Interpersonal Variability in Dependent Personality

Aaron L. Pincus
Kelly R. Wilson
Pennsylvania State University

ABSTRACT The interpersonal circumplex (IPC) was recommended as a personality trait dimensional model with good potential to identify the phenomenological scope of personality disorders whose core dysfunction involves maladaptive expression of interpersonal traits. The IPC was then applied to the reconceptualization of dependent personality and dependent personality disorder. In Study 1, Pincus and Gurtman’s (1995) three interpersonal vectors of dependency were validated via factor analyses conducted on two large samples (N = 921; N = 472) and a reliable self-report measure, the 3 Vector Dependency Inventory (3VDI) was constructed. In Study 2, two samples (N = 103; N = 122) of individuals identified as predominantly endorsing submissive dependence, exploitable dependence, or love dependence, or who were low in aspects of dependency were compared via ANOVA and chi-square analyses on parental representations, adult attachment styles, loneliness, and pathological attachment. Submissive dependence was associated with higher scores on maladaptive constructs (fearful attachment, pathological attachment, and loneliness) and was also associated with lower parental affiliation and higher maternal control. Love dependence was associated with lower scores on maladaptive constructs and higher scores on secure attachment and parental affiliation. Variability in dependent phenomenology was related to its three component traits. Multiple perspectives on integrating love dependence, exploitable dependence, and submissive dependence into a reconceptualization of dependent personality disorder were articulated.
Many who support revising the current categorical classification system of personality disorders assert that one necessary element of such an effort is the integration of personality trait dimensional models into reconceptualizations of personality pathology (Clark, Livesley, & Morey, 1997; Clark & Watson, 1999; Costa & Widiger, 1994; Jackson & Livesley, 1995; Widiger, 1993). This has led to a variety of efforts to rationally and empirically relate existing personality disorder categories found on Axis II of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) to alternative normal personality trait dimensional systems such as the interpersonal circumplex (IPC; Wiggins, 1979; Widiger & Hagemoser, 1997) and the five-factor model of personality (FFM; Costa & McCrae, 1992; Costa & Widiger, 1994; McCrae, 1994; Wiggins & Pincus, 1989).¹

The most prominent approach taken has been to translate DSM personality disorder categories into prototypic FFM and IPC profiles. However, this approach has not yet demonstrated substantial validity and diagnostic efficiency. We suggest that shortcomings of DSM criteria sets (Bornstein, 1997; Westen & Shedler, 1999b) and lack of validity of the DSM personality disorder categorical system itself (Clark et al., 1997; McCrae, Yang, Costa, Dai, Yao, Cai, & Gao, 2001; Westen & Shedler, 1999a, 1999b) limit the successes of such translation efforts. If personality pathology is not categorical in nature, the current trend of attempting to translate DSM categories found on Axis II into prototypic normal trait dimensional profiles rests on slippery ground (Pincus, in press).

Several possible alternatives to DSM translations have been suggested. One view posits that personality pathology reflects extreme variants of normal traits (e.g., Trull & Widiger, 1997). It is currently unclear how to best measure the extreme ends of the dimensional trait continuum to reflect maladaptive content. One might write items that reflect rigidity (e.g., “I always,” or “I never”) or reflect negative consequences. Alternatively, a more quantitative approach could be applied using empirically derived cut-off scores. McCrae’s (1994) approach avoids the sticky issue of defining pathology altogether by simply cataloguing a wide range of problems in living associated with high or low standings on traits.

¹ We acknowledge that there are several additional trait systems. We chose to describe those systems that have been most widely used in personality disorder research.
A more ambitious approach would be to utilize a normal personality trait dimensional model to identify the core traits of personality disorders. The model would provide “a few fundamental dimensions [which] underlie the domain, with different disorders representing alternative expressions of these latent dimensions” (Clark et al., 1997, p. 224). Such an approach shifts assessment of personality disorder from DSM criteria to component traits. Clark et al. (1997) note this has the advantage of preserving the essence of personality stability while correcting for both the highly variable phenotypic behavioral expression of latent traits inherent at the lowest levels of the trait hierarchy and the variable effects of mood or acute distress on behavior and self-concept. The DSM criteria appear particularly vulnerable to both problems because they often operate like single-item measures with incomplete coverage of their implied component traits. Additionally, single scales designed to assess a particular DSM personality disorder category must be heterogeneous, parceling small numbers of items to cover all criteria. This can lead to inadequate instrumentation to assess component traits, instability in assessment over time, and potential spurious comorbid diagnoses (Clark et al., 1997). If reconceptualization were successful, the identified traits would guide development of appropriate diagnostic criterion and instrumentation.

In reconceptualizing personality disorders from this perspective, it is not necessary to assume that all personality disorders are best described at the same level in the trait hierarchy or even that component traits making up the core of a particular personality disorder need to be conceptualized at the same level. Clark et al. (1997) cautioned investigators against assuming all personality disorders follow the same model and noted that “there is not a set number of levels to be explored: breadth versus specificity is itself a continuous variable. It is more important to understand the overall structure of personality, and where a particular measure fits relative to the total structure, than to specify a particular number of levels, which will necessarily be arbitrary” (p. 217). Thus, selection of a particular model operationalized at a particular level in the trait hierarchy continues to be a challenge, and it is not clear that reconceptualization of all personality disorders will be best accomplished using only the FFM, or the IPC, or the traits of personality disorder alone (e.g., Clark, 1993; Livesley, Jackson, & Schroeder, 1992). Investigators should use all the information possible to make an informed decision regarding the implementation of particular structural models.
Such efforts would be required to go beyond description of core traits towards elaboration of an appropriate nomological net accounting for development, adaptivity, maladaptivity, etc. (e.g., Widiger, Verhuel, & van den Brink, 1999).

The Interpersonal Circumplex as a Model for Conceptualizing Personality Disorders

Given the pervasiveness of interpersonal content in both conceptions of personality disorders and personality trait dimensional models, we propose that the core phenomenology of some personality disorders involves dysfunctional expression of, and experiences associated with, interpersonal traits. Other personality disorders that represent core dysfunctional expression of affective or cognitive traits may be best reconceptualized using other personality dimensions at various levels of the trait hierarchy (e.g., Clark & Watson, 1999).

The IPC is a circular model based on the latent dimensions of dominance and nurturance (Wiggins, 1979; see top of Figure 1). Lower-order traits located along the perimeter reflect blends of the two latent dimensions. Traits closer together on the perimeter are conceptually and statistically more similar to each other. Traits falling 90º apart are conceptually and statistically independent. Traits falling 180º apart are conceptual and statistical opposites. While the circular model is itself a continuum with no beginning or end (Gurtman & Pincus, 2000), any segmentalization of the IPC to identify lower-order interpersonal traits is potentially useful (within limits of reliable discriminability), but is ultimately arbitrary. The IPC has been segmentalized into sixteenths (Kielscher, 1982), octants (Wiggins, 1979), and quadrants (Carson, 1969). Currently, the octant-based model is most widely used (Alden, Wiggins, & Pincus, 1990; Wiggins, 1995).

Application of the IPC to the reconceptualization of personality disorders is consistent with the assumptions and recommendations made by Clark and her colleagues (Clark et al., 1997; Clark & Watson, 1999). First, the IPC provides a hierarchically arranged dimensional model of interpersonal functioning based on two latent traits. Variation in the expression of these traits leads to variability in interpersonal functioning that could be used to describe the phenomenology of personality disorders with core interpersonal dysfunction. Second, the IPC and interpersonal theory are based in a tradition that assumes
Figure 1
continuity between personality and psychopathology (Carson, 1991; Keisler, 1982; Leary, 1957; McLemore & Benjamin, 1979; Pincus, 1994). Third, the two latent traits of the IPC give rise to a circular continuum of lower-order component traits that are at an appropriate level of measurement to accommodate variable phenotypic expression in behavior. Finally, the IPC is embedded within a broad set of theoretical assumptions and empirical observations that may aid the development of an appropriate nomological net in which to fully investigate reconceptualizations of personality disorders (Gurtman, 1992; Pincus, 1994).

Interpersonal variability in dependent personality. Our selection of dependent personality as an exemplar is not based on its existence as a DSM category of personality disorder. Instead, we see the concept of dependency as a personality construct that is also congruent with many of the assumptions and recommendations for reconceptualization of personality disorders. Dependency is a ubiquitous construct in developmental, personality, social, and clinical psychology, and appears to be a fundamental, but complex, aspect of personality reflecting a core motivation to obtain and maintain nurturant and supportive relationships (Birtchnell, 1988; Bornstein, 1992, 1993a). It is associated with both maladaptive (Greenberg & Bornstein, 1988) and adaptive functioning (Bornstein, 1998a). Dependent individuals show significant variability in phenotypic behavioral expression (e.g., active and passive strategies for obtaining needed psychological and instrumental resources; Bornstein, 1995a). Finally, a variety of developmental perspectives on dependency have been articulated (e.g., Blatt, Zohar, Quinlan, Zuroff, & Mongrain, 1995; Bornstein, 1996).

Pincus and Gurtman (1995) investigated the structure of dependency by relating the universe of content defined by the combined item pool of several of the most widely used self-report measures of dependency to the IPC and FFM. Because the core motivation of dependent persons is inherently interpersonal, priority was first given to identifying the range of interpersonal traits associated with measures of dependency. Pincus and Gurtman’s results suggested that interpersonal dependency spanned an approximately 90° continuous arc from submissive behavior to nurturant behavior on the IPC (see bottom of Figure 1). This arc is typically referred to as the Friendly-Submissive quadrant of the IPC, reflecting a range of expression from low to average dominance and average to high nurturance, in terms of the latent IPC traits. Component traits of friendly
submissiveness can be based on a choice to segmentalize the IPC into octants, generating three interpersonal vectors reflecting meaningful variation in the expression of dependency labeled submissive dependence, exploitable dependence, and love dependence (Pincus & Gurtman, 1995).

Pincus and Gurtman (1995) used circumplex criteria (Gurtman, 1993, 1997) to select those dependency items most reflective of each of the three interpersonal vectors (component traits) of dependency, resulting in three 12-item markers of love dependence, exploitable dependence, and submissive dependence, respectively. Scores on these markers were correlated with dimensions of the FFM. All three vectors had positive correlations with Neuroticism. However, love dependence exhibited positive correlations with Openness and Conscientiousness, exploitable dependence had no correlation with Openness or Conscientiousness, and submissive dependence had negative correlations with Openness and Conscientiousness (see also Pincus, in press). The authors concluded that their structural analysis supported the view that “dependency is a complex individual difference with diverse components that can be articulated within the framework of the IPC” (Pincus & Gurtman, 1995, p. 753).

The remainder of this article presents a series of studies aimed at validating the component traits of dependency identified by Pincus and Gurtman (1995) and reconceptualizing dependency and dependent personality disorder from this perspective. The first study aimed to replicate the structure of submissive, exploitable, and love dependence markers in independent samples and construct a reliable self-report measure of these component traits.

The second set of studies used this measure to select groups of individuals who endorsed primarily one of the three components of dependency in order to investigate differential relations with a number of theoretically and clinically relevant psychosocial constructs, specifically, adult attachment styles, pathological attachment, parental representations, and loneliness. We investigated attachment constructs because they are related to, but not redundant with dependency (e.g., Ainsworth, 1969). Previous investigations of dependency and attachment constructs have been mixed, with some studies suggesting that dependency is positively related to secure attachment (Wiseman, 1997) and others reporting dependency is positively related to insecure attachment (Zuroff, Moskowitz, & Koestner, 1996).
Parental representations are a fundamental aspect of attachment associated with internal working models (Diamond & Blatt, 1994), and object-relations theorists have specified two important ways in which parental representations affect normal and pathological development. First, parental introjects influence future relationships by enabling an individual to anticipate others’ responses and reactions and to infer such things as thoughts, emotions, and motivations in others (Blatt & Lerner, 1983). Second, parental introjects make it possible for the individual to engage in an “inner dialogue” with parental figures, thereby assisting the person in affect regulation (Blatt, 1974; Bornstein, 1987). Previous investigations focusing on dependency have found mixed results. McCranie and Bass (1984) found dependent persons rated their mothers as utilizing strict control and expecting conformity to authority. Mongrain (1998) found dependent persons rated parents as affiliative and accepting, but found no relationship with parental control. Norton, D. Klein, Donaldson, Pepper, & L. Klein (1995) found no relation between DSM-III-R dependent personality disorder and measures of early home environment, and Whiffin & Sasseville (1991) found no relationship between dependency and recollections of parenting.

Finally, we investigated loneliness because we hypothesized that dependent persons are more vulnerable to feeling lonely due to their strong core motivation to obtain and maintain nurturant and supportive relationships. Some previous studies have found a positive relationship between dependency and loneliness (Mahon, 1981; Schachter & Zlotogorski, 1995); however, Wiseman (1997) found no relationship between dependency and loneliness. We suspect that the mixed results found in these previous investigations of attachment constructs, parental representations, and loneliness may be due to differential use of dependency measures that do not assess the same aspect of dependency and do not span the entire range of dependent core traits (Pincus & Gurtman, 1995).
Study 1: Construction of the 3 Vector Dependency Inventory

METHODS

Participants

Two samples were used to validate the structure of Pincus and Gurtman’s (1995) markers of love dependence, exploitable dependence, and submissive dependence and to construct reliable self-report scales. Sample 1 consisted of 921 predominantly White, young adult college students (290 men, average age 19.08 years old, and 631 women, average age 19.43 years old). The second sample consisted of 472 predominantly White, young adult college students (155 men, average age 19.70 years old, and 317 women, average age 20.11 years old). All participants received course credit for completing a large battery of self-report measures regularly used in screening participants for a variety of psychological investigations.

Measure

The 36 items marking love dependence, exploitable dependence, and submissive dependence (Pincus & Gurtman, 1995, Table 2, p. 752) were randomly assembled into questionnaire format. Sample 1 participants received a questionnaire containing all 36 original items. Sample 2 participants received a reduced item pool based on initial factor analyses of Sample 1 data. All participants were instructed to indicate how well each statement described themselves on a 6-point Likert scale ranging from 1 (not at all like me) to 6 (very much like me).

RESULTS

Principal axis factor analysis was conducted on Sample 1 ratings of the 36 items making up the interpersonal dependency item pool. Examination of the scree plot suggested the extraction of three factors accounting for 34.6% of the item variance. These factors were rotated obliquely, consistent with the model. Evaluation of the rotated solution suggested the three factors corresponded well with Pincus and Gurtman’s (1995) 12 item markers; however, some items exhibited moderate secondary loadings. Thus, only items with factor loadings $\geq .40$ on their target factor and $\leq .20$ on any other factor were retained, reducing the item pool to 27 items. The reduced item pool was submitted to a second principal axis factor analysis with oblique rotation. Three factors were extracted accounting for 37.2% of the item variance (see Table 1). All 9 items marking
<table>
<thead>
<tr>
<th>Item</th>
<th>I²</th>
<th>Iᵇ</th>
<th>IIᵃ</th>
<th>IIᵇ</th>
<th>IIIᵃ</th>
<th>IIIᵇ</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find it difficult to say “no” to people</td>
<td>.82</td>
<td>.74</td>
<td>.00</td>
<td>.08</td>
<td>−.11</td>
<td>−.07</td>
</tr>
<tr>
<td>I find it very difficult to say “no” to the requests of friends</td>
<td>.72</td>
<td>.64</td>
<td>−.07</td>
<td>.01</td>
<td>−.02</td>
<td>.05</td>
</tr>
<tr>
<td>I am more apologetic to others than I need to be</td>
<td>.69</td>
<td>.66</td>
<td>−.01</td>
<td>.05</td>
<td>.03</td>
<td>.02</td>
</tr>
<tr>
<td>I am afraid of hurting other people’s feelings</td>
<td>.59</td>
<td>.62</td>
<td>−.02</td>
<td>−.10</td>
<td>.14</td>
<td>.07</td>
</tr>
<tr>
<td>If I think somebody might be upset at me, I want to apologize</td>
<td>.51</td>
<td>.56</td>
<td>.01</td>
<td>.01</td>
<td>.23</td>
<td>.12</td>
</tr>
<tr>
<td>I worry a lot about offending or hurting someone who is close to me</td>
<td>.47</td>
<td>.47</td>
<td>.00</td>
<td>.04</td>
<td>.31</td>
<td>.31</td>
</tr>
<tr>
<td>I do things that are not in my best interest in order to please others</td>
<td>.43</td>
<td>.37</td>
<td>.19</td>
<td>.19</td>
<td>−.06</td>
<td>−.04</td>
</tr>
<tr>
<td>I am very sensitive to others for signs of rejection</td>
<td>.41</td>
<td>.35</td>
<td>.22</td>
<td>.22</td>
<td>.21</td>
<td>.19</td>
</tr>
<tr>
<td>Anger frightens me</td>
<td>.28</td>
<td>.32</td>
<td>.16</td>
<td>.11</td>
<td>.19</td>
<td>.17</td>
</tr>
<tr>
<td>I don’t have what it takes to be a good leader</td>
<td>.03</td>
<td>.23</td>
<td>.65</td>
<td>.53</td>
<td>−.02</td>
<td>−.09</td>
</tr>
<tr>
<td>I am certainly lacking in self-confidence</td>
<td>.13</td>
<td>.18</td>
<td>.64</td>
<td>.62</td>
<td>.10</td>
<td>.03</td>
</tr>
<tr>
<td>I am entirely self-confident (R)</td>
<td>−.02</td>
<td>−.07</td>
<td>.61</td>
<td>.60</td>
<td>.09</td>
<td>.11</td>
</tr>
<tr>
<td>I feel confident in my ability to deal with most of the personal problems</td>
<td>−.09</td>
<td>−.08</td>
<td>.58</td>
<td>.69</td>
<td>.01</td>
<td>−.03</td>
</tr>
<tr>
<td>I am likely to meet in life (R)</td>
<td>.06</td>
<td>.01</td>
<td>.57</td>
<td>.72</td>
<td>−.08</td>
<td>−.06</td>
</tr>
<tr>
<td>I am very confident about my own judgment (R)</td>
<td>−.10</td>
<td>−.09</td>
<td>.55</td>
<td>.56</td>
<td>−.05</td>
<td>−.05</td>
</tr>
<tr>
<td>I usually expect to succeed in things I do (R)</td>
<td>.08</td>
<td>.28</td>
<td>.55</td>
<td>.40</td>
<td>−.04</td>
<td>−.02</td>
</tr>
<tr>
<td>I would rather be a follower than a leader</td>
<td>.22</td>
<td>.23</td>
<td>.40</td>
<td>.44</td>
<td>.15</td>
<td>.19</td>
</tr>
<tr>
<td>I have a lot of trouble making decisions by myself</td>
<td>.29</td>
<td>.17</td>
<td>.40</td>
<td>.27</td>
<td>.02</td>
<td>.06</td>
</tr>
<tr>
<td>In social situations, I tend to be very self-conscious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I²</td>
<td>I³</td>
<td>II²</td>
<td>II³</td>
<td>III²</td>
<td>III³</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----</td>
<td>----</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>I would feel like I’d be losing an important part of myself if I lost a very good friend</td>
<td>-.06</td>
<td>.07</td>
<td>-.08</td>
<td>-.02</td>
<td>.77</td>
<td>.51</td>
</tr>
<tr>
<td>Having close bonds with other people makes me feel secure</td>
<td>.07</td>
<td>.24</td>
<td>.00</td>
<td>-.04</td>
<td>.66</td>
<td>.52</td>
</tr>
<tr>
<td>The idea of losing a close friend is terrifying to me</td>
<td>-.01</td>
<td>.11</td>
<td>.01</td>
<td>.03</td>
<td>.63</td>
<td>.61</td>
</tr>
<tr>
<td>I often find myself thinking about friends or family</td>
<td>.06</td>
<td>.19</td>
<td>.06</td>
<td>-.15</td>
<td>.59</td>
<td>.41</td>
</tr>
<tr>
<td>I find it difficult to be separated from the people I love</td>
<td>-.03</td>
<td>.07</td>
<td>.04</td>
<td>-.01</td>
<td>.58</td>
<td>.56</td>
</tr>
<tr>
<td>Being isolated from others is bound to lead to unhappiness</td>
<td>.00</td>
<td>.04</td>
<td>.00</td>
<td>-.07</td>
<td>.50</td>
<td>.54</td>
</tr>
<tr>
<td>Being able to share experiences with other people makes them much more enjoyable for me</td>
<td>.09</td>
<td>.16</td>
<td>-.14</td>
<td>-.16</td>
<td>.44</td>
<td>.35</td>
</tr>
<tr>
<td>I frequently ask people for advice</td>
<td>.10</td>
<td>.19</td>
<td>.06</td>
<td>-.02</td>
<td>.35</td>
<td>.19</td>
</tr>
<tr>
<td>The lack of permanence in human relationships does not bother me (R)</td>
<td>-.04</td>
<td>-.16</td>
<td>.10</td>
<td>.07</td>
<td>.31</td>
<td>.33</td>
</tr>
</tbody>
</table>

*Note.* R = Reverse Keyed.

*Sample 1 (N = 921).*

*Sample 2 (N = 472).*
factor I were originally found on Pincus and Gurtman’s (1995) exploit-
able dependence marker. All 9 items marking factor II were originally
found on their submissive dependence marker. All 9 items marking factor
III were originally found on their love dependence marker.

Principal axis factor analysis with oblique rotation was conducted on
Sample 2 ratings of the reduced 27-item interpersonal dependency item
pool. Examination of the Scree plot suggested extraction of three factors
accounting for 41.9% of the item variance (see Table 1). As can be seen
in Table 1, the factor structure of the reduced item pool replicated nicely
in Sample 2.2

All 27 items were thus retained, and three 9-item scales marking
submissive, exploitable, and love dependence were constructed. These
scales are referred to as the 3 Vector Dependency Inventory (3VDI). Scale
statistics and intercorrelations were highly consistent across both sam-
2. Principal axis factor analyses were also conducted separately for gender in Sample 
1. For females (n = 631) the factor solution was identical to that presented in Table 1,
i.e., all 27 items loaded most highly on their target vector. For males (n = 290) 23 of 27
items loaded most highly on their target vector. The four off-target items exhibited split
loadings on the target vector and an adjacent vector. Results available upon request.

Table 2
3VDI Scale Statistics

<table>
<thead>
<tr>
<th>Sample 1</th>
<th>Males</th>
<th>Females</th>
<th>3VDI scale intercorrelations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Love</td>
<td>921</td>
<td>40.51 (7.06)</td>
<td>43.57 (6.10)</td>
</tr>
<tr>
<td>2. Exploitable</td>
<td>921</td>
<td>34.11 (8.08)</td>
<td>36.69 (8.39)</td>
</tr>
<tr>
<td>3. Submissive</td>
<td>921</td>
<td>23.38 (7.96)</td>
<td>25.42 (8.24)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample 2</th>
<th>Males</th>
<th>Females</th>
<th>3VDI scale intercorrelations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Love</td>
<td>472</td>
<td>41.01 (6.90)</td>
<td>43.60 (5.96)</td>
</tr>
<tr>
<td>2. Exploitable</td>
<td>472</td>
<td>34.16 (8.20)</td>
<td>37.00 (7.63)</td>
</tr>
<tr>
<td>3. Submissive</td>
<td>472</td>
<td>22.95 (7.51)</td>
<td>24.70 (7.64)</td>
</tr>
</tbody>
</table>

Note. Cronbach’s α appears in parentheses along diagonal of correlation matrices.
*p < .05, **p < .001.
dependency. He reported values ranging from .16 to .61 with an overall
effect-size across all objective measures of .41 standard deviations. The
average effect-size for gender differences on the 3VDI scales appears
comparable to other objective measures of dependency.

These scales exhibit the structural relations predicted by the IPC
model. We propose that these component traits can be considered as
defining the interpersonal scope of dependent phenomenology that can
be the basis for describing dependent personality and dependent person-
ality disorder. In an effort to validate the 3VDI and articulate more
broadly the nature of love dependence, exploitable dependence, and
submissive dependence, a second study was conducted exploring
group differences between individuals who predominantly endorsed
one of the three component traits of dependency and nondependent
controls on a variety of theoretically and clinically related psychosocial
variables.

Study 2: Variability in Dependent Personality

METHODS

Participants

The 3VDI was administered to two independent groups of over 800 introductory
psychology students each in order to identify participants who endorsed
predominantly love dependence, exploitable dependence, or submissive de-
pendence, or had low scores on all three component traits. Using gender-based
norms, individuals who received a \( z \)-score of .5 or greater on one 3VDI scale
and \( z \)-scores below zero on the remaining scales were partitioned into groups
labeled love dependence, exploitable dependence, and submissive dependence.\(^3\)
Individuals who received \( z \)-scores less than or equal to \(-.5\) on all three scales
were labeled nondependent controls.\(^4\) Identified individuals were then contacted

3. An optimal methodology for investigating the variable phenomenology of the core
traits of dependency in Study 2 would have been to employ regression techniques on
large samples of participants completing all measures. Unfortunately, the limitations and
practicalities of undergraduate participant recruitment precluded treating love depend-
ence, exploitable dependence, and submissive dependence as continuous variables in
this manner. For brevity, groups in Study 2 are referred to as submissive dependents,
exploitable dependents, love dependents, and controls.

4. As pointed out by a reviewer, the control group is not a random sample, but a sample
that may be more independent than average.
by phone and invited to participate in one of two studies for extra credit. These participants made up samples 3 and 4. 

Sample 3 consisted of 103 participants (average age 19.48 years old) grouped as follows: 32 love dependents (9 males, 23 females), 21 exploitable dependents (9 males, 12 females), 16 submissive dependents (8 males, 8 females), and 34 nondependent controls (17 males, 17 females).

Sample 4 consisted of 122 introductory psychology students (average age 19.77 years old) grouped as follows: 45 love dependents (14 males, 31 females), 21 exploitable dependents (5 males, 16 females), 22 submissive dependents (11 males, 11 females), and 34 nondependent controls (16 males, 18 females).

Sample 3 Measures

*Intrex short-form questionnaires.* The Intrex (Benjamin, 1988) operationalizes Benjamin’s (1974, 1984, 1996) Structural Analysis of Social Behavior (SASB) model. The Intrex short form presents a series of 32 standard descriptors on a 0 (not at all characteristic) to 100 (perfectly characteristic) scale at 10-point intervals for selected relationships, reflecting the two underlying SASB dimensions of affiliation (love vs. attack) and autonomy (autonomy vs. control). Participants were asked to rate their relationships with their mothers and fathers separately when the participants were 5 to 10 years of age. Test-retest reliability of the Intrex short form over a 4-week interval was .87 and substantial convergence between long and short forms has been reported (Benjamin, 1988). A variety of parameters can be scored from the Intrex (see Pincus, Newes, Dickinson, & Ruiz, 1998, for a review). For this study, we computed scores for the two SASB dimensions (affiliation, autonomy) as recommended by Pincus et al. (1998).

*Adult Attachment Questionnaire.* The Adult Attachment Questionnaire (AAQ; Bartholomew & Horowitz, 1991) consists of four paragraphs describing each of Bartholomew’s four-category model of adult attachment styles (fearful, preoccupied, dismissive, secure). Participants are asked to read each paragraph and select the paragraph that best describes their experiences relating to others. The theoretical foundations of the four-category model are reviewed by Griffin and Bartholomew (1994).

---

5. Anovas for both samples indicated that cut-off scores achieved the desired partitioning, and the defining dependency variable was significantly higher for each appropriate group and lowest for the control group.
Sample 4 Measures

**AAQ.** Sample 4 participants completed the AAQ as described above.

*The Revised UCLA Loneliness Scale* (Russell, Peplau, & Cutrona, 1980) is a 20-item measure of loneliness that has good reliability and validity and has been used extensively in loneliness research. The alpha reliability coefficient in the present sample was .71.

*Pathological Attachment Scales* (PAS; West & Sheldon, 1988) is a 40-item inventory assessing four elements of pathological attachment. Angry withdrawal reflects the tendency toward strongly negative emotional reactions to perceived caregiver unavailability or unresponsiveness. Compulsive self-reliance reflects avoidance of relying on others for help, while simultaneously avoiding being needed by others. Compulsive caregiving involves excessive self-sacrifice and displacement of one’s own needs by those of attachment figures. Compulsive careseeking reflects an overreliance on attachment figures to assume responsibility for one’s problems and defining relationships by the amount of care one receives. Alpha coefficients for the PAS scales in this sample were: compulsive self-reliance (.70), compulsive caregiving (.84), compulsive careseeking (.79), angry withdrawal (.83), and PAS total score (.72).

**RESULTS**

**Adult Attachment Styles**

The AAQ was completed by participants in both samples and data were combined. Table 3 presents the percentages of each group that selected each of Bartholomew and Horowitz’s (1991) four categorical descriptors as most representative of their relationship experiences. The distribution was not random, $\chi^2(9) = 33.86, p < .001$. Examination of Table 3 indicates that submissive dependents were most likely to endorse a fearful adult attachment style and love dependents were the least likely to do so. In contrast, love dependents were most likely to endorse a secure adult attachment style, and submissive dependents were the least likely to do so. It is notable that love dependents were more likely to report a secure adult attachment style than controls. Many fewer participants selected preoccupied or dismissive adult attachment styles; however, the trend for submissive dependence to be more strongly associated with these two categories than exploitable and love dependence is consistent.

---

6. Separate chi-square analyses for men and women revealed similar results. Therefore we present analysis based on all participants.
A 2 (gender) × 4 (group) multivariate analysis of variance (MANOVA) was conducted using the four PAS scales as dependent variables. The group ×
gender interaction was not significant—approximate \( F(12, 339) = 1.64, \)
ns. The main effect for gender was not significant, \( F(4, 111) = 1.91, \)
ns. The main effect for group was significant, approximate \( F(12, 339) = 3.13, \)
\( p < .001 \). Follow-up univariate analyses of variance (ANOVAs) revealed a
significant main effect for group on angry withdrawal, \( F(3, 118) = 4.26, \)
\( p < .01 \), compulsive caregiving, \( F(3, 118) = 2.71, p < .05 \), compulsive care-
seeking, \( F(3, 118) = 7.61, p < .001 \), and total PAS score, \( F(3, 118) = 8.62, \)
\( p < .001 \) (see Table 4). Post hoc Tukey tests revealed that submissive
dependents were more likely than love dependents and controls to respond
with angry withdrawal when an attachment figure is experienced as unavail-
able. Post hoc Tukey tests also revealed that exploitable and submissive
dependents reported engaging in more compulsive careseeking behaviors
than controls. Submissive dependents had significantly higher total PAS
scores than all three other groups. Exploitable dependents obtained signifi-
cantly higher total PAS scores than love dependents and controls. Although
the univariate main effect for group was significant for compulsive caregiv-
ing, no two groups significantly differed from each other, although controls
obtained the lowest average score.

### Table 3
Percentage of Dependent and Control Groups
by Adult Attachment Category

<table>
<thead>
<tr>
<th>Adult Attachment Style</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissive</th>
<th>Secure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love ((n = 73))</td>
<td>15.1%</td>
<td>12.3%</td>
<td>1.4%</td>
<td>71.2%</td>
</tr>
<tr>
<td>Exploitable ((n = 41))</td>
<td>26.8%</td>
<td>12.2%</td>
<td>9.8%</td>
<td>51.2%</td>
</tr>
<tr>
<td>Submissive ((n = 35))</td>
<td>45.7%</td>
<td>17.2%</td>
<td>11.4%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Control ((n = 66))</td>
<td>33.3%</td>
<td>4.5%</td>
<td>18.2%</td>
<td>44.0%</td>
</tr>
</tbody>
</table>

**Note.** \( \chi^2 (9) = 33.86, p < .001 \). Data from samples 3 and 4 combined.
<table>
<thead>
<tr>
<th>Pathological Attachment</th>
<th>Groups</th>
<th>df</th>
<th>F</th>
<th>Gender</th>
<th>Gender × Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Love</td>
<td>Exploitable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angry Withdrawal</td>
<td></td>
<td>4.26**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsive Caregiving</td>
<td></td>
<td>2.71*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsive Careseeking</td>
<td></td>
<td>7.61***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsive Self-Reliance</td>
<td></td>
<td>2.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAS Total</td>
<td></td>
<td>8.62***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parental Representations</th>
<th>Groups</th>
<th>df</th>
<th>F</th>
<th>Gender</th>
<th>Gender × Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Affiliation</td>
<td></td>
<td>3.90*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Control</td>
<td></td>
<td>4.03**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternal Affiliation</td>
<td></td>
<td>5.28**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternal Control</td>
<td></td>
<td>1.37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loneliness</th>
<th>Groups</th>
<th>df</th>
<th>F</th>
<th>Gender</th>
<th>Gender × Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
<td>6.23**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td>1.77</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** Different superscripts indicate significantly different means based on post-hoc Tukey test (α = .05). PAS = Pathological Attachment Scale.

1 Data from Sample 4.
2 Data from Sample 3.
*p < .05. **p < .01. ***p < .001.
Parental Representations

Parental representations have been widely investigated in psychopathological populations (Bornstein, 1993b), and there has been increasing interest in their relations with normal personality traits (Pincus & Ruiz, 1997; Pincus, 1998). Bornstein (1993b) pointed out that investigators differ in their interpretation of what measures of parental representation actually assess. Some presume that measures of the perception of parents assess veridical reports of parental behavior and that representations reflect (potentially unreliable) static copies of specific parent-child interactions (e.g., McCrae & Costa, 1988). Our assumption is consistent with the alternative view that parental representations are not simply veridical depictions of significant others but are emotionally laden dynamic structures reflecting the currently activated internalized representation of self and other that changes over time and development (Blatt, Auerbach, & Levy, 1997; Blatt, Stayner, Auerbach, & Behrends, 1996; Pincus & Ruiz, 1997).

A 2 (gender) × 4 (group) MANOVA was conducted using ratings of parental affiliation and control when participants were 5 to 10 years old as dependent variables. The gender × group interaction was not significant, $F(12, 276) = 1.71, ns$. The main effect for gender was not significant, $F(4, 90) = 2.03, ns$. The main effect for group was significant, $F(12, 276) = 2.64, p < .01$. Follow-up univariate analyses revealed a main effect for group on maternal affiliation, $F(3, 97) = 3.90, p < .05$, maternal control, $F(3, 97) = 4.03, p < .01$, and paternal affiliation, $F(3, 97) = 5.28, p < .01$ (see Table 4). All groups rated their parents as affiliative and somewhat controlling. Post hoc Tukey tests indicated that submissive dependents rated mothers as significantly less affiliative than love dependents and controls. Love dependents rated fathers as significantly more affiliative than all three other groups. Submissive dependents rated mothers as significantly more controlling than controls.

Loneliness

Loneliness may be considered a distressing but normal aspect of dependent phenomenology. A 2 (gender) × 4 (group) ANOVA was conducted using scores on the Revised UCLA Loneliness Scale as the dependent variable. The group × gender interaction was significant, $F(3, 114) = 2.84, p < .05$. The main effect for gender was significant, $F(1,
114) = 5.73, \( p < .05 \). Consistent with previous investigations of loneliness (Schultz & Moore, 1986; Stokes & Levin, 1986), males reported greater loneliness than females. The main effect for group was significant, \( F(3, 114) = 6.96, \ p < .001 \). We conducted follow-up ANOVAs and post hoc Tukey tests separately for each gender (see Table 4). For females, the main effect for group was not significant, \( F(3, 72) = 1.77, \ ns \). For males, the main effect for group was significant, \( F(3, 42) = 6.23, \ p < .01 \). Post hoc Tukey tests revealed that male exploitable and submissive dependents reported significantly more loneliness than male love dependents and controls. Control males reported an intermediate level of loneliness, while, notably, male love dependents reported significantly less loneliness than all three other groups. The significant interaction is accounted for by the differential relationship between dependency and loneliness for men and women. Specifically, the component traits of dependence are differentially related to loneliness in men but appear unrelated to loneliness in women.

**DISCUSSION**

Our results support the view that a meaningful range of dependent phenomenology is captured by expression of the component traits of submissive dependence, exploitable dependence, and love dependence. Dependency reflects a core motivation to obtain and maintain nurturant and supportive relationships. However, Pincus and Gurtman (1995) posited that the three components of dependency suggest differing psychological and instrumental resources that others are depended on to provide. We propose that love dependence reflects the need to obtain and maintain proximal relationships with nurturant others (i.e., attachment figures) as suggested in the item, “Having close bonds with other people makes me feel secure.” Love dependence appears related to more adaptive functioning (e.g., secure adult attachment style, lower scores on aspects of pathological attachment, and lower scores on loneliness for males). Additionally, love dependents exhibited more affiliative parental representations. Finally, love dependence is also positively related to Conscientiousness and Openness to Experience (Pincus & Gurtman, 1995). An integration of these results suggests that underlying object-relations of love dependents reflect the view of others as friendly and available and the self as loveable. Love dependents successfully bond with attachment figures in adaptive ways and appear open to mutual
shared experiences and commit to relationships readily. Their internal object relations generate inner dialogue supportive of approaching others and expecting care in return, effectively buffering the individual from loneliness.

Exploitable dependence reflects the need to obtain and maintain acceptance and appreciation from others and to avoid conflict, as suggested in the sample items, “I do things that are not in my best interest in order to please others,” and “I worry a lot about offending or hurting someone who is close to me.” In most analyses, exploitable dependents exhibited intermediate scores on psychosocial variables, consistent with circumplex logic. Their object relations and inner dialogue reflect a view that others will be available and appreciative if they are pleased by the exploitable individual. Exploitable dependents do seek care compulsively in a conflict-avoidant way. For example, Newes, Pincus, Claudius, Jones, Skinner, and Wilson (1998) found that individuals high in exploitable dependence were less able to refuse unwanted sexual petting and intercourse than submissive and love dependents. While this strategy of pleasing others to obtain relatedness is successful, exploitable dependent males report significant loneliness, suggesting that such relationships may be much more satisfying for the other person involved.

Submissive dependence reflects the need to obtain and maintain instrumental support from others, as suggested by the sample item, “I have a lot of trouble making decisions by myself.” Submissive dependence was consistently related to higher scores on maladaptive constructs (e.g., fearful adult attachment style, angry withdrawal, compulsive care-seeking, total pathological attachment score, and loneliness in males). Additionally, submissive dependence was also related to recollections of lower parental affiliation and higher maternal control. Finally, submissive dependence was also negatively related to Conscientiousness and Openness to Experience (Pincus & Gurtman, 1995). An integration of these results suggests that underlying object-relations of submissive dependents reflect the view of others as controlling and less available and the self as ineffective and weak (see also Bornstein, 1996). They seek out others for instrumental guidance in compulsive ways and feel angry when needed others do not respond. This pattern in males is particularly likely to lead to loneliness as social bonding in males typically involves shared activities (Eagly, 1987; Maccoby, 1990; Stokes & Levin, 1986), which submissive males are more likely to avoid due in part to passivity and inner dialogue reinforcing negative representations of self and other.
The three-vector model of dependent traits captures nicely the diverse phenomenological and behavioral correlates of dependency summarized by Bornstein (1992, 1993a), including (a) affiliative behavior and interpersonal sensitivity (love dependence), (b) suggestibility (exploitable dependence), and (c) yielding, compliance, and guidance-seeking (submissive dependence). The 3VDI provides an initial set of brief, reliable scales assessing the component interpersonal traits of dependency.

Dependent Personality and Dependent Personality Disorder

We have proposed that dependent personalities are motivated to obtain and maintain nurturant and supportive relationships in variable ways that can be operationalized by the three component interpersonal traits of submissive dependence, exploitable dependence, and love dependence. We also suggest that these component traits be used to reconceptualize dependent personality disorder in ways that preserve the continuity between normal and abnormal dependency. Below, we outline three approaches to dependent personality disorder from this perspective that we suggest merit further theoretical development and empirical investigation.

A maturational perspective. Recently, there has been recognition that dependency may be expressed in immature and mature forms (Blatt et al., 1995; Rude & Burnham, 1995). Both these investigations suggested that measures of dependency reflected two facets. The first typified immature dependency and was labeled “neediness,” reflecting “a generalized, undifferentiated dependence on others and feelings of helplessness and fears of desertion and abandonment” (Blatt et al., 1995, p. 334). The second facet typified mature dependency and was labeled “connectedness” or “relatedness,” reflecting “a valuing of relationships and a sensitivity to the effects of one’s actions on others” (Rude & Burnham, 1995, p. 337). Importantly, neediness was associated with depression, while connectedness was associated with measures reflecting well-being (Blatt et al., 1995; Rude & Burnham, 1995). Similar to the results of Pincus and Gurman (1995), both neediness and connectedness exhibit positive correlations with neuroticism but a differential pattern of correlations with Conscientiousness and Openness to Experience (Zuroff et al., 1996). Recently, Mongrain (1998) asserted that “it is
imperative for future research to recognize the distinction between mature and immature forms of dependency and to test both dimensions” (p. 169).

One approach to reconceptualizing dependent personality disorder is to consider the arc from submissive dependence to love dependence as a maturational dimension. Zuroff et al. (1996) reported correlations between neediness, connectedness, and the two dimensions of the IPC. Specifically, neediness correlated \(-.50\) with dominance and \(-.01\) with nurturance, while connectedness correlated \(-.13\) with dominance and \(.26\) with nurturance. We used these correlations to project the two constructs onto the IPC using trigonometric methods (Wiggins & Broughton, 1991). Neediness was located at \(268.85^\circ\), almost precisely on the submissive dependence vector on the IPC. Connectedness was located at \(333.43^\circ\), falling almost directly between the exploitable dependence and love dependence vectors on the IPC. The arc of dependency, spanning the friendly submissive quadrant of the IPC, may be demarcated by immature dependency (submissive dependence) at one end and mature dependency (love dependence) at the other. Personality disorder may then be reconceptualized in maturational terms. Adults expressing immature forms of dependency would then be considered as having a dependent personality disorder. This is consistent with our results suggesting that submissive dependence is associated with higher scores on maladaptive constructs, lower levels of parental affiliation, and higher levels of maternal control.

An interpersonal perspective. The IPC tradition has based conceptions of psychopathology on the intensity of specific interpersonal behaviors and the rigidity of interpersonal behaviors over time (Pincus, 1994). “Abnormality consists of the rigid reliance on a limited class of interpersonal behaviors regardless of the situational influences or norms, that often are enacted at an inappropriate level of intensity. Normality, then, is simply the flexible and adaptive deployment, within moderate levels of intensity, of behaviors encompassing the entire circle, as varied interpersonal situations dictate” (Carson, 1991, p. 190). From this perspective, all component traits of dependency can be adaptive or maladaptive. Dependent personality disorder may be conceptualized as a rigid reliance on behaviors expressing any or all component traits in situations that are not congruent with such expression. Further, extremely intense expressions of love dependence (e.g., a clinging need to absolutely maintain physical proximity to a nurturant figure) might be just
as maladaptive as extreme expression of exploitable and submissive dependence. For example, extreme love dependence may reflect failure in development of the capacity to be alone (Winnicott, 1958).

**A broader trait perspective.** The IPC is a structural variant of the FFM dimensions of Agreeableness and Extraversion (McCrae & Costa, 1989). As such, it is possible to consider the component interpersonal traits of dependency in relation to the remaining dimensions of the FFM. Only Neuroticism exhibited consistent (positive) relations with love dependence, exploitable dependence, and submissive dependence (Pincus & Gurman, 1995), as well as with neediness and connectedness (Zuroff, et al., 1996). One might expand the core definition of dependence to include Neuroticism. While normal dependency may include mild levels of affective reactivity and/or vulnerability to distress, perhaps dependent personality disorder is associated with higher levels of Neuroticism. That is, individuals with the core motive to obtain and maintain nurturant and supportive relationships, who are also highly reactive and distress-prone, might experience greater impairment when those on whom they depend for needed psychological and instrumental resources are unavailable or unresponsive.

The three perspectives outlined above are clearly not mutually exclusive. The IPC is a personality trait dimensional model that appears to have great potential for the integration of multiple perspectives on dependency and dependent personality disorder. Beyond dependency, it is possible that similar logic and methodology could be employed in reconceptualizing other personality disorders for which the core dysfunction involves maladaptive expression of interpersonal traits.

**Potential limitations of the present studies.** Participants in all studies were university students, and a necessary next step would be to evaluate Pincus and Gurman’s (1995) three-vector model in clinical populations. In addition, while not optimal, the between-subjects approach taken in Study 2 offers useful information for the reconceptualization of dependent personality and dependent personality disorder by utilizing normal personality dimensions to identify the scope and variability of this important individual difference. Implications of the expanded scope of dependent phenomenology may advance theoretical understanding of the heterogeneity of dependent persons, their experiences, and their behavior. This stands in contrast to the DSM, which views dependent
personality disorder as a discrete categorical diagnosis. Although we used a between-groups approach to our data collection and analysis in Study 2, this is not meant to reify categorical boundaries. While it is possible that a dependent person could express all three component traits with equal frequency or intensity (Bornstein, 1995a, 1998b), the trait approach to personality and its pathology suggests it is more likely that individuals diagnosed with a personality disorder would rigidly use a preferred strategy for obtaining needed psychological or instrumental resources from others that reflects a particular underlying component trait of dependency (Bornstein, 1998c; Pincus, in press).

REFERENCES


学霸图书馆（www.xuebalib.com）是一个“整合众多图书馆数据库资源，提供一站式文献检索和下载服务”的24小时在线不限IP图书馆。

图书馆致力于便利、促进学习与科研，提供最强文献下载服务。