DIFFERENTIATING CONNECTEDNESS AND NEEDINESS AS TWO FORMS
OF DEPENDENCY

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The Depressive Experiences Questionnaire Dependency scale has been used extensively by researchers to measure a personality style vulnerable to depression. However, subsequent studies have demonstrated that the DEQ-Dependency is composed of two distinct forms of dependency, "Connectedness" and "Neediness", which may have different implications for mental health. While Connectedness may represent a more mature form of dependency than Neediness, it may not represent an entirely "healthy" form of relatedness as previously suggested. Although these scales are being used in current research, it is not yet clear what they represent. One goal of the present study was to further examine the construct validity of Connectedness and Neediness in order to differentiate these constructs. Gender, self-efficacy, relationship quality, and interpersonal behavior were chosen because of their proposed significance in differentiating forms of dependency. 265 undergraduates completed the DEQ, Beck Depression Inventory (BDI), the Mutual Psychological Development Questionnaire (MPDQ), and the Inventory of Interpersonal Problems (IIP). Overall, results supported the importance of distinguishing between these two factors of dependency. Neediness was associated with more maladaptive correlates for both genders. The picture is more complex for Connectedness, however, and it appears that Connectedness is less healthy for women than for men.
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CHAPTER ONE

INTRODUCTION

Overview

The DEQ Dependency scale has been used as a measure of maladaptive interpersonal dependency. Rude and Burnham (1995) conducted a factor analysis with this scale and identified two subfactors. Factor 1, which they labeled "Connectedness", was described as "a sensitivity to the effect of one's actions on others and a valuing of relationships". Factor 2, which was labeled "Neediness", was described as an "anxious concern regarding possible rejection".

The purpose of this thesis is to determine whether Connectedness and Neediness relate differently to important measures of psychological functioning. This will involve examining the construct validity of these two subfactors with measures of efficacy, depression, relationship quality and interpersonal behavior. Thus, the question to be answered is whether Connectedness and Neediness represent what Rude and Burnham (1995) proposed and, if not, what new information can contribute to a better understanding of the constructs that these scales measure.

This paper is organized into three major sections. First, theories and models of classical dependency as well as current views of dependency will be introduced in order to provide an overview of this multidimensional construct. The assessment of dependency will be briefly presented. The dependency-depression link and the importance of depression as an area of study will be overviewed. This will be followed
by a discussion of the personality vulnerability approach to identifying subtypes of depression.

The second section of this paper will involve a discussion of current attempts in the literature to clarify the concept of dependency. First, the differentiation of adaptive versus maladaptive aspects of dependency will be presented. This will be followed by a presentation of proposed types or levels of dependency within the broad dependency construct. Studies that identified subfactors on the DEQ-DEP will be overviewed and discussed in order to highlight the need to differentiate forms of dependency. The section will be concluded with a review of research on Neediness and Connectedness and the current view of what they represent.

The final section of this paper will discuss gender differences and quality of relationships as a means of better understanding dependency and depression. The construct of mutuality will be introduced as a measure of healthy interdependence based on the Stone Center model of development in relationship. The importance of evaluating the individual's social environment when assessing for vulnerability to depression will also be discussed.

Dependency

Defining Dependency

Dependency is a broad and ambiguous construct that must be clearly defined if it is to be measured accurately and to predict mental health outcomes. Dependency can be conceptualized as a current psychological state, a personality trait, a personality type that is vulnerable to psychopathology, or as a distinct personality disorder (Pincus & Gurtman, 1995). The process of defining dependency involves identifying its multiple
components and behavioral correlates. One way of defining dependency is to identify the underlying needs that drive dependent behavior. Hirschfield and colleagues (1977) define dependency as "a complex of thoughts, beliefs, feelings, and behaviors which revolve around the need to associate closely with, interact with, and rely upon valued other people" (pg. 610). According to Zuckerman (1958), dependency is best defined by the three needs of succorance, deference, and abasement. Succorance is the tendency to demand affection, love, and nurturance from others without reciprocity. Deference is defined as the need to admire a superior other and to be worshipful, doing whatever he/she requests. Abasement refers to the need to admit inferiority, and to accept criticism, blame, and defeat. Given these two definitions it is apparent that theorists disagree as to the amount of pathology that is inherent in dependent individuals.

**Etiology of Dependency**

The behavior of dependent adults is often viewed as child-like, which suggests that dependency is characterized by abnormal development. Birtchnell (1988) defines dependency as, "a failure to progress towards a normal level of maturity" (Birtchnell, p. 116). In addition, the official Diagnostic Manual of the American Psychiatric Association (1952) described the passive-dependent personality as "a tendency to cling to others as a dependent child to a supporting parent" (cited in Birtchnell, 1984). The classic psychoanalytic drive theory links dependency to a fixation at the oral stage of development. According to Freud, the "oral dependent" adult will exhibit infantile behaviors such as preoccupation with activities involving the mouth and relying on food to cope with frustration (cited in Bornstein, Galley, & Leone, 1986). Dependency needs
are thought to be unconscious and in conflict with conscious prohibitions against expressing these needs (Bornstein, 1992). Bornstein (1996) conducted a literature review of studies that addressed three different hypotheses of the "orality" model. These hypotheses included infantile feeding and weaning experiences as predictors of later dependency, the relation between dependency and preoccupation with food and mouth-related activities, and dependency as a predictor of "oral" psychopathology. Bornstein concluded that the classical psychoanalytic model of dependency is not strongly supported by empirical research.

Object relations theory and attachment theory, two more recent models of dependency that have branched out from classic psychoanalytic theory, share similar views as to how the dependent personality develops. Both models propose that dependency results from an inadequate relationship with the primary caregiver in early infancy and childhood (Bornstein, 1992). The object-relations model emphasizes the process of separation-individuation (Mahler, 1963) and the development of the self-concept. In this model, the dependent personality develops when the individual fails to move successfully from reliance on the primary caretaker to autonomy and the capability to meet psychological needs on his or her own (Eagle, 1975).

Although quite similar, the ethological model of dependency differs from object-relations in that it emphasizes the importance of the innate, biological aspect of infant-mother bonding and attachment in the development of self-concept and interpersonal behavior (Bowlby, 1969). Bowlby emphasized that the early infant-caretaker relationship is internalized as a "working model" for future relationships. These working models play an important role in the development of dependent traits and behaviors (Bowlby, 1969).
It is important to note that, although they are closely related, insecure attachment and dependency are not the same construct. According to Livesley et al. (1990), attachment behaviors refer to the attainment of proximity to an individual who is conceived of as stronger or wiser. Dependent behaviors, on the other hand, are not directed toward a specific individual and are directed at obtaining assistance, guidance, and approval. Thus, dependent behavior is more generalized than attachment and may be directed towards a number of people in the dependent individual's social world (Bornstein, 1992).

From a fourth theoretical perspective, social learning theory, dependency is regarded as a learned behavior acquired during infancy (Walters & Parke, 1964). The different levels of dependency that exist among individuals are thought to result from the varying degree to which dependent behaviors are rewarded by the primary attachment figure during early development (Bornstein, 1992). Similar to the psychodynamic perspective, the social learning view proposes that conflicts arise during early and middle childhood when children are usually encouraged to be autonomous and independent. The child is forced to decide which type of behavior, dependent or independent, is appropriate in different situations. The key difference between the social learning view and the psychoanalytic theories is the way in which dependency-related cognitions are conceptualized. Whereas mental representations of internalized objects are hypothesized to determine dependency needs in the psychoanalytic theories, the social learning view suggests that beliefs and expectations regarding rewards and punishments are the key determinant of dependency needs (Bornstein, 1992). More recent social learning theorists have focused on interpersonal dependency as a negative attributional style in which the individual views him or herself as helpless and ineffective. Thus, the
dependent individual believes that he/she must rely on others for guidance and support (Abramson, et al., 1978).

**Current Models of Dependency**

While the core motivation of dependency has been consistently identified as a need to maintain proximity to others (Bornstein, 1992; Birtchnell, 1988), current models are more complex and attempt to account for the multifaceted nature of dependency. For example, Bornstein's 4-factor model (Bornstein, 1993) is based on the notion that there are four primary components of dependency. The first component in this model is a cognitive representation of the self as powerless and inadequate in comparison to others. The second component is the motivation to obtain support and guidance from others. The third component is affective, and consists of the anxiety and fear that are present when self-reliance becomes necessary. The final component of Bornstein's 4-factor model is comprised of the behaviors that the dependent individual engages in to obtain what they need from others. These behaviors include help-seeking, approval-seeking, reassurance-seeking, and yielding to others (Bornstein, 1993).

Birtchnell (1984) proposed that there are three subtypes of dependency that fit within the broader definition. Affectional dependence, which fits the classical definition of dependence, involves a marked need for attention and the fear of abandonment. Ontological dependence, a term that was originally coined by Laing (1965), involves the need to become fused with another person in order to maintain a sense of worth and identity. Deferential dependence refers to the tendency to engage in self-blame and to defer and abase oneself to others who are considered superior. According to Birtchnell
(1984), it is the deferential aspect of dependence that is most closely linked with depression.

A third model of dependency was proposed by Pincus and Gurtman (1995), who identified three aspects of dependency using the interpersonal circumplex and the 5-factor model of personality as a structural framework. The first aspect, submissive dependency, is characterized by yielding, compliance, and guidance-seeking. Exploitable dependency is associated with suggestibility. The third aspect of Pincus and Gurtman's model, love dependency, is linked with interpersonal sensitivity and affiliative behavior. It was suggested that love dependency is a relatively stable component of personality that is related to attachment processes (Pincus & Gurtman, 1995). Of these three aspects of dependency, love dependency had significantly lower correlations with Neuroticism than did submissive and exploitable dependency.

One commonality among these models is the emphasis on yielding or deferring to others as an important behavioral component of dependency. Bornstein and Birtchnell's models both suggest that another important component of dependency is a need to rely on others because of an underlying sense of inadequacy. A notable difference between these three models is the conceptualization of how one should account for different aspects of dependency. Bornstein's model appears to describe dependency in terms of different components of a unified type of dependency, whereas Pincus and Gurtman's model seems to describe different behaviors that are associated with three different types of dependency. Birtchnell's model also seems to identify distinctly different type of dependency. He describes these types both in terms of behavior and in terms of underlying needs. Given the current models of dependency, it is apparent that
dependency is complex and conceptualizations of its components are varied, which points to a need for further research in this area.

Assessment of Dependency

Numerous measures of dependency have been developed from a variety of theoretical perspectives. Dependency can be measured along two dimensions: content and format (Bornstein, 1992). The content dimension involves measures of different types or theoretical models of dependency, for example, oral dependency versus interpersonal dependency. The format dimension involves different ways of measuring dependency, for example, objective versus projective measures. Objective measures can involve self-report questionnaires, behavioral measures, peer nomination techniques, and interview ratings. Projective measures include TAT-derived dependency scales and dependency content on the Rorschach. Objective and projective dependency measures generally show positive intercorrelations. Objective tests show better long-term retest reliability than projective tests and are more susceptible to self-presentation biases (Bornstein, 1996).

Different objective self-report scales that attempt to measure dependency include Navran's (1954) MMPI Dependency (Dy) scale; Sinha's (1968) Dependence Proneness (DP) scale; Hirschfeld et al's (1977) factor-analytically derived Measure of Interpersonal Dependency (MID); and the Dependency Scale of Blatt, D'Afflitti, and Quinlan's (1976) Depressive Experiences Questionnaire. Most of these measures are uni-dimensional and do not attempt to account for the different aspects of dependency that are identified in the current models reviewed above. The predictive validity of these measures may be reduced because there appear to be various aspects and levels of dependency which might
have different implications for behavior and mental health (Pincus and Gurtman, 1995). Thus, the range of dependency-related content on many measures of dependency may be too general to be optimally useful. An example of a measure that does account for different aspects of dependency is the Interpersonal Dependency Inventory (Hirschfeld et al., 1977). This measure contains three scales: Emotional Reliance on Another Person, Lack of Social Self-Confidence, and Assertion of Autonomy.

Dependency and Depression

The lifetime rates of Major Depression vary from 3.5% to 5.8% in the United States and the rates for Dysthymia range from 2.1% to 4.7%. There is also consistent evidence that the rates of Major Depression are increasing and more recent cohorts have earlier onset (Weissman & Klerman, 1992). Symptoms of depression increase the likelihood of suicide, as 15% of depressed individuals take their own lives (Teuting, Koslow, & Hirschfeld, 1981; cited in Turner & Hersen, 1997). Psychological, social, genetic, and biological factors all contribute to the etiology of major depression, therefore, efforts to understand and to manage depression must take these various factors into consideration (Arean, McQuaid, & Munoz, 1997).

The social morbidity and impairment of functioning in work and marriage for those with major depression has been well documented for more than 20 years (Weissman & Klerman, 1992). The recent Rand Case Medical Outcome Study compared patients with major depression, dysthymia, and depressive symptoms to patients with eight chronic medical conditions. Patients with depressive symptoms had worse social functioning and more days in bed than patients with six of the eight medical conditions, with the main exception being coronary heart disease (cited in Weissman & Klerman,
Depression is not only prevalent in the general population, but it is also a common presenting problem in the practices of medical physicians and mental health specialists (Burnam & Wells, 1990). These findings indicate that depression is a debilitating condition that has a serious impact on functioning.

One reason why dependency is important to study is that it is often linked with depression (Birtchnell & Kennard, 1983; Blatt, D’Afflitti, & Quinlan, 1976; Overholser, 1991). On self-report measures, dependency scores account for 10-20% of the variance in depression scores (Bornstein, 1992), which suggests that dependency is an important area of focus for researchers and clinicians. In addition, the dependency-depression relationship has been found in children, adolescents, and adults, as well as in clinical and non-clinical populations (Bornstein, 1994). The relationship between dependency and depression becomes difficult to clarify because dependency has numerous correlates, many of which can be seen as risk factors for depression. These correlates include low agency (Zuroff et al., 1999); low self-esteem (Overholser, 1991); fear of negative evaluation and shyness (Overholser & Freiheit, 1994); submissiveness, (Bornstein, 1994); and anxious attachment (Zuroff & Fitzpatrick, 1995).

Submissiveness appears to be an important interpersonal correlate of dependency. Submissive behaviors can include conforming to group opinion, complying with the demands of others, and excessive apologizing for minor offenses (Allan & Gilbert, 1997). Individuals who are high in dependency are seen as highly motivated to please others in order to gain the guidance and nurturance that they seek (Bornstein, 1993). There is some evidence that submissive behaviors are related to parental interactions. For instance, Mongrain (1998) found that when displaying hostility, dependent individuals
expected colder and more impatient responses from their fathers. However, when exhibiting submissive behavior, dependent individuals expected their fathers to react with greater affiliation (Mongrain, 1998). This data provides some support for the social learning view of dependency because it suggests that individuals who exhibit dependency may have received positive reinforcement when they behaved submissively.

Several researchers have suggested that submissive behaviors play a key role in the dependent individual's vulnerability to depression. Submissiveness is similar to the deferential aspect of dependence, which Birtchnell (1984) considered the aspect of dependency most strongly linked with depression (Birtchnell, 1984). Pincus and Gurtman (1995) included submissiveness as one of the three major facets of interpersonal dependency. They proposed that submissiveness may serve to maintain depressed mood through a cycle in which poor self-concept is reinforced through the dominant behaviors of others who are allowed to take control of the relationship. In addition, Overholser (1997) suggested that assertiveness training is an important aspect of treatment for individuals with severe interpersonal dependency because of their tendency to engage in maladaptive submissive behaviors.

Another important link between dependency and depression may be the excessive amount of help-seeking or reassurance-seeking behavior that the dependent individual engages in as well as the way in which the individual engages in this behavior. Coyne (1976) originally developed this notion of the reassurance-seeking cycle in order to describe reactions to depressed individuals. This theory could also be applied to dependent individuals as behaviors such as clinginess and demanding attention may result in higher levels of interpersonal rejection. This rejection may lead to a cycle in
which the dependent individual becomes depressed and more needy, which may lead to
greater demands for reassurance. These excessive demands may place a burden on others
who come to resent the dependent individual (Mongrain, 1998). There is some support
for this position. Mongrain, Vettese, Shuster, & Kenadall (1998) recorded conflict-
resolution interactions of couples. They found that partners of dependent women, as
measured by the DEQ, experienced declining positive mood and increased irritability
over the course of the interaction. Demands for greater reassurance have been identified
as a problematic interpersonal tactic, which increases the likelihood of rejection in
depressed individuals (Joiner, Katz, & Lew, 1997).

A possible limitation of much of the current literature on the correlates of
dependency, as mentioned previously, is that dependency is usually measured as a unified
construct. It is important to determine whether there are different forms or levels of
dependency that have different behavioral, motivational, and affective correlates. This is
one of the questions being addressed in the current study. In addition, the exact nature of
the relationship between correlates of dependency and depression is far from conclusive,
with many different pathways proposed in the literature (Birtchnell, 1984; Bornstein,
1992; Nietzel & Harris, 1990). One model that has received a great deal of attention is
the diathesis-stress model, which is espoused in the personality vulnerability theories of
depression.

**Personality Vulnerability Theories**

One of the major difficulties in treating depression is that it is quite heterogeneous
with respect to etiology and symptomatology. Because of this, researchers have
attempted to divide it into purer subtypes. In identifying these subtypes, the expectation
is that we will understand more about the etiology of depression and will be able to treat it more effectively (Abramson, et al., 1997). In the past, the emphasis in this line of research has focused on developing classification systems that are based primarily on presenting symptoms. This approach, based on a medical model, is derived from clinical observation that certain symptoms of depression appear to cluster together. Subsequent research is conducted to identify a distinct cause or treatment associated with each subtype.

Attempts to distinguish depression based on symptomatology can be seen as the first of two major issues in the effort to divide depression into more homogeneous subtypes. The second major issue, which is relevant to this paper, involves identifying different personality types that may predispose individuals to experience depression. These personality subtypes, which include hopelessness (Abramson, Metalsky, & Alloy, 1989), dependent and self-critical (Blatt, 1974), dominant goal and dominant other (Arieti & Bemporad, 1980), and sociotropy and autonomy (Beck, 1983), have been proposed from a theoretical approach to classifying depression. Sociotropy refers to individuals who are overly sensitive to rejection and interpersonal losses. The theory-based approach differs from the medical model in that it classifies depression according to etiology and experiences, rather than basing the division on symptoms or biological processes (Abramson et al., 1997). This approach may be more helpful than the medical model because it provides us with a better understanding of how individual differences in personality account for differences in the onset and expression of depression (Skinner, cited in Abramson, 1997). This knowledge may allow us to identify certain forms of
therapy that are more effective in treating patients with certain personality characteristics (Heiby & Campos, 1986).

Because the meaning of the term "depression" often changes in different contexts, it is important to note how depression is defined in the personality vulnerability theories. The DSM-IV defines a Major Depressive Episode as "a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities" (American Psychiatric Association, 1994, p. 320). This definition refers to a clinical syndrome, which is diagnosed by the presence of certain symptoms. However, in the personality-based approaches, depression can also be used to describe a mood state that ranges from a mild reaction to life events to a severe clinical disorder that involves distorted cognition and vegetative symptoms (Blatt, 1974). According to these theories, individuals who are considered to have depressive personality structures are more vulnerable to experiencing depressed mood, which is thought to have continuity with types of clinical depression (Zuroff, et.al., 1983). According to Arieti and Bemporad (1980), the extent to which distorted conceptions of self and others are accepted defines the continuum from mild to severe depression (Arieti & Bemporad, 1980).

From a psychodynamic perspective, Blatt (1974) proposed two distinct pathways of development that predispose certain individuals to experience depression: dependent and self-critical. According to Blatt, the dependent personality results from the internalization of a mental representation of the self as weak and ineffectual. When the dependent individual encounters an experience that involves abandonment or rejection, "anaclytic" depression is likely to ensue. Thus, the dependent personality is seen as a diathesis that, when coupled with high levels of interpersonal stress, places an individual
at increased risk for depression. The anaclitic type of depression is characterized by an excessive fear of abandonment and feelings of helplessness and emptiness.

Blatt proposed that anaclytic depression is associated with negative parenting experiences during childhood. Specifically, it has been suggested that parents of dependent individuals may have failed to provide adequate physical gratification at the beginning of the separation-individuation stage of development (Whiffen & Sasseville, 1991). Blatt and colleagues also theorized that dependent individuals felt abandoned as children and experienced parents as cold and ungiving (Rosenfarb et al., 1994). In contrast to Blatt's dependent personality subtype, the self-critical personality results from inadequate representations of the self in relation to others. Consequently, the self-critical individual focuses on individuality and achievement instead of interpersonal relationships, in order to obtain self worth (Blatt, 1974). Blatt (1974) has suggested that the dependent personality is less developmentally advanced than the self-critical personality because it involves conflict at an earlier stage of development.

The differentiation between themes of interpersonal relatedness and self-definition as two major pathways to depression is not unique to Blatt's psychodynamic theory. Interestingly, these two broad processes have been described from a number of different theoretical perspectives. For example, based on attachment theory, Bowlby (1980) proposed three personality types that are vulnerable to experiencing depression. The first type, which is similar to Blatt's dependent personality, results from anxious-ambivalent attachment and is characterized by a pattern of dependency and anxiety centering around the fear of abandonment. The second subtype, similar to self-critical, are those individuals with an anxious-avoidant attachment that results from early parental
loss or critical and rejecting parents. These individuals develop a striving for independence and distance themselves from others as a defense against feelings of worthlessness. The third group, described as compulsive caregivers, does not parallel Blatt's subtypes; however, it involves a marked degree of dependency on caregivers and guilt about leaving home.

From an interpersonal model, Arieti and Bemporad (1980) also describe depression in terms of two predisposing personality styles which they labeled dominant other and dominant goal. The dominant other subtype is similar to Blatt's dependent individual in that gratification is received through compliance and submission to others. This person's sense of self is threatened by the loss of another person who had served as a source of self-esteem (Arieti & Bemporad, 1980). The dominant goal subtype is similar to Blatt's self-critical subtype in that depression is theorized to ensue when a desired goal, on which the sense of self has been constructed, appears unattainable. However, Arieti and Bemporad's model is different from Blatt's because both dominant-other and dominant goal individuals are dependent on others for a sense of well-being. In addition, unlike Blatt's concept of the self-critical individual, the dominant other individual believes that obtaining an achievement goal will result in being valued by others (Arieti & Bemporad, 1980).

Perhaps the most widely researched personality vulnerability model, other than Blatt's, is that of the cognitive behaviorist, Aaron Beck. Beck (1983) proposed a distinction between "sociotropic" and "autonomous" personalities, which are similar to Blatt's subtypes. The sociotropic individual is overly sensitive to rejection and interpersonal losses, whereas the autonomous individual is overly concerned with themes
of independence and achievement. Despite the similarities, there are a few key differences between Blatt's and Beck's models. First, Beck does not concentrate on the childhood development of these personality subtypes, rather, he chooses to focus on current relationships, which are influenced by negative cognitive patterns (Zuroff & Fitzpatrick, 1995). In addition, while Blatt views these two types as more stable personality characteristics that endure over time, Beck proposes that individuals can shift from one vulnerability to the other, depending on current life circumstances (Coyne & Whiffen, 1995).

There has been empirical support for the relationship between these two personality types and depression. Nietzel and Harris (1990) conducted a meta-analysis of studies that looked at these relationships using various measures of dependency and self-criticism. They found that the mean effect size for the relationship between dependency and depression was .28 and the mean effect size for autonomy (or self-critical) was .31. However, there has been mixed support for the diathesis-stress model in which vulnerabilities are proposed to interact with specific life events, such as interpersonal rejection or failure to achieve (Nietzel & Harris, 1990). For instance, Zuroff and Mongrain and Zuroff (1987) found that dependent individuals reported more depression than self-critical or control participants after listening to audiotapes involving interpersonal rejection. On the other hand, self-critical individuals did not report more depression than dependent or control individuals after listening to tapes of failure scenarios.

There are some areas of the personality vulnerability theories that need further investigation. First, the congruence between event and personality type does not appear
as straightforward as first proposed (Abramson et al., 1997). For example, a dependent individual might experience a negative event that appears to fit into the achievement category; however, he or she might construe this event as having interpersonal implications. Another area of the diathesis-stress model that needs further investigation involves intervening variables such as mood, social support, and coping styles. While it is advantageous to identify multiple determinants, these models become complex and difficult to test (Klein, Wonderlich, & Shea, 1993). Finally, it is possible that the distinction between two pathways to depression is an oversimplification of individual differences in personality. It should be investigated whether more specific distinctions within these two dimensions could be more helpful in predicting behavior and outcome. The current study is an attempt to address this issue within the dependency factor of the Depressive Experiences Questionnaire.

Clarifying the Dependency Construct

Adaptive Aspects of Dependency

As previously reviewed, classical models of dependency have generally emphasized the maladaptive nature of this construct. According to Bornstein (1994), it is necessary to move away from the view of dependency as a deficit, because this view is overly simplistic. Identifying and exploring adaptive aspects of dependency should be considered an important step in improving our measurement of dependency as a vulnerability to depression (Blatt, Zohar, et.al., 1995; Bornstein, 1994). The recognition of adaptive aspects of dependency would allow us to increase our knowledge of the etiology and dynamics of dependency as well as our ability to treat dependent individuals (Bornstein, 1996). For instance, treatment of excessive dependency should not be solely
aimed at reducing maladaptive aspects but should also utilize adaptive aspects of dependent behavior (Bornstein, 1995).

A recent literature review by Bornstein (1994) suggests that adaptive aspects of dependency can be divided into three areas: dependency as a factor in compliance with medical and psychotherapeutic regimens, dependency as a factor in sensitivity to interpersonal cues, and dependency as a factor in academic performance. Dependent individuals have been found to seek treatment more quickly and to be more cooperative, compliant, and have more positive attitudes about therapists than do non-dependents. In addition, Bornstein reported that dependent individuals are less likely to drop out of treatment prematurely than non-dependents. With regard to interpersonal sensitivity, dependent individuals seem more adept at picking up on interpersonal cues than non-dependents. Masling, O'Neill, and Katkin (1982) conducted an interesting study in which participants interacted with confederates who were instructed to treat them in either a warm or cold manner. Readings of participants' electrodermal responses indicated that dependent individuals responded differentially to warm versus cold treatment, whereas non-dependents showed no difference (cited in Bornstein, 1994). Finally, Bornstein reported that dependent individuals have been shown to demonstrate stronger academic performance than non-dependents. According to Bornstein, this relationship appears to be mediated by cognitive flexibility as well as willingness to seek help and guidance.

According to Bornstein (1992), to the extent that the dependent person is able to infer accurately the attitudes, beliefs, and feelings of others, he or she should be better able to obtain the support that he or she desires. Mongrain (1998) found that dependency, as measured with the DEQ, predicted greater perceived social support than
did self-criticism in an undergraduate sample. It has been demonstrated that social support has a strong direct and independent effect on depression and its change over time (Lin, 1986). Therefore, it would appear that the ability to gain support would be an adaptive aspect of dependency, as it could serve as a buffer to depression.

Levels of Dependency

Another direction in the movement to clarify the dependency construct has been the recent identification of different developmental levels or forms of dependency. According to Blatt et al. (1995), there are different developmental levels ranging from immature dependency to mature forms of interconnectedness. Identifying and differentiating between these different levels may allow us to measure more precisely dysphoria associated with issues surrounding loss. In addition, it may also "provide a basis for assessing different developmental levels of interpersonal relatedness, as well as the role of attachment in personality development and in different forms of psychopathology" (Blatt et al., 1995, pg. 35). Rude & Burnham (1995) and Blatt and colleagues (1995, 1996) have attempted to address this question by identifying different subscales within the DEQ Dependency scale. Both factors of the DEQ are consistently correlated with measures of depression; however, the Dependency factor is not as highly correlated with measures of depression as the Self-Critical factor (Blatt et al., 1982). The moderate relation of the Dependency factor to measures of depression was used as a rationale by both sets of researchers to investigate whether the DEQ-DEP taps into different levels of dependency.
Subscales within the DEQ-DEP

In order to determine the presence of different levels of dependency within several existing dependency scales, Rude and Burnham (1995) conducted a factor analysis of the DEQ Dependency scale, the SAS Sociotropy scale, and a combined version of the two scales. With a sample of 431 undergraduates, two factor solutions were identified within all three of these measures. For the DEQ, items loading on Factor 1 seemed to represent "a sensitivity to the effect of one's actions on others and a valuing of relationships". Rude and Burnham named this factor "Connectedness". Items loading on Factor 2 appeared to assess the more traditional, maladaptive definition of dependency, characterized by "anxious concerns regarding possible rejection". This factor was named "Neediness".

In order to determine the extent to which Connectedness and Neediness represent a vulnerability to depression, the Beck Depression Inventory (BDI) was administered. As predicted, it was found that the DEQ Neediness factor was positively and significantly correlated with depression, whereas the Connectedness factor was not. In addition, it was found that females scored significantly higher on the DEQ Connectedness factor, but not on the Neediness factor. An interaction between gender and DEQ Neediness was significant, indicating that Neediness was more predictive of depressive symptomatology for women than for men. Similar results were found for the SAS factors and the combined DEQ/SAS factors. The authors concluded that the sex differences on both the DEQ and SAS dependency factors were entirely accounted for in their study by the higher Connectedness scores for women. Rude and Burnham reported that both the DEQ
and SAS dependency scales are confounded with the more adaptive psychological dimension of Connectedness.

Blatt and colleagues (1995, 1996) have also acknowledged a need to refine the DEQ Dependency scale. Using an undergraduate sample, they identified two subfactors that they labeled "Dependence" and "Relatedness". The items were identified a priori on theoretical grounds and were somewhat different from Rude and Burnham's, with Dependence including items that reflected "feelings of helplessness and broad concerns about possible loss", and Relatedness including items that were characterized by "feelings of loss and loneliness in reaction to the disruption of a relationship to a particular person" (Blatt, et. al, 1995). As in the Rude and Burnham study, the Dependence factor was significantly correlated with two depression measures (BDI & Zung Depression Scales), while Relatedness was not. The differentiation between Dependence and Relatedness in relation to depression was also stronger for women than for men. Findings from both sets of researchers support the need to refine the measurement of dependency, with important implications for gender differences and the link to depression.

Research on Connectedness and Neediness

After identifying the Connectedness and Neediness factors within the DEQ and SAS, Rude and Burnham (1995) suggested several key areas for future research. First, they mentioned the importance of correlating Connectedness and Neediness factors with other measures of psychological functioning in order to gain a better understanding of what they represent. Second, they cautioned that the lack of correlation between Connectedness and depression does not necessarily mean that individuals who score high in Connectedness lack a vulnerability to depression. Rather, it is possible these
individuals may be more vulnerable to depression than individuals low in Connectedness in the presence of interpersonal problems (Rude and Burnham, 1995). In addition, Rude and Burnham suggested that Neediness could represent a stronger vulnerability to depression for women because of their greater orientation toward relationships. Thus, it would seem that the role of gender could have important implications for the link between these two types of dependency and depression.

Prior research has supported the need to differentiate between Connectedness and Neediness when measuring dependency, especially with regard to interpersonal styles. Zuroff, Moskowitz, & Koestner (1996) extended Rude and Burnham's (1995) work in a study that used both self-report measures and event-contingent recording to examine the relationships between Connectedness and Neediness and measures of depression, attachment, personality traits, and social interactions. For the event-contingent recording procedure, participants were asked to rate features of every 10-minute interaction during a 7-day period. Results indicated that Neediness was associated with dysphoria, neuroticism, introversion, insecure attachment, and submissiveness. In addition, Needy individuals rated their social interactions as less pleasant. Connectedness was associated with mild dysphoria, mildly insecure attachment, warmth, conscientiousness, and greater intimacy in social interactions. These researchers concluded that Neediness does appear to correspond more closely to the traditional construct of dependency. However, they cautioned against viewing Connectedness as implying positive mental health.

According to Zuroff, Moskowitz, and Cote (1999) the Interpersonal Circumplex (Wiggins, 1982) provides a good framework for the interpersonal behavior of dependent individuals. Within the Interpersonal Circumplex, dominance and submissiveness define
the axis of agency and agreeableness and quarrelsomeness define the axis of communion. The agency-communion construct was originated by Bakan (1967). These authors used an event-contingent recording procedure to measure agency and communion, as well as affect. Dependency, as assessed with the DEQ, was associated with low levels of agency and high levels of communion. However, when the data were reanalyzed, replacing Dependency with Connectedness and Neediness, Neediness was associated with low levels of agency but not communion, whereas Connectedness was associated with communion but not low agency.

Affect played an interesting role in Zuroff, Moskowitz, and Cote's (1999) study. When individuals who scored high in Connectedness behaved agentically, they were less likely than others to experience pleasant affect. The authors theorized that individuals high in Connectedness are more secure in their attachments, which allowed them to behave more communally because they had less fear of being hurt. However, these individuals experienced less pleasant affect while behaving agentically because they were sensitive to the negative impact that agentic behavior might have on others' feelings. While this study provides useful information in understanding interpersonal correlates associated with Connectedness and Neediness, the role of gender would have been interesting to address.

McCabe, Connolly, & Vaerum, (1999) examined Connectedness and Neediness in a study that looked at the relationship between interpersonal rejection and depression. They were interested in determining what role these personality styles played in the rejection of depressed individuals. Rude and Burnham's (1995) descriptions of Connectedness and Neediness were used as scripts for actors portraying these two
personality styles. Participants watched one of eight videotapes in which actors played one of the two personality styles and displayed either depressed or nondepressed affect. They were led to believe that they would be interacting with the actor in a few minutes. Instead of meeting with the actors, participants were asked to complete measures of interpersonal perception and rejection. Greater rejection was associated with depression and male gender; however, there was no effect for Neediness versus Connectedness. Needy actors were perceived as slightly more submissive than Connected actors. However, these results are difficult to interpret because Rude and Burnham's (1995) descriptions of Neediness and Connectedness may not have been accurate, as they had stated that more research needed to be done to determine what these subfactors represent.

It is evident that additional research on Neediness and Connectedness is warranted. The role of gender and interpersonal relationships seem to be particularly important areas of study. The following section will discuss gender differences in dependency and depression as well as the importance of evaluating the individual's social environment.

Dependency, Gender, and Sex Role

The majority of studies investigating gender differences in objective measures of adult dependency have found higher levels of dependency in women than in men. However, results from projective measures of dependency indicate that men and women show similar levels of dependency (cited in Bornstein, 1992). This discrepancy is most likely related to the face validity of the measures. Men would be less willing to acknowledge clearly dependent traits on objective measures, whereas they would not be
able to distort their responses on projective measures because they are unaware of the content being assessed (Bornstein, 1992).

As reviewed in Bornstein (1992), it has been suggested that men and women have equal underlying dependency needs, but that the expression of these needs is largely a function of sex role socialization. Support for this theory comes from research that shows boys and girls to have similar dependency levels during early childhood, but that gender differences increase with age. By school age, girls show significantly higher dependency levels than boys. In combination, findings from adult projective measures and early childhood dependency measures suggest that boys and girls (and men and women) have similar levels of dependency. However, girls are socially encouraged to express these needs overtly, whereas boys are encouraged to be more assertive. In fact, self-reported dependency varies as a function of the degree to which men and women adopt traditional sex roles. For example, Welkowitz et al. (1985) found that the DEQ Dependency score and the Bem Sex Role Inventory Femininity score were significantly correlated in men. Interestingly, while DEQ Dependency and BSRI Femininity were also correlated for women, the correlation was nonsignificant. BSRI Masculinity was negatively correlated with DEQ Dependency in both men and women.

**Gender Differences in Depression**

Twice as many women as men report depressive symptoms or diagnosable depression over the course of their adult lives (Weissman & Klerman, 1977; McGrath, et al., 1991). There is extensive research on possible reasons for the preponderance of depression in women, none of which has provided conclusive evidence. It has been suggested that the greater degree of depression in women is an artifact, resulting from
differences in reporting styles and help-seeking attitudes. However, this hypothesis has received limited support, as men appear just as likely to admit and seek help for depression (Brems, 1995). It has also been suggested that men express depression differently, by acting out more and abusing alcohol. This explanation has also received limited support, and it appears that alcoholism cannot be considered a symptom of depression (Nolen-Hoeksema, 1990). Another possible explanation for the gender difference in depression involves biological differences, such as hormonal factors. Although hormones do appear to play a role in some women's mood at various stages in the menstrual cycle, there is no clear evidence that these hormonal changes can account for women's greater vulnerability to depression (Brems, 1995).

Numerous social factors have been suggested as contributing to the preponderance of depression in women. These factors include socioeconomic issues, social roles, discrimination and interpersonal violence. According to Brems (1995), these factors cause women to be socially disadvantaged and are quite likely to be related to higher levels of depression. In addition, it has been found that marriage has a more positive effect on men's mental health than women's (Nolen-Hoeksema, 1990). Differences in personality development that lead women to be more vulnerable to depression have also been given considerable attention. Psychoanalysts, behaviorists, and cognitive theorists all seem to concur that certain personality characteristics, such as an internalization of hostility, self-effacing behavior, and nonassertiveness make women more vulnerable to depression (Nolen-Hoeksema, 1990). It seems probably that the higher rate of depression in women results from a combination of these factors. Women's social roles are the most relevant for the current study.
Growth in Relation

One of the explanations for the association between dependency and pathology is that Western culture and psychological theory have placed an emphasis on autonomy as the key to healthy adaptation and psychological well-being (Rude & Burnham, 1995; Blatt, et al., 1995; Stiver, 1994). Early developmental theorists generally supported this view by describing development as a progression away from dependence toward increased autonomy (Jordan, 1986). The dichotomy between autonomy and dependence is strongly related to gender and social roles. Several authors have argued that women define themselves primarily in relation and connection to others, whereas for men, individuation and a sense of agency are more central in forming a sense of self (Gilligan, 1982; Smolak, Levine, & Striegel-Moore, 1996). It has also been suggested that the pathological view of dependency reflects a gender bias and a misunderstanding of female development. According to Stiver (1994), the result of this misunderstanding is that, "women's propensity to engage with others is often seen as an indicator of dependency and thus characterized as a potential source of maladaptive behavior" (page 638).

Researchers at the Wellesley College Stone Center have developed the Relational Model as a theoretical explanation of women's psychological development and well-being (Jordan et al., 1991). The Relational Model states that the development of a woman's sense of self is organized around the ability to maintain emotional connections, rather than to separate from them. This view is similar to that of Fairbairn (1946), an object relations theorist who suggested that healthy development involves a progression from dependence toward interdependence, in which the individual is capable of viewing his or her self as autonomous yet also intimate and connected to others. Fairbairn viewed
the key to healthy development as mature dependence, which is characterized by "giving and exchange" rather than taking, which is characteristic of immature dependence (1946, p. 39). According to Jordan (1986), much of developmental literature has focused on need fulfillment in relationships, rather than two-sided, mutual exchange. Because of this, the "dependence" on relationships for well-being has been misconstrued as pathology.

Mutuality

Based on the Relational Model, there is a need to define a mature, healthy dependency, which can be more accurately labeled "interdependence". The construct of mutuality captures an interdependent quality within relationships. According to Genero et al. (1992) mutuality refers to "the bidirectional movement of feelings, thoughts, and activity between persons in a relationships" According to Jordan et al. (1991), the ability to be involved in a mutual relationship requires the following:

1. Interest and responsiveness to the subjectivity of the other person through empathy
2. Willingness to make one's own needs known and to reveal one's own inner states
3. A capacity to acknowledge one's needs without manipulating the other to gain gratification
4. Valuing the process of knowing, respecting, and enhancing the growth of the other
5. Establishing an interacting pattern in which both people are open to change in the interaction

According to the Relational Model, mutual relationships are a source of growth and a buffer to depression for both men and women; however, mutuality may be especially important for women (Genero et al., 1992; Jordan et al., 1991; Miller, 1986).
Perceived mutuality in relationships has been measured using the Mutual Psychological Development Questionnaire (MPDQ). Items of the MPDQ were selected based on the six conceptual mutuality elements of empathy, engagement, authenticity, zest, diversity, and empowerment that were described by Miller (cited in Genero et al., 1992). Empathy represents a shared exchange of thoughts and feelings, where each person is able to connect with the other's experience. Engagement is characterized by shared attention, interest, and responsiveness. Authenticity describes the process of coming closer to knowing each other's experiences and recognizing each other for who he/she is. Zest is the quality of being energized by the relationship. Diversity is the process of working through different perspectives and feelings. Finally, empowerment is a capacity for action where each person can have an impact on the other. Based on clinical observations of dyadic interactions, Miller (1988) suggested that mutual interchanges provide participants with the following benefits: increased sense of vitality, increased ability to take action, increased knowledge of self and other, greater sense of self-worth and validation, and a desire for more connection with others (cited in Genero et al., 1992).

Perceived mutuality, measured by the MPDQ, has been positively associated with adequacy of social support, relationship satisfaction, cohesion, relational health, and greater control over the experience and expression of anger (Genero et al., 1992; Sperberg & Stabb, 1998; Liang et al., 1999). Perceived mutuality has been negatively correlated with depression, and difficulty expressing and controlling anger (Genero et al., 1992; Sperberg & Stabb, 1998). Genero et al.'s (1992) findings included significant gender differences. Low spouse or partner mutuality was predictive of depressive
symptoms in women but not in men. This finding supports the idea that mutual relationships may have more significant implications for women. However, Genero et al. (1992) also concluded that, based on their data, mutuality is also an important aspect of relationships for men.

Social Environment

One of the limitations of the personality vulnerability model as an explanation for the link between dependency and depression is that it has neglected the importance of the individual's social environment (Zuroff et al., 1995). According to Skerret (1996), "it is important to go beyond the exploration of individual factors that promote quality of life and examine the ways in which an enlarged individual capacity for connection improves both individual as well as relational resilience and adaptation" (p. 97). This idea has been promoted by many theorists who suggest that the individual cannot be examined without considering the context of the social environment (Zuroff et al., 1995; Cane & Gotlib, 1985; Coyne, 1976; Youngren & Lewinsohn, 1980). Social support plays a crucial role in the onset, maintenance and relapse of depressive symptoms (Lin, 1986). However, it is important to note that it is not just the presence of relationships that provides a buffer against depression but the quality. In fact, when relationships are stable, yet low in support and validation, they may contribute to a depressive cycle (Coyne, 1976). Again, this may be especially true for women.

When considering the social environment, the question is not whether it is pathological to have a predominately relational orientation, but how and when does a relational orientation become a risk factor for psychological distress. Because women are more highly oriented toward others, their experience of negative emotion toward the self
is often linked to experiences of hurt and concern over relationships (Liang et al., 1999). Thus, while a relational orientation may not be maladaptive by itself, it may increase one's risk for experiencing depression in the presence of interpersonal problems and relationship difficulties. This may be especially true for women who find themselves in non-supportive relationships, which they attempt to maintain by making accommodations, often at the expense of their self-esteem. According to Smolak, Levine, & Striegel-Moore (1996), "if a woman's orientation towards others' needs eclipses a sense of her own needs and opinions, she will be at risk for mental health problems in general" (pg. 126).

Jack (1991) suggested that women in non-mutual relationships often become depressed because they experience a loss of self over the failure to achieve or to maintain an intimate connection. In addition, Jack and Dill (1992) found that depression scores were related to the degree to which women endorsed "care as self-sacrifice" values. Other studies have shown that it is the nature of women's relationships rather than the loss of or the dependency on relationships that increases their vulnerability to depression. Therefore, it seems necessary to evaluate the quality of relationships when assessing for vulnerability to depression.

The Proposed Study

The purpose of the current study was to extend the validation of Connectedness and Neediness by assessing the relationships of these two constructs with measures of efficacy, interpersonal functioning and relationship quality. The Mutual Psychological Development Questionnaire (MPDQ) was chosen to assess perceived mutuality within
relationships. The Inventory of Interpersonal Problems (IIP) was chosen because of its relevance to potential interpersonal behavior and attitudes that Connected or Needy individuals might experience. Efficacy was measured using the Efficacy scale of the DEQ.

If Connectedness represents a more mature form of relatedness than Neediness, as Rude and Burnham (1995) propose, it should be a better predictor of mutuality in relationships than Neediness. In addition, it is proposed that for Connected individuals, depression will be better predicted by the level of mutuality in the relationship rather than the presence or absence of a romantic relationship. In contrast, if Neediness represents a more developmentally immature form of dependency that represents dependence on relationships, the presence or absence of a romantic relationship should predict depression in Needy individuals.

Because Connectedness items seem to capture a sensitivity to the effect of one's actions on others, it was proposed that people high in Connectedness would tend to be overly nurturant toward others. Because Neediness represents a more immature form of dependency, it was proposed that people high in Neediness may be more inclined to engage in clingy and attention-seeking behaviors.

Social loss, such as a recent break up or death of a family member was assessed in the current study. According to Overholser (1992), some cases of dependency may be normal reactions to the loss of a close relationship. Therefore, it is important to take into account this particular stress, especially when measuring dependency.

Hypotheses
Based upon the literature review for dependency, personality vulnerability to depression, levels of dependency, gender differences, and mutuality, the following hypotheses were proposed:

The following hypotheses were replications from previous studies:

1. If Neediness represents a more maladaptive personality style, it should be a better predictor of depression scores than Connectedness.

2. Because women have a greater orientation toward relationships than men, females should score higher on Connectedness and overall Dependency than males.

3. If Neediness captures the classical view of pathological dependency, it should be inversely related to self-efficacy.

4. Hypotheses relating Connectedness and Neediness to interpersonal problems:
   a. Neediness should be positively associated with overall interpersonal problems.
   b. If Neediness represents a less healthy relationship orientation, it should be a better predictor of interpersonal problems than Connectedness.

5. Connectedness, which is proposed to represent developmentally mature form of dependency, was expected to be a better predictor of perceived relationship mutuality than Neediness.

6. Hypotheses relating Connectedness and Neediness to perceived mutuality versus presence or absence of intimate relationship:
   a. For individuals who are high in Connectedness, perceived mutuality will be a better predictor of depression than presence or absence of an intimate relationship.
   b. For individuals who are high in Neediness, the presence or absence of an intimate relationship will be a better predictor of depression than perceived mutuality.
7. Hypotheses relating Connectedness to overly nurturant behavior:
   a. Connectedness was expected to be positively associated with overly nurturant
      behavior.
   b. Connectedness was expected to be a better predictor of problems being overly
      nurturing than Neediness.

8. Hypotheses relating Neediness to intrusive interpersonal behavior:
   a. Neediness was expected to be positively associated with intrusive interpersonal
      behavior.
   b. Neediness was expected to be a better predictor of intrusive and clingy behavior than
      Connectedness.

CHAPTER TWO

METHOD

Participants

Two hundred and sixty-five undergraduate students (85 men, 185 women)
volunteered to participate. The mean age was 19.9 years with a range of 18 to 54 years.
Sixty-six percent of participants were White, 14.7% Black, 7.2% Hispanic, 6.4% Asian,
and 4.5% other. Seventy-six percent of participants reported that they were single, 3.4%
were married, and 19.6% were in a committed relationship. Thirty-nine percent were in
school full-time, 25.3% were employed part-time, 4.2% were employed full time, and 4%
were self-employed.
Measures

Demographic Information. The demographic section included questions involving social network, marital status, age, ethnicity, and major (see appendix A). Social loss, such as the death of a family member or divorce, was assessed.

Beck Depression Inventory (BDI). The BDI revised (Beck & Steer, 1987) measures current levels of depressive symptoms. The BDI consists of 21 groups of questions with 4 possible answers in ascending order of symptom severity. The questions include symptoms such as suicidal ideation, loss of appetite, pessimism, sense of failure, self-dissatisfaction, crying, social withdrawal, work inhibition, and irritability.

The psychometric properties of the BDI, as reported by Shaver and Brennan (1991) in a review of the literature, are as follows: .86 odd-even split-half reliability, .70 test-retest reliability, and .60 to .90 convergent validity. The BDI is also highly correlated with clinical ratings of depression versus low correlations with anxiety and other psychiatric diagnoses (Shaver & Brennan, 1991). Alpha internal consistency for the BDI was .92.

Depressive Experiences Questionnaire (DEQ). The DEQ (Blatt, D'Aflitti, & Quinlan, 1976) is a 66-item self-report questionnaire that is rated on a seven-point Likert-type scale (see Appendix B). The first two factors of the DEQ, Dependency and Self-Criticism, assesses experiences associated with depression. Dependency contains items that are primarily externally directed, whereas Self-Criticism contains items that are primarily internally directed. The third factor, Efficacy, contains items involving a sense of confidence about one's abilities with themes of satisfaction, feelings of independence, and feelings of accomplishment.
Blatt, D'Afflitti, and Quinlan (as cited in Shaver & Brennan, 1991) have reported alpha coefficients ranging from .72 to .86 for each of the scales that compose the DEQ. In addition, test-retest reliabilities for the DEQ range from .64 to .89, indicating that it is relatively stable. The Dependency factor has been found to be only moderately correlated with measures of depression at around .30, and the Self-Criticism factor is more highly correlated with measures of depression at around .65. (Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982). Efficacy was correlated negatively with depression and positively with descriptions of ideal self (Blatt, D'Afflitti, & Quinlan, 1976). The DEQ factors can be scored using factor weights based on the original sample, however, this study will use unit weights. Unit weighting is more parsimonious and efficient because weights vary across samples. Alpha internal consistency values for the Dependency and Efficacy scales were .77 and .69, respectively.

Connectedness and Neediness are two recently identified subscales within the DEQ Dependency scale (Rude and Burnham, 1995). Connectedness was proposed to represent a more mature form of relatedness with items such as "I would feel like I'd be losing an important part of myself if I lost a very close friend." Neediness was defined as a more immature form of dependency with items such as "I urgently need things that only other people can provide." Connectedness and Neediness will be scored in the same manner as the original DEQ, using unit weights rather than factor weights. In a sample of undergraduates, Connectedness and Neediness were found to be highly stable with coefficient of congruence correlations of .96 and .97 respectively. The coefficient of congruence represents the correlation between the two subsamples in Rude and Burnham's (1995) study. In Rude and Burnham's study, Neediness was positively and
significantly correlated with depression, whereas Connectedness was not. Connectedness has been positively associated with communion and Neediness negatively associated with agency (Zuroff, Moskowitz, & Cote, 1999). Alpha internal consistency values for Connectedness and Neediness were .74 and .75, respectively.

**Mutual Psychological Development Questionnaire (MPDQ)**

The MPDQ (Genero, Miller, & Surrey, 1992) is a 22-item scale measuring perceived mutuality in relationships (see Appendix C). The MPDQ was derived from the six conceptual mutuality elements of empathy, engagement, authenticity, zest, diversity, and empowerment, as described by Miller (1988). Respondents are asked to rate a relationship from their own perspective as well as their perceptions of the other individual's experience of the relationship. Ratings are based on a 6-point Likert-type scale from "never" to "all the time". An example is "When we talk about things that matter to [other person], I am likely to...." and "When we talk about things that matter to me, [other person] is likely to ...." (Genero et al., 1992). The MPDQ score is based on 22 items, combining the self and other perspectives.

Although early in the development process, the MPDQ appears to be both valid and reliable. Alpha coefficients for spouse/partner relationships and for friend relationships were .92 and .89, respectively. Test-retest reliability correlations for a 2-week period were acceptable with spouse/partner mutuality at .83 and friend mutuality at .82. In terms of construct validity, the MPDQ has been positively associated with adequacy of social support, relationship satisfaction, and relational health, and negatively associated with depression (Genero et al., 1992; Liang et al., 1999). Alpha internal consistency for the MPDQ was .90.
The MPDQ instructions were modified for the current study in order to allow participants who do not currently have a romantic partner to rate their relationship with a close friend.

**Inventory of Interpersonal Problems (IIP)**

The IIP (Horowitz et al., 1988) is a 127-item measure that assesses interpersonal distress (see Appendix D). The IIP was developed from an analysis of the complaints of individuals seeking psychotherapy. The IIP is composed of two sections. The first 78 items begin with "it is hard for me to" and the remaining 49 items describe "things that you do too much". The IIP is rated on a 5-point likert-type scale ranging from "not at all" to "extremely". The names of the IIP subscales are differentiated between the H ("hard to") and the T ("too much") subscales. The six subscales of the IIP include H. Assertive, H. Sociable, H. Intimate, H. Submissive, T. Responsible and T. Controlling. Alpha coefficients for these subscales ranged from .82 to .94 and test-retest correlations over a 10-week period ranged from .80 to .90. In addition, the IIP has been shown to be responsive to client changes that occur in psychotherapy and meaningfully correlated with other interpersonal measures (Horowitz et al., 1988).

Allen, Wiggins, and Pincus (1990) have constructed the IIP-Circumplex, which is a derivation of the IIP based on a circumplex model. Eight scales were identified, including the following: Domineering, Vindictive, Cold, Socially Avoidant, Nonassertive, Exploitable, Overly Nurturant, and Intrusive. Alpha coefficients for these scales ranged from .72 to .85. Overly Nurturant items included "I try to please other people too much" and "I put other people's needs before my own too much". Individuals who score high on Intrusive are described as inappropriately self-disclosing, attention
seeking, and find it difficult to spend time alone (Allen, Wiggins, & Pincus, 1990).

Alpha internal consistency values for the overall IIP was .97.

CHAPTER THREE

RESULTS

Descriptive Analyses

Before evaluating the hypotheses, it was first necessary to determine whether the sample was typical or atypical. The measures used in this study were expected to yield means and standard deviations similar to those previously reported by studies using the same measures with similar populations. The expected and observed means and standard deviations for each measure used in this study are shown in Table 1. The results of these comparisons suggest that this sample is comparable to similar populations.

In addition to comparing the sample's parameters to previous studies using the same measures, it was also necessary to determine whether the sample's scores were normally distributed. Frequency distributions were examined to determine whether the distribution of scores for each measure represented a normal or non-normal distribution. Based on histograms and measures of skewness and kurtosis, it was determined that all of measures were approximately normally distributed.

The data were also analyzed to determine whether there were any unexpected correlations between the demographic variables and the measures used in the study. There were significant correlations between age of participant and DEQ Dependency, r(265) = -.16, p < .01 and DEQ Connectedness, r(265) = -.16, p < .01. However, these correlations may not be meaningful because of low effect sizes.
To further detect any unhypothesized associations, t-tests were conducted between gender and the measures used in this study (see Table 2). As shown in Table 2, there were two unhypothesized gender differences found on the measures. Females scored significantly higher on the Mutual Psychological Development Questionnaire (MPDQ) and males scored significantly higher on the Inventory of Interpersonal Problems (IIP).

In order to check the measures for multicollinearity, a correlation matrix was run between the measures used in this study (see Table 3). Results indicated that correlations over .5 were reasonably expected based on the nature of the variables. For instance, many of the variables were from the same scales of subscales. As shown in Table 3, there were several unhypothesized correlations. For instance, Connectedness was positively correlated with BDI, MPDQ, IIP, and problems being Intrusive, but less so than Neediness was. Neediness was negatively correlated with MPDQ and positively correlated with problems being Nurturant.

Hypothesis-Testing Analyses

**Hypothesis 1:** Neediness will be a better predictor of depression than Connectedness.

When the contribution of Connectedness to the prediction of BDI scores was controlled by partialling, Neediness contributed significant additional, partial $r(259) = .38$, $p < .001$. Thus, Hypothesis 1 was supported. When analyses were run separately by gender, these results held for men and women.

**Hypothesis 2a:** Females will have higher Dependency scores than males.

Females scored higher on DEQ Dependency than males, as shown in Table 4. Thus, Hypothesis 2a was supported.
Hypothesis 2b: Females will have higher Connectedness scores than males.

Females scored higher on DEQ Connectedness than males, as shown in Table 4. Thus, Hypothesis 2b was supported.

Hypothesis 3: Neediness will be significantly and inversely correlated with Efficacy.

Neediness was inversely correlated with DEQ Efficacy, as shown in Table 5. Thus, Hypothesis 3 was supported.

Hypothesis 4a: Neediness is expected to be significantly correlated with overall interpersonal problems.

Neediness correlated positively with IIP scores, as shown in Table 5. Thus, Hypothesis 4a was supported.

Hypothesis 4b: Neediness will be a better predictor of overall interpersonal problems than Connectedness.

When the contribution of Connectedness to the prediction of overall interpersonal problems was controlled by partiailling, Neediness contributed significant additional variance, partial r(258) = .46, p < .001. Therefore, Hypothesis 4b was supported.

Hypothesis 5: Connectedness is expected to be a better predictor of perceived mutuality than Neediness.

When Neediness was controlled by partiailling, Connectedness contributed significant unique variance to the prediction of perceived mutuality, partial r(259) = .23, p < .001. However, Neediness also contributed significant unique variance to this prediction, partial r(259) = -.28, p < .001. Thus, Hypothesis 5 was not supported as both Neediness and Connectedness contributed significant unique variance to the prediction of perceived mutuality, and the absolute values of their sizes were not notably different.
However, Neediness was negatively associated with perceived mutuality, whereas Connectedness was positively associated with perceived mutuality (See table 3). When analyses were run separately for gender, this finding held for men but not for women. For women, Connectedness did not contribute significant unique variance in predicting perceived mutuality when Neediness was controlled, partial r(176) = .07, p = .34. Thus, it appears that, for women, Neediness is more predictive of perceived mutuality than Connectedness. In addition, Neediness is inversely correlated with mutuality for both men and women (see Table 4).

**Hypothesis 6a:** For individuals who score high in Connectedness, perceived mutuality will be a better predictor of depression than the presence or absence of a romantic relationship.

Among individuals who were high in Connectedness (Conn > 5.2), perceived mutuality contributed significant unique variance when the presence or absence of a romantic relationship was controlled by partialling, partial r(121) = -.24, p < .01. Thus, Hypothesis 6a was supported.

**Hypothesis 6b:** For individuals who score high in Neediness, the presence or absence of a romantic relationship will be a better predictor of depression than perceived mutuality. Among individuals who scored high in Neediness (Need > 3.5), the presence or absence of a romantic relationship did not contribute significant unique variance when perceived mutuality was controlled, partial r(121) = -.01, p = .91. Thus, Hypothesis 6b was not supported.

**Hypothesis 7a:** Connectedness is expected to be positively associated with problems being overly nurturant.
Connectedness was positively correlated with IIP Overly Nurturant, as shown in Table 3. Thus, Hypothesis 7a was supported.

**Hypothesis 7b:** Connectedness is expected to be a better predictor of problems being overly nurturant than Neediness.

When Neediness was controlled by partialling, Connectedness contributed significant unique variance in predicting problems being overly nurturant, partial r(259) = .49, p < .001. However, Neediness also contributed significant unique variance to the prediction of problems being overly nurturant, partial r(259) = .32, p < .001. Thus, Hypothesis 7b was not supported, as both variables contributed significant unique variance. This result held for both men and women.

**Hypothesis 8a:** Neediness is expected to be positively associated with problems being intrusive.

Neediness was positively correlated with IIP Intrusive, as shown in Table 5, thus Hypothesis 8a was supported.

**Hypothesis 8b:** Neediness is expected to be a better predictor of problems being intrusive than Connectedness.

When Connectedness was controlled by partiailling, Neediness contributed significant unique variance to the prediction of problems being intrusive, partial r(259) = .27, p< .001. Thus, Hypothesis 8b was supported.

However, when the analysis was run separately by gender, Neediness did not contribute significant unique variance to predicting problems being intrusive for women.

*Exploratory Analysis*
Some additional analyses were performed which might provide useful peripheral contributions to the literature. There were several unexpected gender differences in this study. These findings seem to indicate that Connectedness has more negative implications for females. As shown in Table 6, whereas Connectedness was associated with depression in the overall sample, when analyses were run separately for gender, this correlation held for women but not for men. Connectedness was also positively correlated with interpersonal problems for women but not for men (see Table 4). Finally, Connectedness was positively correlated with perceived mutuality for men but not for women.

There were additional gender differences that are not related to Connectedness or Neediness but might add to our understanding of mutuality in this sample. For instance, perceived mutuality was inversely correlated with depression in the combined sample, however, when analyses were performed separately for gender, this association held for women, but not for men (see Table 4). Perceived mutuality was associated with efficacy for men but not for women.

CHAPTER FOUR

DISCUSSION

The primary purpose of this thesis was to identify important distinctions between Connectedness and Neediness as two different types of dependency to provide evidence for construct validity of both measures of these constructs. Thus, an attempt was made to test the nomological network of relationships for both Neediness and Connectedness with each other and with other measures of
psychological functioning in order to determine whether these measures represent what Rude and Burnham (1995) proposed. Based on previous findings and Rude and Burnham's (1995) conclusions, it was hypothesized that Neediness would be more strongly associated with measures of depression and interpersonal problems than Connectedness, as it is proposed to be a more maladaptive form of dependency. Furthermore, an important goal of this thesis was to determine whether Neediness and Connectedness relate differently to important aspects of relationships. Measures that look at aspects of interpersonal functioning were chosen because dependency is an interpersonal construct and it is likely that the most meaningful distinctions between Neediness and Connectedness would be detected on these measures.

Overall, the majority of hypotheses were supported, and findings were generally consistent with previous literature. In addition to the hypotheses, there were several findings that appear to contribute to our understanding of Neediness and Connectedness with regard to interpersonal functioning, and especially gender differences. Unexpected gender differences seem to suggest that Connectedness, as measured by Rude and Burnham (1995), has more positive implications for men than for women. The remainder of this section will examine each hypothesis in detail, followed by a discussion of limitations and implications for research and clinical practice.

Based on previous findings (Rude & Burnham, 1995; Zuroff, Moskowitz, & Koestner, 1996) it was first hypothesized that Neediness would better predict depression than would Connectedness. Consistent with previous
literature, this hypothesis was supported. When analyses were run separately by gender, the results held for both men and women. Overall, it appears that Needy individuals are more likely to be depressed than are Connected individuals. This finding provides some additional support for Rude and Burnham's (1995) assertion that Neediness represents a more maladaptive form of dependency for both men and women.

For the sake of comparison, it is important to note that Connectedness was associated with depression, but only for women and not for men. This is inconsistent with Rude and Burnham's (1995) findings, as these researchers reported no association between Connectedness and BDI score for men or women. However, this result is consistent with Zuroff et al.'s (1996) findings, in which Connectedness was mildly associated with BDI score. Unfortunately, Zuroff et al. (1996) did not include any mention of gender differences for this correlation.

The second hypothesis stated that females would have significantly higher levels of the combined DEQ measure of dependency than males. This hypothesis was based on findings from previous research (Chevron, Quinlan, & Blatt, 1978; Rude & Burnham, 1995). This was indeed supported. The second part of this hypothesis predicted that females would score higher in Connectedness than males, also based on findings from previous research (Rude & Burnham, 1995). This part of the second hypothesis was also supported. The replication of these findings provides further support for previously found gender differences in dependency.
While women scored higher in Connectedness, there was no gender difference for Neediness. This finding is consistent with Rude and Burnham's (1995) findings and suggests that the gender difference typically found on the DEQ Dependency scale may be attributed to higher scores for females on Connectedness items than on Neediness items. This suggests that examining gender differences on the DEQ Dependency scale can be misleading and less informative than when the distinction is made between Neediness and Connectedness. While women consistently score higher on measures of dependency, this does not seem to be the case when Neediness is separated out. One explanation for this discrepancy is that items on the Connectedness scale are more related to female sex roles than are the Neediness items. Thus, sex differences in social desirability could have accounted for females' reporting higher levels of Connectedness than males.

Based on Rude and Burnham's (1995) assertion that Neediness represents the more traditional, immature form of dependency, the third hypothesis stated that Needy individuals would have low levels of efficacy. According to dependency theorists, the dependent individual has a mental representation of the self as weak and ineffectual and thus looks to others for protection and support (Abramson et al., 1978; Blatt et al., 1974). Therefore, if Neediness indeed represents this traditional, immature form of dependency, it should be associated with low scores on measures of efficacy. This hypothesis was supported for both men and women. Thus, it is possible that Needy
individuals really do believe that they "need" other people because they can not rely on themselves.

While Neediness was associated with low efficacy, Connectedness was not associated with efficacy in the overall sample. However, Connectedness was positively associated with efficacy for men. Thus, it again appears that Connectedness may have more positive implications for men than for women. In addition, efficacy seems to be very important in distinguishing Needy from Connected men as efficacy was negatively correlated with Neediness and positively correlated with Connectedness for men. This result provides support for the notion that Neediness and Connectedness should be treated as different types of dependency with important implications for gender.

The negative relationship between efficacy and Connectedness for women can also be interpreted using feminist theory regarding the importance of relationships for women. It is possible that Connected women who do not feel that they are achieving the kind of connection that is so important to them are likely to experience lower levels of efficacy. Again, this would be especially true for women because their ability to establish close relationships is more central to their sense of self (Genero et al., 1992). In addition, it is possible that women who are low if efficacy feel more of a need to connect with others in order to increase their sense of efficacy.

It is less clear why efficacy appears to be important in distinguishing Needy from Connected men. It is possible that the experience of Neediness is detrimental to a man's sense of efficacy because, based on traditional sex roles,
men are not supposed to feel needy (Bornstein, 1992). Men who perceive themselves as having strong dependency needs may feel insecure about their ability to take care of themselves. Thus, experiencing the self as being needy may have a greater impact on efficacy for men than for women because the trait of Neediness is less socially desirable for men. On the other hand, Connected men may feel highly efficacious because they are more skillful at relating to others and are more able to express their relationship needs.

The fourth hypothesis proposed that Neediness would be associated with interpersonal problems. As in Hypothesis 3, this prediction was based on Rude and Burnham's (1995) assertion that Neediness represents a more immature, problematic form of dependency. Difficulty with interpersonal functioning appears to be an important area of focus when examining dependency. For instance, Overholser (1996) suggested that maladaptive social functioning may provide the link between dependency and depression. Indeed, results of this study revealed that Neediness is strongly associated with interpersonal problems for both genders. This finding can be related to Zuroff et al.'s (1996) findings in which Needy individuals rated their interpersonal interactions as unpleasant. It seems reasonable that Needy people may experience more unpleasant affect when interacting with others, due to various interpersonal difficulties that they appear to have.

Interestingly, Connectedness was also associated with interpersonal problems in this study but only for women and not for men. It is possible that Connected females perceive and report more interpersonal problems because
they have higher standards for the quality of their relationships. In contrast, men may not have such high expectations for their relationship quality and may not perceive as many interpersonal problems. Thus, it can not be concluded that Connected women have more trouble interacting with others than do Connected men, rather, it could be that they simply perceive more problems in relationships because of their higher expectations.

The fifth hypothesis stated that Connectedness would better predict perceived mutuality than would Neediness. Perceived mutuality was chosen to differentiate between Connectedness and Neediness because Connected individuals should report more healthy relationships. This is based on Rude and Burnham's (1995) theory that Needy individuals "need" others for their own gain whereas Connected individuals value the relationship itself. Classical dependency theory would suggest that Needy individuals are unlikely to engage in mutual relationships. According to Zuckerman (1958), "succorance" is a key component of dependency where the individual demands love, affection, and nurturance without reciprocity. In contrast, Zuroff (1996) suggested that Connected individuals evidence an appreciation of other people's feelings and needs and a concern with relationships rather than with need gratification. If this is the case, the relationships of Connected individuals should be more mature, with higher levels of mutuality. Mutuality was chosen to measure level of maturity within relationships because it represents a bi-directionality and interdependent quality in relationships ( Genero et al., 1992).
Indeed, Connectedness contributed significant variance to the positive prediction of mutuality in the overall sample. However, this was only the case for men because separate analyses for gender indicated that Connectedness is not related to mutuality for women. Neediness, on the other hand, contributed significant unique variance to the negative prediction of mutuality for both genders. Thus, it appears that Neediness is important in predicting low levels of mutuality in general and Connectedness contributes to the positive prediction of mutuality for men. This finding only partially supports the notion that Connected individuals have more mutual relationships. It should be noted that high levels of Connectedness do not necessarily mean that an individual will succeed in finding a partner that is a good candidate for a mutual relationship.

The first part of the sixth hypothesis stated that, for individuals who are high in Connectedness, perceived mutuality would be more predictive of depression than would the presence or absence of a romantic relationship. This hypothesis was based on the notion that, if Connectedness represents a more healthy way of being related, these individuals should place more importance on the quality of relationships than whether or not they are in a relationship. Thus, non-mutual relationships may be more likely to contribute to depression for Connected individuals. This hypothesis was supported. One interpretation of this finding would be that Connected individuals do not "need" a romantic partner, but rather place importance on being in a mutual relationship.

The second part of the sixth hypothesis stated that, for individuals high in Neediness, the presence or absence of a romantic relationship would be more
predictive of depression than would perceived mutuality. Thus, Needy individuals "need" a romantic partner in their lives, but they may not necessarily be as concerned with the quality of the relationship. This hypothesis was not supported, as in this group, lack of mutuality was predictive of depression and the presence or absence of a romantic relationship was not. However, there is an important limitation of this finding. The presence or absence of a romantic relationship was determined based on a demographic item asking participants to state whether they were single, in a committed relationship, married, widowed, or divorced. It is possible that participants responded "single" even though they were dating someone, especially for this age group. It would have been more accurate to provide an option for boyfriend/girlfriend. Thus, the results of these analyses should be interpreted with caution.

The remaining hypotheses are an attempt to further examine the nomological network by identifying specific interpersonal problems that could distinguish between Neediness and Connectedness. The goal here was to determine how our measures matched the constructs for the purposes of construct validity. Hypothesis seven stated that Connectedness would be positively associated with problems being overly nurturant. This was hypothesized to help answer the question, "are Connected individuals overly concerned with other peoples' feelings and needs?" This hypothesis was supported for both genders. The second part of this hypothesis stated that Connectedness would better predict problems being overly nurturant than
would Neediness. However, this hypothesis was not supported, as it was found that both Neediness and Connectedness were important in predicting problems being overly nurturant. Thus, it is likely that problems being overly nurturant is a common difficulty for both Needy and Connected individuals, and is not specific to either construct.

Another possible interpretation of this finding is that Needy individuals may simply perceive that they are giving more to others than they actually are. For instance, they may feel that they do not get enough from others because they constantly "need" more. This may distort their interpretation of how much they are giving. Additionally, it could be that Needy and Connected people behave in overly nurturant ways for different reasons. For instance, Needy individuals may be motivated to please others in order to gain the nurturance that they seek for themselves (Bornstein, 1993). Connected individuals, on the other hand, might sacrifice their own needs by nurturing others in order to maintain their valued connections. Thus, while problems being overly nurturant doesn't seem to help us distinguish between Neediness and Connectedness it does appear to be an important difficulty shared by both. Again, however, it is possible that Needy individuals are motivated to nurture others in order to be taken care of in return, whereas Connected individuals are motivated by a need to maintain the relationship for its own sake.

The eighth hypothesis stated that Neediness would be related to problems being intrusive. One conceptualization of dependent individuals is that they are clingy and attention-seeking. Overholser (1996) suggested that, as dependent
individuals attempt to meet their dependency needs, they may become aggressive and demanding because they feel they will never get enough attention. If the Neediness subfactor indeed represents this immature form of dependency, individuals who score high on this measure should also have high scores on the IIP measure of intrusiveness, which includes attention-seeking behavior. This hypothesis was supported, as Neediness was correlated with IIP Intrusive for both men and women.

The second part of this hypothesis stated that Neediness would be a better predictor of problems being intrusive than would Connectedness. This was hypothesized because it was conceptualized that Needy individuals would engage in more demanding, reassurance seeking behavior that might cause others to reject them. On the other hand, according to Rude and Burnham's (1995) theory, Connected individuals may not be as desperate for attention and should have fewer problems with intrusive behavior. This hypothesis was indeed supported, as results indicated that for both genders Neediness is a better predictor of problems being intrusive than is Connectedness. However, it is important to note that Connectedness was also associated with problems being intrusive. Again, it could be that Needy and Connected people behave in an intrusive manner or perceive that they behave in an intrusive manner for different reasons.

Results of exploratory analyses revealed additional interesting gender differences. For instance, mutuality was negatively associated with depression for women but not for men. Connectedness was associated with Neediness for
women but not for men. This finding was unexpected and is inconsistent with previous research findings (Blatt et al., 1995). The lack of relationship between Connectedness and Neediness for men seems to suggest that distinguishing between these two factors is more useful in understanding male dependency and relatedness. Again, it should be noted that gender differences in social desirability due to sex roles may be possible sources of measurement bias that could have affected these findings.

Summary of Findings

In discussing the findings from the analyses, the results for each hypothesis were considered in terms of consistency with the research literature and with theory. Overall, the results of this thesis support the notion that Neediness and Connectedness represent distinct forms of dependency with important differences for gender and interpersonal functioning. This study extends the work of Rude and Burnham (1995) because it related Neediness and Connectedness to other measures of psychological functioning in order to gain a better understanding of what these two constructs represent.

One conclusive statement regarding the findings is that Connectedness generally has fewer maladaptive correlates for both genders than does Neediness. This seems consistent with previous research. However, it appears that gender differences are essential in understanding the construct of Connectedness because it seems to have less positive implications for women than for men. The gender differences found in this study are likely the most important findings because they raise interesting questions about what these
constructs, and relationships in general, mean for men and women. Because of their importance in making conclusions about this study, possible explanations regarding the observed gender differences will be discussed in the following paragraphs.

The finding that Connectedness was associated with depression for women and not for men is indeed significant. As with other gender differences in this study, is likely related to sex-role socialization and the greater implications that relationships have for women's depression. For instance, Connected women may be more likely than men to suffer from depression when they are unable to make connections with others or when the connections that they make are not optimal (Liang et al., 1999). On the other hand, also based on sex-role socialization, males may be more concerned with achievement and individuation than with connections to others (Gilligan, 1982; Smolak, Levine, & Striegel-Moore, 1996). Therefore, men may be more likely to experience depression when achievement goals are threatened, whereas women may be more likely to experience depression when relationship goals are threatened. This rationale would also explain why mutuality is negatively correlated with depression for women, but not for men.

Connectedness was also associated with interpersonal problems for women and not for men. It is important to note that one should not interpret these results to mean that Connected women have more problems relating to others based on personality deficits or lack of interpersonal skills. An alternative explanation is that women are likely to have a higher standard for
relationship quality than men and, therefore, are more likely to be attuned to problems in their relationships. Furthermore, it should be stressed that the presence of interpersonal problems is often dependent on the interpersonal behavior of individuals within a woman's social network. For instance, it may be that a woman's romantic partner does not place as much importance on the quality of the connection and thus, not relate in a way that fulfills her relationship needs.

It was unexpected that Connected women in this sample did not report high levels of mutuality. Similar to the explanation of higher perceived interpersonal problems for Connected women, it is possible that they are more likely to be aware of inequality in relationships and to rate their relationships as more non-mutual because they tend to place more importance on the quality of relationships, and therefore, have higher standards. This result, as well as other gender differences previously discussed, is consistent with Genero et al.'s (1992) finding and lends support to the idea that mutual relationships are more important for women. This may be because women are more likely to experience loss of self over the failure to engage in mutual relationships (Jack, 1991).

A possible interpretation of these gender differences is that women who are high in Connectedness may be prone to experience more dysphoria and to be less satisfied with their relationships than men who are high in Connectedness, especially when their connections are not optimal. It is also possible that women are less likely to have their relationship needs met than are
men. There is evidence to support this idea, as marriage seems to have a more positive effect on men's mental health than women's (Nolen-Hoeksema, 1990). Gender differences in this study also lend support to relationship-based interventions for women who suffer from depression.

On a final note, it is necessary to keep in mind that the particular measure of Connectedness that was used in this study originated from the Depressive Experiences Questionnaire, which was developed to measure aspects of depression. Thus, the label "Connectedness" may be misleading in that the items may not necessarily capture the positive aspects of the overall construct of Connectedness.

Implications for Theory, Research and Practice

Results from this study have provided more support to the notion that broad constructs such as dependency should not be measured or conceptualized by clinicians and researchers in a uni-dimensional manner. It may be misleading and inaccurate to assume that certain traits occur together because they are blanketed under the broad construct of dependency. For instance, it is dangerous to assume that people who place great value on relationships also have an inability to take care of themselves. Clinicians and researchers should take into account that dependency is a much more complex construct with different levels of maturity if they are to avoid overgeneralization.

In regard to theory and practice, the distinction between different developmental levels of dependency suggests that there needs to be a
heightened awareness of the balance between connection and independence. Rather than labeling dependency and connection as "bad" or "weak" and independence as "strong" or "masculine", researchers and clinicians need to emphasize a balance between the two poles. As Fairbairn had stated (1946), the key to healthy development is interdependency. Interdependency occurs when individuals view themselves as autonomous yet also intimately connected with others.

Connectedness, as measured in this study, appears to lie somewhere along the dimension of immature dependency and mature interdependency, however, it does not appear to represent mature interdependence, at least not for women. According to Zuroff, Moskowitz, & Koestner (1996), Connected individuals show an appreciation of other people's feelings and a concern with relationships. However, the costs associated with this trait may reflect an over-concern for others' feelings at the expense of one's own needs. These highly Connected individuals, especially women, may be more likely to sacrifice aspects of themselves for the sake of the relationship. Here we can see the possible liability associated with Connectedness, as measured in our study.

This study also highlights the risks of making the oversimplified assumption that women are dependent and men are not. For instance, women did report higher levels of Connectedness but there were no gender differences found for Neediness. As evident in these gender differences, it is necessary to identify different aspects of dependency that may have different implications for men and women. For instance, it will be important for researchers and
clinicians to consider the implications of relationships on the well-being of men, a topic that has been under-researched. However, the difficulty in this area of research is that gender, like dependency, is much more complex than was once conceptualized. Researchers must take into account the fact that there are males with "feminine" attributes and females with "masculine" attributes (Twenge, 1999).

It is important for clinicians to assess clients in order to provide an individualized treatment plan. Linking different personality types such as Connectedness and Neediness to different interpersonal problems is likely to aid in determining important areas of focus in treatment. For instance, Connected women may need assistance with finding and developing more fulfilling relationships, whereas treating Needy men may require more of a focus on increasing self-efficacy. With regard to clinical practice it would also be important to have an understanding of how various interpersonal problems associated with different types of dependency might increase the likelihood that individuals will be rejected by their social network and thus be at risk for depression. Targeting these interpersonal problems in treatment may decrease the risk for depression.

Limitations of this Study

One readily apparent limitation of this study was that it relied solely on self-report measures. There are several problems with this methodology. First, it is quite difficult to determine the degree to which behaviors, attitudes and
feelings actually occur because of the tendency for people to respond in ways that distort reality or that conform to social expectations. This problem may be especially salient for individuals who are highly dependent, as Blatt (1976) suggested that denial may be a common defense for dependent individuals. Another problem with using only self-report measures is the likelihood of response set bias. For instance, some people may simply have a tendency to make extreme ratings, rate items in an overly negative way, an overly positive way, or according to social desirability or sex-roles.

Another problem with using only self-report measures for this particular topic is that the face validity of our measure of dependency may have induced response sets based on conformity to sex-roles. For instance, Bornstein (1992) suggested that higher scores on objective dependency measures are due largely to sex-role socialization. Therefore, it could be that the gender differences observed on these measures may not accurately reflect underlying dependency needs. One way to get around this problem would have been to use different methods such as projective measures or informant ratings to get at these constructs. One could then compare gender differences across these different types of measures.

An additional limitation of this study concerns the measurement of perceived mutuality and the MPDQ. The problem here is that the participant is asked to make ratings from the perspective of both people in the relationship. Individuals may have great difficulty taking on the perspective of their partner, especially when the individual has a tendency to blame the other and to not take
responsibility for their own role in creating problems within the relationship.

In addition, the MPDQ may be especially sensitive to current state of a particular relationship. For instance, if there had been a week of bad fights, the participant could be more likely to exaggerate the negative aspects of the relationship. Furthermore, the MPDQ measures one particular relationship rather than providing a measure of how the person generally functions in relationships. Different relationships are much more or less likely to be mutual based on the individual's partner. To address some of these problems, future studies might use informant ratings by partners at different points in time.

Another limitation of this study is the low generalizability of a sample of college students. College students are less likely to have been in relationships for long periods of time. Results may be markedly different in a sample of middle aged adults who have been married for many years. In addition, college students are experiencing transitional periods in which they may be more prone to feelings of loss and dependency. Older adults, who are at different developmental stages, may experience their dependency and relationship needs in different ways.

A specific problem with this study was that we were unable to use social loss as a control for situational dependency. The measure used was not properly designed and appeared to be confusing to participants. Thus, it was determined that it was not a valid measure of social loss. Future investigations should look at this factor as it may have an impact on individuals' dependency and depression ratings. Individuals who have experienced significant amounts
of social loss might experience more intense feelings of dependency and depression.

Regarding internal validity, suggestions for future research include using different methods to measure the constructs and obtaining informants to provide a more complete view of interpersonal behavior. For instance, one could use projective measures, interviews, or informant-ratings to reduce the problem of shared method variance and the effects of social desirability on gender differences. In addition, using peer informants may provide particularly interesting information in a study of relationships. Using different populations such as older adults from a community sample would provide an advantage in regard to external validity. This method would allow comparison of the relationship between dependency, gender, and depression across developmental stages.

The collection of longitudinal data would likely aid in determining how Neediness and Connectedness interact with life events such as the breakup of a relationship or death of a loved one. Levels of dependency are likely to change as major life events occur. For instance, it is possible that Connected individuals may be less likely to experience depression after a negative life event because they are better able to make use of social support. Using longitudinal data may also allow us to better determine the direction of causation between variables. For instance, it would be useful to examine the impact that depression has on the experience of dependency needs.
Finally, it may be quite useful to look at the relationship of attachment to Neediness and Connectedness. Much research has been done on the relationship between attachment and dependency. Looking at different developmental levels of dependency in relation to attachment might provide more specific information about how different personality styles develop.

Collins and Read (1990) developed a measure of adult attachment that included three dimensions. These dimensions measure the extent to which individuals are comfortable with closeness, the extent to which individuals feel that they can depend on others, and anxious and fearful feelings about being abandoned or unloved. These dimensions clearly appear to be closely related to Neediness and Connectedness. Future studies might use this measure to gain further information about Neediness and Connectedness.
APPENDIX

A
<table>
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<th>Measure</th>
<th>Expected Mean</th>
<th>Expected Std. Dev.</th>
<th>Observed Mean</th>
<th>Observed Std. Dev.</th>
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**Note.** Sources of expected means and standard deviations were outpatient samples, Weiss (1999) for the BDI, Viglione, Lovette, Gottlieb, & Friedberg (1995) for the DEQ, Genero et al. (1992) for the MPDQ, and Horowitz (1988) for the IIP. *Neediness and Connectedness could not be compared to Rude and Burnham's (1995) scores because a different scoring system was used.
Table II

T-tests for Gender

<table>
<thead>
<tr>
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APPENDIX

C
Table III

Correlations Among Measures in Overall Sample

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*p < .05.

**p < .01.

***p < .001.
APPENDIX

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| **Females** |       |       |        |        |        |        |        |        |       |
| BDI    | ----  | .40***| .28*** | .41*** | -.11   | -.28***| .57*** | .34**  | .43***|
| DEQ-D  | ----  | .84***| .80*** | .22**  | -.08   | .51*** | .35*** | .59*** |
| Connectedness | ---- | .49***| .00  | -.05   | .38*** | .30*** | .59*** |
| Neediness | ---- | -.47***| -.23**| .56*** | .31*** | .46*** |
| Efficacy | ----  | .12   | -.30***| -.10   | -.15   |        |        |        |
| MPDQ   | ----  | -.34***| -.28***| -.18*  |        |        |        |
| IIP    | ----  | .75***| .62*** |
| Intrusive | ---- | .56***|
| Nurturant | ---- |       |

*p < .05.
**p < .01.
***p < .001
REFERENCES


Miller, J. B. (1986). *What do we mean by relationships?* The Stone Center, Wellesley, MA.


