Development and Testing of the Codependency Assessment Tool

Cyrilla Hughes-Hammer,¹ Donna S. Martsolfo,¹ and Richard A. Zeller²

Codependency constitutes a significant health risk, particularly for women, because codependent women are often involved in abusive and potentially harmful relationships. Individuals who are identified as codependent can engage in therapy and gain knowledge and freedom from such relationships. However, there is no reliable and valid measure of codependency that is consistently used to identify these individuals. This article describes the development and testing of the Codependency Assessment Tool, a multivariate tool that conceptualizes codependency as a construct comprising five factors: (1) Other Focus/Self-Neglect, (2) Low Self-Worth, (3) Hiding Self, (4) Medical Problems, and (5) Family of Origin Issues. The instrument has excellent reliability and validity. Its test-retest reliabilities = .78 to .94; Cronbach's α = .78 to .91. Criterion validity was determined to be established by using known groups; construct validity was established by comparing the codependency dimensions with depression.

Codependency is a learned behavior, expressed by dependencies on people and things outside of the self, which neglect and diminish one's own identity. It is a significant health problem. It has been estimated that 40 million Americans have been properly labeled as codependent (Goff & Goff, 1988). Some authors suggest that codependent relating is a widespread problem and a common way of interacting in American society (Schaef, 1987). In particular, women who are codependent are often involved in abusive relationships and potentially harmful living situations. Individuals who engage in therapy (self-help or professional) have gained both knowledge and freedom from harmful codependent relationships (Collins, 1993; Luff, 1990; Uhle, 1994; Webster, 1990). Identification of individuals who are codependent is an important step in assisting them to engage in therapy. However, there is no reliable and valid measure of codependency that is consistently used for identifying these individuals for clinical or research purposes. The purpose of this article is to describe the development and testing of the Codependency Assessment Tool (CODAT), a multivariate tool with excellent reliability and validity that conceptualizes codependency as a construct comprising five factors.

DEFINITION OF CODEPENDENCY

Early Attempts at Definition

Codependency as a concept evolved from the chemical dependency field in the treatment of families of alcoholics. Initially, the symptoms of codependence were thought to be caused by the stress of living with an addicted person. After further study, it became apparent that, even as the addicted person improved, the codependent behavior of family members often continued, and sometimes escalated, indicating that a separate phenomenon was occurring. As family members sought therapy and revealed the histories of their families of origin, it was apparent that many had alcoholic...
parents or abusive caretakers. Codependency as an independent construct began to be studied more intensely by professionals in the chemical dependency field (Beattie, 1987; Cermak, 1986; Kitchens, 1991; Wegscheider-Cruse & Cruse, 1990; Whitfield, 1987).

The construct of codependency continues to be developed and expanded beyond the field of chemical dependency. Results of a study conducted by O'Brien and Gaborit (1992) suggest that codependency can exist independent of chemical dependency.

Efforts toward definition validation of the concept resulted in a consensus in 1990 when the National Council on Codependence developed the following definition: "Codependency is a learned behavior, expressed by dependencies on people and things outside the self; these dependencies include neglecting and diminishing of one's own identity. The false self that emerges is often expressed through compulsive habits, addictions, and other disorders that further increase alienation for the person's true identity, fostering a sense of shame" (Whitfield, 1991, p. 10). Although this consensus definition was developed in 1990, writers in the field continue to delineate their own unique definitions emerging from clinical practice and research on existing codependency scales.

Current Conceptualizations

Numerous conceptualizations of codependency exist in the literature. However, Wegscheider-Cruse and Cruse (1990) conceptualize codependency as having three core symptoms (delusion, repression, compulsion) and three resulting complications or associated symptoms (low self-worth, relationship problems, medical problems). The authors' synthesis of the Wegscheider-Cruse and Cruse model with other codependency literature suggests one core concept, "Other Focus/Self-Neglect," and four codependency subconcepts, "Family of Origin Issues," "Low Self-Worth," "Hiding Self," and "Medical Problems." We now turn to a discussion of these concepts.

Other Focus/Self Neglect. Other Focus/Self Neglect is defined as the compulsion to help or control events or people through manipulation or advice-giving. It focuses on control and boundary issues. According to Cermak (1986, 1991) reviewed by Hands & Dear (1994), the defining criteria for codependency include

1. Control of both self and others
2. Taking responsibility for meeting others' needs to the point of self-neglect
3. Distortion of boundaries related to separation and intimacy with others
4. Enmeshed relationships

Wright and Wright (1991, 1995) have developed a model in which codependency is conceptualized as a personality syndrome, as a way of relating, or both. The model encompasses six concepts reflecting codependent relating (Excitement/Challenge, Worth Dependency, Jealousy, Exaggerated Sense of Responsibility, Rescue Orientation, and Change Orientation).

O'Brien and Gaborit (1992) conceptualize codependency as having to do with the appropriateness of interpersonal relationships and self-autonomy. These authors enumerate five factors related to codependency, which include: (1) Care Taking, (2) Other/Referenting, (3) Surrendering the Self, (4) Faulty Communication Skills, and (5) Lack of Autonomy.

Carson & Baker (1994) indicate that subjects in their study of college women who had abuse histories scored significantly higher on the Beck Codependency Assessment Scale factors of Control and Family Background (t = 12.98, P < .001).

Roehling and Gaumond (1996) conducted a study to determine the reliability and validity of the Codependent Questionnaire (CQ) using a sample of 42 clients who were receiving psychotherapy at a private outpatient clinic. Results of the study showed that therapists' ratings of the subjects' display of codependent symptoms were significantly correlated with subscale scores on the CQ for Responsibility (r = .51, P < .01), Control (r = .48, P < .01), and Enmeshment (r = .41, P < .05). The therapists in this study tended to associate codependency with the behaviors of taking responsibility for meeting the needs of others while excluding personal needs, accompanied by a strong need to control others.

Wise and Ferreiro (1995) conducted a qualitative descriptive study of six nurses who identified themselves as having difficulties with codependency. Indepth interviews were conducted with these nurses to determine how these nurses identified themselves as codependent and what effects
their codependency had on their practice of professional nursing. Caretaking that was either enslaving or overinvolved mothering emerged as a significant theme for these nurses. Furthermore, the study revealed that the need to control patients was an issue for these nurses.

**Family of Origin Issues.** Current unhappiness as a result of growing up in a family that was troubled, chemically dependent, or overwrought with problems in which thoughts and feelings were not expressed and discussed and in which affection was not openly displayed, is considered under the broad heading Family of Origin Issues. Various authors suggest that individuals who grow up in such families learn roles that include codependent relating (Black, 1981; Wegscheider-Cruse, 1984). Codependency is further conceptualized as conformity to unhealthy family rules set in such families (Subby & Friel, 1984). Based on the work of Ackerman (1983) with children of alcoholics who were not yet adults, codependency is conceptualized as rejection and chaos. The personality development of these children had been affected by the perceived rejection in their families of origin. Favorini (1995) suggests that issues surrounding control and strong caregiving orientation result from behaviors used to survive as a child in a dysfunctional family.

Carson and Baker (1994), in a study of 171 adult female university students, found a relationship between codependency and childhood abuse. A history of abuse or parental alcoholism was reported by 59% of the sample. Gotham and Sher (1996) found a similar relationship between a family history of alcohol abuse and scores on the Codependency Assessment Questionnaire. Roehling, Koelbel, and Rutgers (1996) studied codependence and unhealthy parenting practices in a sample of 218 high school students. Findings indicated that parental abuse was a mediating factor between parental alcoholism and codependence in the subjects.

In a study of 442 undergraduates, Crothers and Warren (1996) found that subjects’ codependency was significantly correlated with several parenting styles of their own parents. In particular, codependency was positively correlated with mother’s codependency, father’s codependency, compulsive mother, coercive mother, coercive father, and controlling father.

**Low Self Worth.** Codependency includes thoughts of self-criticism and self-hatred and feelings of shame, self-blame, and humiliation. Fossum and Mason (1986) indicate that the shame evolves in individuals as a result of being raised in shame-bound families.

In a study of 97 wives of either alcoholic (N = 31), psychiatric (N = 35), or dental (N = 31) patients at a Veterans Administration inpatient unit and outpatient clinic, Hinkin and Kahn (1995) showed that the subjects who had a positive family history of alcoholism had significantly lower self-esteem scores when compared with those with negative family histories.

**Hiding Self.** Codependency includes use of a positive front to cover and control negative emotions with repression of feelings. Thus, a false self emerges (Whitfield, 1987). In the Wright and Wright (1991, 1995) model, three concepts conceptualize codependency as a personality syndrome (externalization of blame, minimization of difficulty, and unrealistic positive expectations). Uhle (1994) lists denial as one of the core issues of codependence.

In a study of 442 undergraduates, Crothers and Warren (1996) showed that codependency was significantly correlated with inhibition of self-expression (r = .55, P < .001).

In-depth interviews revealed the importance of denial (Wise and Ferreiro, 1995). Initially, the six nurse subjects were unable to state how their codependent behavior had adversely affected patient care. However, when asked by the researchers to describe differences in their clinical practice as a result of their recovery process, the subjects were able to give concrete examples of negative effects of their codependent behavior on their practice. Furthermore, unresolved feelings about their own emotions made it difficult for the subjects to discuss patients’ emotional concerns with them.

**Medical Problems.** Codependency includes a sense of current ill health when compared with family and friends, accompanied by worry and preoccupation with real or imagined health difficulties and impending body failure.

Gotham and Sher (1996) showed that physiological complaints or symptoms were significantly correlated with total codependency scores (r = .24, N = 467, P < .0001). Hinkin and Kahn (1995) found that wives of dental patients had significantly
fewer somatic symptoms when compared with wives of alcoholics.

Loughead, Kelly, and Bartlett-Voigt (1995) tested the efficacy of a 16-week therapy group for self-identified codependent individuals. A pretest, post-test comparison indicated that somatic symptoms were significantly decreased after participation in the group therapy sessions.

Summary

Codependency's core concept, Other Focus/Self-Neglect, and its four subconcepts have been shown to have identifiable antecedents and profound consequences. Codependency has been widely embraced, and treatment for codependency is thought to be possible (Shockley, 1994). Codependence is now well established in the minds of professionals and the public. What is needed now is the development of a reliable and valid measure of the dimensions of codependence (Meyer, Peterson, and Stoffel-Rosales (1991). The development and testing of the CODAT, which is a multivariate tool that conceptualizes codependency as a construct comprising five factors, provides a response to this challenge.

TOOL DEVELOPMENT

The current study develops an instrument that reliably, validly, and comprehensively measures the dimensions of codependency. The theoretical model developed by Wegscheider-Cruse and Cruse (1990) and the authors' earlier review were used to guide construction of this measure of codependency.

Phase I: Development of Items

A systematic, logical process was designed to identify the content domain or major concepts. Then, items designed to sample each domain were written. The initial pool of 250 items was generated. The pool of items used in this analysis was gathered from a multitude of sources (Hands & Dear, 1994). A substantial amount of qualitative investigation and quantitative pretesting went into the refinement of these items. These items were constructed such that the content of the items was as isomorphic with the content of the concepts as possible. Independent review confirmed this judgment; hence, the authors assert that the items, as empirical representations of their respective concepts, are content valid. Table 1 presents a sample of these items.

The content validity of these items was established by eight experts in the field of codependency and alcoholism. Those identified as experts were all certified addictions counselors and held masters degrees or higher in counseling, psychology, or psychiatric nursing. These experts were asked to review the instrument to (1) evaluate each item according to its relevancy for the concept of codependency, (2) identify items that were omitted, and (3) to suggest areas of item improvement or modification. Based on the feedback of the experts, 70 items were omitted, and other items were revised.

Phase II: Devising of the Codependency Assessment Tool

The revised 180-item instrument was mailed to the same group of eight experts. Each expert was asked to rate each item on a four-point Likert scale regarding relevancy of the item to the construct of codependency. Scoring was as follows: 1 = not relevant; 2 = somewhat relevant; 3 = relevant; and 4 = very relevant. Items with a content validity index of less than 3.5 were dropped from the pool of items. A total of 153 items were retained, and minor adjustments to item construction were made in response to reviewer suggestions.

Reviewers were also asked to evaluate the underlying concepts for their relevancy and completeness. Identification of areas of omission and suggested areas of improvement or modification were also requested from the reviewers. All underlying concepts were verified to be appropriate indicators of codependency.

Finally, the 153-item CODAT contained 26 items to assess denial, 19 to assess repression, 20 to assess compulsion, 30 to assess self-worth, 18 to assess relationship problems, 13 to assess control issues, 13 to assess boundary issues, and 14 to assess medical problems. The responses were scored as follows: 1 = rarely; 2 = occasionally; 3 = often; 4 = usually, and 5 = most of the time. Twenty percent of the items were reversed to eliminate response set bias.

Phase III: Instrument Testing

Factor analysis. The 153-item instrument was tested with a group of 236 men and women who were clients at various settings that provide mental
Table 1. A Sample of Codependency Items

<table>
<thead>
<tr>
<th>Other focus/Self-neglect</th>
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<tbody>
<tr>
<td>1. I feel compelled or forced to help other people solve their problems (ie, offering unwanted advice)</td>
<td>2. I try to control events and how other people should behave</td>
<td>3. I become afraid to let other people be who they are and allow events to happen naturally</td>
<td>5. I try to control events and people through helplessness, guilt, coercion, threats, advice-giving, manipulation, or domination</td>
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<tr>
<td>4. I feel ashamed of who I am</td>
<td>17. I pick on myself for everything, including the way I think, feel, look, act, and behave</td>
<td>21. I measure myself too much</td>
<td>24. I feel humiliated or embarrassed</td>
</tr>
<tr>
<td>10. I put on a happy face when I am really sad or angry</td>
<td>11. I keep my feelings to myself and put up a good front</td>
<td>13. I hide myself so that no one really knows me</td>
<td>14. I keep my emotions under tight control</td>
</tr>
<tr>
<td>6. I worry about having stomach, liver, bowel, or bladder problems</td>
<td>7. I am preoccupied with the idea that my body is failing me</td>
<td>9. I feel that my general health is poor compared with my family and friends</td>
<td>12. I feel ill and run down</td>
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Table 2. Percent of Variance Explained by the First 10 Extracted Factors

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<tbody>
<tr>
<td>Factor</td>
<td>153 Items</td>
<td>Cumulative Percent</td>
<td>25 Items</td>
</tr>
<tr>
<td>I</td>
<td>28.6</td>
<td>28.6</td>
<td>27.5</td>
</tr>
<tr>
<td>II</td>
<td>5.7</td>
<td>34.3</td>
<td>12.1</td>
</tr>
<tr>
<td>III</td>
<td>4.3</td>
<td>38.6</td>
<td>9.1</td>
</tr>
<tr>
<td>IV</td>
<td>3.4</td>
<td>42.0</td>
<td>7.8</td>
</tr>
<tr>
<td>V</td>
<td>2.7</td>
<td>44.7</td>
<td>6.0</td>
</tr>
<tr>
<td>VI</td>
<td>2.6</td>
<td>47.3</td>
<td>4.0</td>
</tr>
<tr>
<td>VII</td>
<td>2.3</td>
<td>49.6</td>
<td>3.7</td>
</tr>
<tr>
<td>VIII</td>
<td>2.0</td>
<td>51.6</td>
<td>3.0</td>
</tr>
<tr>
<td>IX</td>
<td>1.9</td>
<td>53.5</td>
<td>2.8</td>
</tr>
<tr>
<td>X</td>
<td>1.8</td>
<td>55.3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

health care. The settings of this convenience sample included outpatient clinics, private practices, inpatient settings, and codependency treatment groups.

We used SPSS (SPSS, Inc., Chicago, IL), to extract 10 factors from a correlation matrix of the 153 items. Table 2 presents the percent of variance explained by each of the first 10 extracted factors. An examination of these explained variances shows that a substantial percentage of the variance (28.6%) was extracted on the first factor. On factor II, the percentage of variance extracted drops dramatically to 5.7%. Thereafter, there is a modest and steady decline in the percentages of variance explained. A total of 44.7% of the variance is explained on the first five factors.

These 10 factors were rotated to a Varimax solution. In this solution, factors emerged for each of the concepts noted above. Additional factors had weak loadings and ambiguous theoretical definitions. Subsequent iterations eliminated items with small factor loadings and/or those with weak theoretical definitions on the factors they defined. Finally, the five best items defining each of the five concepts were selected.

Ten factors were then extracted from a correlation matrix of these 25 items. Table 2 also presents the variance explained by the first 10 factors extracted from this matrix. An examination of these percentages of variance explained shows that a similar percentage of the variance was extracted on the first factor (27.5%). However, subsequent factors had more variance explained in the factor analysis of the 25 items compared with the factor analysis of the 153 items. Indeed, the first five factors of the factor analysis of 25 items accounted for 62.5% of
the variance, up substantially from the 44.7% of the variance on the first five factors of the factor analysis of 153 items.

Moreover, in the factor analysis of the correlation matrix of 25 items, there was a clear disjunction in variance explained at five extracted factors. That is, factor V accounted for 6.0% of the variance, a third higher than the 4.0% of the variance explained on factor VI; however, the 4.0% variance explained factor VI was only 10% higher than the 3.7% explained in factor VII. This disjunction in explained variance constitutes the inference that there are five systematic factors in this matrix while the remaining factors are random. This is an application of the Scree test.

The first five factors of the factor analysis on the correlation matrix of these 25 items, rotated to a Varimax solution, are presented in Table 3. An examination of this rotated factor structure reveals that each factor is strongly defined by five items. These item clusters are the items that were written to measure their respective dimensions of codependence. The factor loadings of these items on their respective factors range from .62 to .84. None of these items was loaded on any factor other than the factor they defined higher than .41.

The factor analysis results led to the revision of the Wegscheider-Cruse and Cruse (1990) model. The final theoretical model developed in this study is shown in Figure 1. The core symptom of Other Focus/Self-Neglect is depicted centrally in the model. Three of the associated symptoms of codependency are conceptualized as overlapping with the core symptom in the model and consist of Low Self-Worth, Hiding Self, and Family of Origin Issues. Medical problems are conceptualized as resulting from both the core and other three associated symptoms. Table 1 lists representative CODAT questions for the core symptom and each of the four associated symptoms of codependency. The five items that defined each factor were summed into five subscales. Each subscale represented its respective conceptual dimension of codependence. The subscales were then summed into a total scale, the general measure of codependency.

Reliability of 153-item scale. Internal consistency and test-retest stability of the measure was tested in two studies. The first used a sample of 32 students from a class of undergraduate baccalaureate nurses in a course in psychiatric nursing. The 153 item CODAT was administered to this sample
on two occasions. Table 4 presents the results of this analysis. Examination of Table 4 reveals that the internal consistency, assessed by Cronbach's α, of the total scale was .97 at time I and .96 at time II. The internal consistencies of the subscales ranged from .82 to .91 at time I and from .83 to .91 at time II. The test-retest reliability with use of Pearson's correlation for the total scale was .90. The test-retest reliabilities of the subscales ranged from .78 to .94.

Reliability of 25-item tool. Once the items defining each factor were established, a scale was constructed for each factor. The five items measuring each concept were summed to create a scale score for each respondent. Table 4 also presents the Cronbach's α reliability coefficients for the five 5-item scales. An examination of Table 4 reveals that the α reliabilities vary from .78 for Medical Problems to .85 for Other Focus/Self-Neglect. The total scale α reliability is .91. The average reduction in reliability resulting from the decreased number of items was .05.

Criterion group validity. Criterion validity was determined by using known group techniques. The CODAT was administered to a control group of 38 professional women (university professors, administrators, and scientists) and to a group of 21 women who were being treated for codependency in mental health outpatient treatment settings. Table 5 presents the results of this analysis.

For the 153-item tool, the total scale in the control group had a mean of 185.2, significantly lower than the 272.2 mean in the codependent group ($t = 4.98, df = 57, P < .01, \eta^2 = .42$). This mean difference accounted for 42% of the variance in the CODAT scores; comparable with a correlation coefficient of .65. Similar results can be observed for the five dimensions of CODAT. In all cases, the codependent group had higher scores than the control group. In all cases, this difference was statistically significant. The $\eta^2$ scores varied from a low of .15 for Hiding Self, to a high of .38 for Self-Worth. Criterion group validity has thus been strongly established for both the 153-item tool and the 25-item tool.

**DISCUSSION**

Results of the studies to develop and test the CODAT reveal that the measure has good internal consistency, test-retest reliability, and criterion group validity.

The major advantages of the CODAT for assessing codependency are its comprehensiveness and its grounding in the Wegscheider-Cruse and Cruse (1990) theoretical model. The original model developed by Wegscheider-Cruse and Cruse (1990) conceptualized the core symptoms to be denial, repression, and compulsion. In this study, the results of the factor analysis indicate that Other Focus/Self-Neglect (control and boundary issues) constitute the core symptom; the compulsion symptom was incorporated in the core symptom of Other Focus/Self-Neglect in the revised model. Wegscheider-Cruse and Cruse (1990) conceptualized the secondary symptoms of codependency to be low self-worth, relationship problems, and medical problems. In the revised model, secondary symptoms that emerged from the factor analysis were Low Self-Worth, Hiding Self (repression and denial), Medical Problems, and Family of Origin Issues. The core symptom of codependency (Other Focus/Self-Neglect) suggests that the codependent individual neglects the self and focuses on others; as a result, the individual develops a host of secondary symptoms. The individual suffers from low self-esteem as a result of lack of identity formation and unresolved family of origin issues. The family of origin issues contribute to a learned behavior of repression and denial of feelings. The person's focus on the need to care for, and control, others results in neglect of the self, which eventually can lead to the onset of a variety of medical problems.

An additional advantage of the CODAT is that its construct validity with depression has been established (Hughes-Hammer, Martsolf, & Zeller, 1998). For example, substantial overlap exists between each dimension of codependency and depression. The least powerful dimension of codependency in
independently predicting depression is Other Focus/ Self Neglect.

The use of the CODAT in further research on codependency is justified. This instrument will shed substantial light on the degree to which codependency is related to issues of power and loss of self.

ACKNOWLEDGMENT

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REFERENCES


Black, C. (1981). It will never happen to me. Denver: M.A.C.


### Table 5. Criterion Validity

<table>
<thead>
<tr>
<th>Factors</th>
<th>153-item Tool</th>
<th>26-item Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Controls (N = 38)</td>
<td>Codependents (N = 21)</td>
</tr>
<tr>
<td>Other focus/Self-neglect</td>
<td>.44</td>
<td>.21</td>
</tr>
<tr>
<td>Self-worth</td>
<td>.36</td>
<td>.38</td>
</tr>
<tr>
<td>Hiding self</td>
<td>.25</td>
<td>.15</td>
</tr>
<tr>
<td>Medical</td>
<td>.31</td>
<td>.33</td>
</tr>
<tr>
<td>Family</td>
<td>.65</td>
<td>.27</td>
</tr>
<tr>
<td>Total scale</td>
<td>.42</td>
<td>.48</td>
</tr>
</tbody>
</table>

NOTE: All differences between group means P < .01.