot reveal certain things about myself to him/her.
- 19. When I am in a close relationship I lose my sense of who I am.
- 21. My partner loves and appreciates me for who I am.
- 25. I feel that my partner does not know my real self.

APPENDIX E

APPENDIX E

Anger Response Inventory (Tangney, Wagner, Marschall, & Gramzow, 1996)

Instructions: Below are situations that people are likely to encounter in day-to-day life, followed by several common reactions to those situations.

As you read each scenario, try to imagine yourself in that situation. Then indicate how likely you would be to react in each of the ways described. We ask you to rate all responses because people may feel or react more than one way to the same situation, or they may react different ways at different times.

For example:

You wake up early one Saturday morning. It is cold and rainy outside.

- | | not likely | | likely |
|--|---------------------------|--|--------|
| a) You would telephone a friend to catch up on news. | 1-----2-----3-----4-----5 | | |
| b) You would take the extra time to read the paper. | 1-----2-----3-----4-----5 | | |
| c) You would feel disappointed that it's raining. | 1-----2-----3-----4-----5 | | |
| d) You would wonder why you woke up so early. | 1-----2-----3-----4-----5 | | |

Please do not skip any items - - rate all responses.

An example of one of the 23 scenarios:

G. You are arguing with your spouse or partner and a friend tries to interfere.

- | | not at all
angry | somewhat
angry | extremely
angry |
|--|---------------------------|-------------------|--------------------|
| a) How angry would you be in this situation? | 1-----2-----3-----4-----5 | | |

The next 7 questions are about what you would actually do:

- | | not likely | | very likely |
|---|---------------------------|--|-------------|
| b) I'd yell at the friend to mind their own business. | 1-----2-----3-----4-----5 | | |
| c) The more I'd think about the friend's interruption, the angrier I'd get. | 1-----2-----3-----4-----5 | | |

APPENDIX E (cont'd).

**G. You are arguing with your spouse or partner and a friend tries to interfere.
(Cont'd).**

- | | not likely | very likely |
|---|---------------------------|-------------|
| d) I'd stop speaking to the friend. | 1-----2-----3-----4-----5 | |
| e) I'd leave the room to calm myself down. | 1-----2-----3-----4-----5 | |
| f) I'd go into the kitchen and break something. | 1-----2-----3-----4-----5 | |
| g) I'd tell the friend I appreciate the concern, but I'd like to keep this between me and my partner. | 1-----2-----3-----4-----5 | |
| h) I'd decide it's OK if the friend wants to put in a word or two. | 1-----2-----3-----4-----5 | |

The next 3 questions are about the long-term consequences of how you would handle the situation. Looking back over what you would actually do, how do you think things would turn out in the long-run?

- | | harmful | beneficial |
|--|---------------------------|------------|
| I) Would the long-term effect be harmful or beneficial for <u>you</u> , personally? | 1-----2-----3-----4-----5 | |
| j) Would the long-term effect be harmful or beneficial for the friend, personally? | 1-----2-----3-----4-----5 | |
| k) Would the long-term effect be harmful or beneficial for your <u>relationship</u> with the friend? | 1-----2-----3-----4-----5 | |

APPENDIX F

APPENDIX F

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

Instructions: Please respond to the following statements about how you generally feel about yourself. Please fill in the number that corresponds to the following scale:

1	2	3	4	5
-----		-----		
Strongly disagree		Neither agree nor disagree		Strongly agree

1. On the whole, I am satisfied with myself.
2. At times I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on equal plane with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

APPENDIX G

APPENDIX G

Beck Depression Inventory (Beck, 1978)

Instructions: This questionnaire consists of 21 group statements. After reading each group of statements carefully, circle the number (0, 1, 2, or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1. 0 I do not feel sad.
 1 I feel sad.
 2 I am sad all the time and I can't snap out of it.
 3 I am so sad or unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
 1 I feel discouraged about the future.
 2 I feel I have nothing to look forward to.
 3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
 1 I feel I have failed more than the average person.
 2 As I look back on my life, all I can see is a lot of failures.
 3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
 1 I don't enjoy things the way I used to.
 2 I don't get real satisfaction out of anything anymore.
 3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
 1 I feel guilty a good part of the time.
 2 I feel quite guilty most of the time.
 3 I feel guilty all of the time.

6. 0 I don't feel I am being punished.
 1 I feel I may be punished.
 2 I expect to be punished.
 3 I feel I am being punished.

APPENDIX G (cont'd).

7. 0 I don't feel disappointed in myself.
 1 I am disappointed in myself.
 2 I am disgusted with myself.
 3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.
 1 I am critical of myself for my weaknesses or mistakes.
 2 I blame myself all the time for my faults.
 3 I blame myself for everything bad that happens.
9. 0 I don't have any thoughts of killing myself.
 1 I have thoughts of killing myself, but I would not carry them out.
 2 I would like to kill myself.
 3 I would kill myself if I had the chance.
10. 0 I don't cry anymore than usual.
 1 I cry more now than I used to.
 2 I cry all the time now.
 3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.
 1 I get annoyed or irritated more easily than I used to.
 2 I feel irritated all the time now.
 3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
 1 I am less interested in other people than I used to be.
 2 I have lost most of my interest in other people.
 3 I have lost all of my interest in other people.
13. 0 I make decisions about as well as I ever could.
 1 I put off making decisions more than I used to.
 2 I have greater difficulty in making decisions than before.
 3 I can't make decisions at all anymore.
14. 0 I don't feel I look any worse than I used to.
 1 I am worried that I am looking old or unattractive.
 2 I feel that there are permanent changes in my appearance that make me look unattractive.
 3 I believe that I look ugly.

APPENDIX G (cont'd).

15. 0 I can work about as well as before.
 1 It takes an extra effort to get started at doing something.
 2 I have to push myself very hard to do anything.
 3 I can't do any work at all.
16. 0 I can sleep as well as usual.
 1 I don't sleep as well as I used to.
 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
 3 I wake up several hours earlier than I used to and cannot get back to sleep.
17. 0 I don't get more tired than usual.
 1 I get tired more easily than I used to.
 2 I get tired from doing almost anything.
 3 I am too tired to do anything.
18. 0 My appetite is no worse than usual.
 1 My appetite is not as good as it used to be.
 2 My appetite is much worse now.
 3 I have no appetite at all anymore.
19. 0 I haven't lost much weight, if any, lately.
 1 I have lost more than 5 pounds.
 2 I have lost more than 10 pounds.
 3 I have lost more than 15 pounds.
- I am purposely trying to lose weight by eating less. Yes _____ No _____
20. 0 I am no more worried about my health than usual.
 1 I am worried about physical problems such as aches and pains; or upset
 stomach; or constipation.
 2 I am very worried about physical problems and it's hard to think of much
 else.
 3 I am so worried about my physical problems that I cannot think about
 anything else.
21. 0 I have not noticed any recent change in my interest in sex.
 1 I am less interested in sex than I used to be.
 2 I am much less interested in sex now.
 3 I have lost interest in sex completely.

APPENDIX H

APPENDIX H

The Center for Epidemiologic Studies Depression Scale (CES-D Scale; Radloff, 1977)

Instructions for Questions: Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week. Please use the following scale:

1	2	3	4
_____	_____	_____	_____
Rarely or None of the time (Less than 1 day)	Some or a Little of the time (1-2 days)	Occasionally or a Moderate amount of time (3-4 days)	Most or All of the Time (5-7 days)

1. I was bothered by things that don't usually bother me.
2. I did not feel like eating; my appetite was poor.
3. I felt that I could not shake off the blues even with help from my family or friends.
4. I felt that I was just as good as other people.
5. I had trouble keeping my mind on what I was doing.
6. I felt depressed.
7. I felt that everything I did was an effort.
8. I felt hopeful about the future.
9. I thought my life had been a failure.
10. I felt fearful.
11. My sleep was restless.
12. I was happy.
13. I talked less than usual.
14. I felt lonely.
15. People were unfriendly.
16. I enjoyed life.
17. I had crying spells.
18. I felt sad.
19. I felt that people dislike me.
20. I could not get "going."

APPENDIX I

APPENDIX I

Parental Bonding Instrument (Parker, Tupling, & Brown, 1979)

Instructions: This questionnaire lists various attitudes and behaviors of parents. As you remember your mother/father in your first 16 years, please fill in the number that is most appropriate on the answer sheet. Please use the following scale:

0	1	2	3
<hr/>			
Very unlike my mother/ father	Moderately unlike my mother/ father	Moderately like my mother/father	Very like my mother/ father

Dimensions of the Parental Bonding Instrument:

Note: The numbers refer to item numbers as they appear in the Parental Bonding Instrument.

Care

1. Spoke to me with a warm and friendly voice.
2. Did not help me as much as I needed.
4. Seemed emotionally cold to me.
5. Appeared to understand my problems and worries.
6. Was affectionate to me.
11. Enjoyed talking things over with me.
12. Frequently smiled at me.
14. Did not seem to understand what I needed or wanted.
16. Made me feel I wasn't wanted.
17. Could make me feel better when I was upset.
18. Did not talk with me very much.
24. Did not praise me.

Overprotection

3. Let me do those things I liked doing.
7. Liked me to make my own decisions.
8. Did not want me to grow up.
9. Tried to control everything I did.
10. Invaded my privacy.

APPENDIX I (cont'd).

- 13. Tended to baby me.
- 15. Let me decide things for myself.
- 19. Tried to make me dependent on her/him.
- 20. Felt I could not look after myself unless she/he was around.
- 21. Gave me as much freedom as I wanted.
- 22. Let me go out as often as I wanted.
- 23. Was overprotective of me.
- 25. Let me dress in any way I pleased.

APPENDIX J

APPENDIX J

Psychological Separation Inventory- Conflictual Independence and Emotional Independence (Hoffman, 1984)

Instructions: The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate number on the scale at the top of the page: 1, 2, 3, 4, or 5. When you have decided on your answer, fill in the circle on the answer sheet that corresponds to your answer. **READ EACH ITEM CAREFULLY BEFORE RESPONDING.** Answer as honestly as you can.

1	2	3	4	5
Not at all true of me	A little bit true of me	Moderately true of me	Quite a bit true of me	Very true of me

Conflictual Independence

1. Sometimes my mother/father is a burden to me.
2. I feel like I am constantly at war with my mother/father.
3. I blame my mother/father for many of the problems I have.
4. I wish I could trust my mother/father more.
5. I have to be careful not to hurt my mother's/father's feelings.
6. I sometimes feel like I'm being punished by my mother/father.
7. I wish my mother/father wasn't so overprotective.
8. I wish my mother/father wouldn't try to manipulate me.
9. I wish my mother/father wouldn't try to make fun of me.
10. I feel that I have obligations to my mother/father that I wish I didn't have.
11. My mother/father expects too much from me.
12. I wish I could stop lying to my mother/father.
13. I often wish that my mother/father would treat me more like an adult.
14. I am often angry at my mother/father.
15. I hate it when my mother/father makes suggestions about what I do.
16. Even when my mother/father has a good idea I refuse to listen to it because she/he made it.
17. I wish my mother/father wouldn't try to get me to take sides with her.
18. I argue with my mother/father over little things.
19. My mother/father is sometimes a source of embarrassment to me.
20. I am sometimes ashamed of my mother/father.
21. I get angry when my mother/father criticizes me.

APPENDIX J (cont'd).

- 22. When I don't write my mother/father often enough I feel guilty.
- 23. I feel uncomfortable keeping things from my mother/father.
- 24. I often have to make decisions for my mother/father.
- 25. I sometimes resent it when my mother/father tells me what to do.

Emotional Independence

- 26. I like to show my friends pictures of my mother/father.
- 27. I feel longing if I am away from my mother/father for too long.
- 28. My mother/father is the most important person in the world to me.
- 29. I wish that my mother/father lived nearer so I could visit her/him more frequently.
- 30. Being away from my mother/father makes me feel lonely.
- 31. I sometimes call home just to hear my mother/father's voice.
- 32. While I am home on vacation I like to spend most of my time with my mother/father.
- 33. After being with my mother/father for a vacation I find it difficult to leave her/him.
- 34. I like to hug and kiss my mother/father.
- 35. I decide what to do according to whether my mother/father will approve of it.
- 36. When I do poorly in school I feel I'm letting my mother/father down.
- 37. My mother/father is my best friend.
- 38. I seem to be closer to my mother/father than most people my age.
- 39. Sometimes I think I am too dependent on my mother/father.
- 40. I care too much about my mother/father's reactions.
- 41. I sometimes feel like an extension of my mother/father.
- 42. I'm not sure I could make it in life without my mother/father.

APPENDIX K

APPENDIX K

Personal Style Inventory-Revised (Robins, Ladd, Welkowitz, Blaney, Diaz, & Kutcher, 1994)

Instructions: Here are a number of statements about personal characteristics. Please read each one carefully, and indicate whether you agree or disagree, and to what extent, by filling in the appropriate number on the answer sheet. Please use the following scale:

1	2	3	4	5	6
_____	_____	_____	_____	_____	_____
Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree

Dimensions of the Personal Style Inventory:

Note: The numbers refer to item numbers as they appear in the Personal Style Inventory.

Concern About What Others Think

- 7. I am very sensitive to criticism by others.
- 13. I am easily persuaded by others.
- 23. It is very important to me to be liked or admired by others.
- 31. I am very concerned with how people react to me.
- 33. I get very uncomfortable when I'm not sure whether or not someone likes me.
- 39. I am most comfortable when I know my behavior is what others expect of me.
- 45. I judge myself based on how I think others feel about me.

Dependency

- 3. I find it difficult to be separated from people I love.
- 11. It is hard for me to break off a relationship even if it is making me unhappy.
- 17. I find it difficult if I have to be alone all day.
- 21. It is very hard for me to get over the feelings of loss when a relationship has ended.
- 27. I like to be certain that there is somebody close I can contact in case something unpleasant happens to me.
- 37. I become upset when something happens to me and there's nobody around to talk to.
- 43. I become very upset when a friend breaks a date or forgets to call me as planned.

APPENDIX K (cont'd).

Pleasing Others

- 1. I often put other people's needs before my own.
- 5. I am very sensitive to the effects I have on the feelings of other people.
- 9. I worry a lot about hurting or offending other people.
- 15. I try to please other people too much.
- 19. I often feel responsible for solving other people's problems.
- 25. I feel I have to be nice to other people.
- 29. I am too apologetic to other people.
- 35. It is hard for me to say "no" to other people's requests.
- 41. I often let people take advantage of me.
- 47. It is hard for me to let people know when I am angry with them.

Perfectionism/Self-Criticism

- 8. It bothers me when I feel that I am only average and ordinary.
- 14. I usually view my performance as either a complete success or a complete failure.
- 24. I feel badly about myself when I am not actively accomplishing things.
- 32. I have a hard time forgiving myself when I feel I haven't worked up to my potential.

Need for Control

- 4. I am easily bothered by other people making demands of me.
- 12. In relationships, people are often too demanding of one another.
- 18. It is hard for me to take instructions from people who have authority over me.
- 22. It is hard for me to have someone dependent on me.
- 36. I resent it when people try to direct my behavior or activities.
- 40. I am very upset when other people or circumstances interfere with my plans.
- 44. I become upset more than most people I know when limits are placed on my personal independence and freedom.
- 48. I feel controlled when others have a say in my plans.

Defensive Separation

- 2. I tend to keep other people at a distance.
- 6. I don't like relying on others for help.
- 10. When I'm feeling blue, I don't like to be offered sympathy.
- 16. I don't like people to invade my privacy.
- 20. I often handle big decisions without telling anyone else about them.

APPENDIX K (cont'd).

- 26. It is hard for me to express admiration or affection.
- 28. It is difficult for me to make a long-term commitment to a relationship.
- 30. It is hard for me to open up and talk about my feelings and other personal things.
- 34. When making a big decision, I usually feel that advice from others is intrusive.
- 38. Personal questions from others usually feel like an invasion of my privacy.
- 42. I rarely trust the advice of others when making a big decision.
- 46. I become upset when others try to influence my thinking on a problem.

APPENDIX L

APPENDIX L

The Inventory of College Students' Recent Life Experiences (Kohn, Lafreniere, & Gurevich, 1990)

Instructions: 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 (do not include this week)**. Fill in the number on the answer sheet that is most appropriate to your experience. Please use the following scale:

Intensity of Experiences over the past month (do not include this week):

1	2	3	4
Not at all part of your life	Only slightly part of your life	Distinctly part of your life	Very much part of your life

Dimensions of the Inventory of College Students' Recent Life Experiences (ICSRLE):

Note: The numbers refer to item numbers as they appear in the ICSRLE.

Developmental Challenge

- 11. Struggling to meet your own academic standards
- 14. Struggling to meet the academic standards of others
- 19. Dissatisfaction with your mathematical ability
- 20. Important decisions about your future career
- 23. Important decisions about your education
- 25. Lower grades than you hoped for
- 30. Finding courses too demanding
- 32. Hard effort to get ahead
- 40. Dissatisfaction with your ability at written expression
- 45. Dissatisfaction with your physical appearance

Time Pressure

- 5. Too many things to do at once
- 13. Not enough leisure time
- 15. A lot of responsibilities
- 18. Not enough time to meet your obligations
- 27. Not enough time for sleep
- 29. Heavy demands from extracurricular activities

APPENDIX L (cont'd)

- 41. Interruptions of your school work

Academic Alienation

- 16. Dissatisfaction with school
- 30. Finding course(s) uninteresting
- 34. Disliking your studies

Romantic Problems

- 1. Conflicts with boyfriend's/girlfriend's/spouse's family
- 17. Decisions about intimate relationship(s)
- 39. Conflicts with boyfriend/girlfriend/spouse

Assorted Annoyances

- 10. Having your contributions overlooked
- 35. Getting "ripped off" or cheated in the purchase of services
- 36. Social conflicts over smoking
- 38. Disliking fellow student(s)
- 47. Gossip concerning someone you care about

General Social Mistreatment

- 4. Social rejection
- 6. Being taken for granted
- 12. Being taken advantage of
- 24. Loneliness
- 42. Social isolation
- 44. Being ignored

Friendship Problems

- 2. Being let down or disappointed by friends
- 8. Having your trust betrayed by a friend
- 31. Conflicts with friends

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