Assessment of Codependency Behavior in Two Health Student Groups

Jerry Clark, Virginia C. Stoffel

Key Words: education, occupational therapy • students, occupational therapy • recruitment

The present study examines the relationship between codependency and caregiving to determine whether codependent persons tend to be attracted to caregiving professions. The study also examined the relationship between codependency, self-esteem, and locus of control, as measured by the Friel Co-Dependency Assessment Inventory (Friel, 1985; Friel & Friel, 1987), the Tennessee Self-Concept Scale (Fitts, 1965), and the Internal-External Locus of Control Scale (Rotter, 1966), respectively. Voluntary participants consisted of 15 occupational therapy students and 15 health information administration (HIA) students believed to be different from one another with respect to the caregiving aspects of their respective professions. The occupational therapy group scored significantly lower than the HIA group on the measure of codependency (m = 21.2 vs. m = 28.8, respectively) (t(28) = 2.258, p = .05). No other significant differences were noted between groups for the other test scores. Only codependency scores between 31 and 60, that is, moderate-to-severe and severe concerns (n = 6), had a strong correlation with self-esteem scores (r = - .974) and a moderate correlation with locus of control scores (r = .683). No student in the occupational therapy group scored within the moderate-to-severe or severe range. The results did not support a relationship between codependency and choice of a caregiving-oriented profession. Further, only moderate-to-severe and severe codependency scores were indicative of low self-esteem and high external locus of control.

Implications of this study suggest incorporation into the academic preparation of occupational therapy students information regarding codependency and self-assessment of codependency to facilitate awareness of the student's need to nurture others. Replication of this study with registered occupational therapists and certified occupational therapy assistants to determine the extent to which these findings are applicable is suggested.

The term codependency has its origins in the treatment of alcoholism. Although treatment programs initially focused primarily on the alcoholic, then on teaching the family how not to perpetuate the disease, eventually the focus on the family intensified and the diagnostic category of codependency emerged (Laing, 1989a).

According to Wegscheider-Cruse (1984), a codependent person is anyone who (a) is in a love or marital relationship with an alcoholic, (b) has one or more alcoholic parents or grandparents, or (c) was raised within an emotionally repressive family. She estimated that 96% of the population is codependent. Larsen (1983) estimated that the number of alcohol-addicted persons in the United States was between 10 and 15 million and that each one of these persons adversely affected 20 to 30 others.

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Given these figures, the number of codependent persons in this country actually exceeds that of the total population. Gomberg (1989) reflected these concerns around use of the term codependency.

The aforementioned definitions were primarily based on an association with alcoholism. Regardless of whether a person had the symptoms of codependency, if he or she was in a relationship with a chemically dependent person, then he or she was considered to be codependent (Friel & Friel, 1988). Over time, codependency has come to take on a definition and identity unto itself. Subby and Friel (1984) defined it as a dysfunctional pattern of living that was learned from a set of rules within the family system.

More recently, at the First National Conference on Co-Dependency held in Scottsdale, Arizona, codependency was defined as a pattern of painful dependence on compulsive behaviors and others’ approval in an attempt to find safety, self-worth, and identity (Laing, 1988a). These behaviors are recognized as a direct outgrowth of virtually any dysfunctional family experience (Germak, 1985, 1986; Friel & Friel, 1988; Subby & Friel, 1984; Whitfield, 1987; Woititz, 1983). Bowen (1978) noted that in a dysfunctional family system, survival of the family is given priority over all individuals’ needs for nurturance. Approval, acceptance, and attention are rarely provided unconditionally to the child in a dysfunctional family. More often than not, these are provided through attainment of family goals, maintenance of family secrets (e.g., alcoholism, child abuse), or fulfillment of certain family roles (e.g., the doer, the enabler, the lost child, the hero, the mascot, the scapegoat). The child develops a pattern of learned dependence on those behaviors that elicit family approval and thus reinforce the child’s sense of self-worth and identity.

In this view, codependency is seen as a progressive process whereby self-denial and concomitant caring for other family members is based on the assumption that doing so will foster love, closeness, acceptance, and security in the family (Germak, 1985; Wegscheider-Cruse, 1985). Although the child is given ample opportunity to care for others, his or her own emotional needs for nurturance and caring remain essentially unfulfilled. This also means that the child will enter adulthood with a vast reservoir of unmet needs (Friel & Friel, 1988). These needs may then manifest themselves in the classic symptoms of codependency, some of which include extreme sense of responsibility to others, inability to appropriately care for the self, increased focus on others’ needs, decreased focus on needs of the self, overreaction to things external to the self, underreaction to things internal to the self, low self-esteem, low self-concept, high external locus of control, and denial (Beattie, 1987, 1989; Friel & Friel, 1988; Wilson-Schaef, 1986, 1987).

The symptom of denial is one of the more perplexing aspects of codependency. It serves as a natural defense mechanism that offers protection against a reality that is too painful to allow into conscious awareness. Used sparingly, such as in response to a traumatic event, this mechanism serves a healthy purpose. However, for a child raised in a dysfunctional family, denial becomes a daily means with which to cope with the ongoing trauma that is elicited by this experience (Friel & Friel, 1988). When the child reaches adulthood, the denial system that once served the child so well now begins to interfere with his or her ability to recognize his or her own thoughts and emotions. Denial is often exhibited by persons who have yet to face their codependency concerns. Because persons in denial deny the symptoms of codependency, assessments and diagnoses that are based on self-report criteria can be quite difficult.

Codependency is universal in that virtually everyone has had dysfunctional family experiences (Friel & Friel, 1988). Thus, it can be postulated that different people would develop varying degrees of such behavior depending on the effect that these experiences have had on them, the degree to which the resultant codependent behavior was reinforced, and the strength of their denial system. Further, the degree to which codependency has had a negative influence on one’s life would determine whether it is dysfunctional for a particular person.

In this sense, codependency can be conceptualized as a behavioral continuum. One pole represents the absence of codependent behavior, or no negative influence (i.e., functional), and the opposite pole represents severe codependent behavior, or strong negative influence (i.e., dysfunctional). Points along the continuum represent mild to moderate codependent behavior. Given that the literature contends that virtually everyone has had dysfunctional family experiences and is therefore codependent to some extent, we offer this rudimentary conceptualization of codependency as a behavioral continuum to explain the various levels of codependency that can come to be exhibited by different persons.

The polar ends of the continuum can be illustrated in a comparison between one person who is a healthy striver, characterized by no or few codependent concerns, and another person who is a perfectionist, characterized by severe codependent concerns. The healthy striver typically exhibits the following behaviors: (a) sets high, challenging, but realistic standards and goals; (b) is able to laugh at self and engage in positive self-talk; (c) pays attention to details, but focuses on main issues; (d) knows how to assess his or her own limits, asks for help, delegates; (e) focuses on accomplishments; and (f) examines criticism, takes that which is warranted, and disregards that which is not. Conversely, the perfectionist typically (a) sets impossibly high standards and goals; (b) engages in negative self-talk; (c) obsesses over small details; (d) does not know how to assess his or her own limits and is unable to ask for help; (e) dwells on mistakes; and (f) takes criticism personally. Persons who fall
at various points along the continuum would be expected to engage in the above behaviors to a greater or lesser degree depending on their own level of codependency concerns and state of function.

To further complicate matters, societal systems can serve to perpetuate some codependent behaviors (Friel & Friel, 1988; Wilson-Schaef, 1987). Indeed, according to Wilson-Schaef (1987), society not only supports and encourages codependency, but also views such behavior as a positive way to function within the system. For example, in business, it is common for employees to work overtime. In fact, for employees to succeed in some professions, such overtime is often an unspoken requirement. Given codependents’ desire for approval and recognition, this situation provides them with a perfect opportunity to capitalize on these behaviors. Consequently, they may choose to work an inordinate amount of overtime because they want to gain recognition and approval from employers rather than because of realistic job responsibilities. Nevertheless, employers may interpret this behavior as a sign of the employee’s dedication and commitment to corporate interests.

Perhaps in no other societal system is this positive view of codependent behavior more evident than in the health care system. The health profession, with its emphasis on devotion to the care of others, is an ideal medium for the expression of the nurturing aspects of the codependent person. It has been purported that many codependent persons become professional caregivers for this very reason (Reverby, 1987; Sherman, Cardea, Gas- kill, & Tyran, 1989; Smalley, 1990; Wilson-Schaef, 1987). According to Wegscheider-Cruse (1984), approximately 83% of all nurses are the first-born children of an alcoholic parent, thus by definition they are codependents. One should note, however, that Wegscheider-Cruse’s statement was based on association rather than on a quantifiable measure of the severity of codependency. A 1985–1986 poll conducted by the Arizona-based Sierra Tucson Treatment Center found that 25% of the persons seeking treatment for codependent behaviors worked in the field of human services (Laign, 1989b). However, it was not clearly defined as to what constituted a field of human service.

Wilson-Schaef (1987) stated that due to frequent feelings of low self-worth, codependent persons tend to find meaning in making themselves indispensable to others. Given their need for others’ approval, they are willing to do whatever it takes to be liked. Consequently, their caretaking can often escalate to the point of workaholism. Codependents are willing to sacrifice so much of themselves that they set aside their own physical, emotional, and psychological needs for the sake of others. They are detrimentally selfless. They may often find themselves overburdened and exhausted, which in turn may lead to stress-related problems or symptoms such as headache, muscle tension, ulcers, and high blood pressure.

The cumulative effect of this chain of events might well be one of burnout. Cherniss (1980) described burnout as a disease of overcommitment that is caused by chronic work stress and that is typically characterized by a negative affect. Smalley (1989) sees occupational therapists as developing codependent caregiving patterns when their role definition and sense of self-esteem are dependent on patient outcomes. The person may emotionally withdraw from the job as a means to cope with such stress. However, this coping response may also result in dissatisfaction with one’s job performance and an inability to find meaning and purpose in the work. The person may ultimately choose to leave the job.

Many of the health professions have been cited as high-stress occupations, occupational therapy notwithstanding, due to the intensive and intimate nature of the therapeutic process (Cherniss, 1980). Consequently, therapists may be at risk for developing burnout. The few studies that have been conducted to examine this issue as it specifically relates to occupational therapy have had mixed results with reported levels of burnout that ranged from low to moderate (Brolfier, Bender, Cyranowski, & Velletri, 1987; Rogers & Dodson, 1988; Sturgess & Poulsen, 1983). Further, the measurement norms used in burnout studies noted above may not have been applicable to occupational therapists, and as such the results should be viewed as tentative.

Given these potential ramifications, it would appear to be critical that the health professions address codependency issues early in the career of health care personnel. Ideally, this should occur at the student level, because the insight that is gained will enable potential caregivers to recognize both the positive and negative aspects of their codependent behaviors and the effect that these may have on their personal and professional interactions.

It must be stressed that the relationship between codependency and caregiving that has been reported in the literature has not been based on objective and quantitative tests, but rather on association. For example, codependency is assumed to be associated with family members of an alcohol-dependent person. Other assumptions about codependent persons being drawn toward caregiving professions have been suggested. Therefore, we believe that because these conclusions are based on these assumptions, they should be carefully scrutinized.

The present study was an attempt to clarify this issue through a quantitative examination of the relationship between caregiving professions and the purported tendency for codependent persons to be drawn toward them. Two groups of health and rehabilitation professional students, believed to be different with respect to the caregiving aspects of their respective professions, were quantitatively assessed and compared for codependency characteristics. The codependency scores for each group were compared with scores from two
measures of constructs commonly associated with codependency, that is, self-esteem and locus of control.

If there is no real tendency for codependent persons to be drawn toward caregiving-oriented professions, we would expect to find no significant difference between the student groups with respect to this variable. Further, if a continuum is an accurate conceptualization of codependency, we would expect that only the more severe manifestations of codependency would reflect the classical codependency symptom picture, for example, low self-esteem and external locus of control.

The following null hypotheses were formed:

1. There will be no significant difference between the codependency scores of students pursuing a career in a profession that is caregiving-oriented and the scores of students pursuing a career in a profession that is not caregiving-oriented.
2. There will be no significant difference between the student groups with respect to the scores obtained from a measure of self-esteem.
3. There will be no significant difference between the student groups with respect to the scores obtained from a measure of locus of control.
4. There will be no correlation between high codependency and low self-esteem scores.
5. There will be no correlation between high codependency and high locus of control scores, that is, externality.

Method

Subjects

Undergraduate health and rehabilitation professional students from the University of Wisconsin-Milwaukee were voluntary participants in this study. Fifteen juniors in the occupational therapy program comprised the occupational therapy group and 15 juniors in the health information administration (HIA) program comprised the HIA group. Both student groups were in the first week of classes during the first semester after acceptance into their respective academic programs. With the exception of race, the groups were similar with respect to sex, mean age, marital status, number of children, and family income (see Table 1).

Measurement

Three assessments were employed. The Friel Co-Dependency Assessment Inventory (Friel, 1985; Friel & Friel, 1988) was used to measure codependency. This assessment consists of two parts—a brief demographic survey and 60 true-false statements. The demographic survey allowed the students to identify the following issues as applying to them or not: chemical dependency or abuse in themselves or their immediate or extended family; stress-related problems or symptoms in themselves, their immediate or extended family, or anyone close to them; satisfaction with their work and career; satisfaction with the number and quality of their friendships; and satisfaction with the relationships with their mate, partner, or spouse.

To control for acquiescent response sets, the even-numbered test items in the second part of the Friel Co-Dependency Assessment Inventory are worded in the codependent direction and the odd-numbered items are not. The odd-numbered responses are reflected before a total score is computed. A total score is then the sum of all “true” answers after reflection.

Total scores between 0 and 9 indicate few codependent concerns; between 10 and 20, mild concerns; between 21 and 30, mild-to-moderate concerns; between 31 and 45, moderate-to-severe concerns; and over 45, severe concerns (Friel & Friel, 1988). According to Friel and Friel (1987), the range of scores typically found for significant others who are in family programs for chemical dependency treatment is 30 to 55.

Reliability of the inventory was reported to be between .83 and .85 on fairly homogeneous samples with a somewhat restricted range (Friel & Friel, 1987). Because the assessment did not have a validity scale, all items on the L and K scales from the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1951) were used for this purpose.

The second assessment used was the clinical and research form of the Tennessee Self-Concept Scale (Fitts, 1965). This scale consists of 100 Likert-type items that are designed to measure various components of self-concept, for example, self-esteem, identity, and self-satisfaction. The Tennessee Self-Concept Scale yields subscores for the components, which in turn are combined to produce a total P score, the most indicative score of overall self-

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**Table 1**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>OT Group (n = 15)</th>
<th>HIA Group (n = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-25 (n = 26.5)</td>
<td>19-40 (n = 26.8)</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Black</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Married</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>No. of children</td>
<td>0 (n = 14)</td>
<td>0 (n = 11)</td>
</tr>
<tr>
<td>Income (m)</td>
<td>$28,670</td>
<td>$25,333</td>
</tr>
</tbody>
</table>

Note. OT = occupational therapy; HIA = health information administration.
confidence would be maintained. At this point, each student was asked to begin the tests.

Although their anonymity was assured at the outset, they could base their results on what is usually most true for them. The students were also told that they could privately discuss the results with the supervising professor, in which case they could base their results on what is usually most true for them. The students were then instructed to respond to the statements as honestly as possible, in the belief that behavior is influenced by forces within one's control (i.e., internal locus of control) or whether behavior is influenced by forces beyond one's control (i.e., external locus of control). Each test item is composed of two statements that represent polar views of locus of control, and the respondent selects between the two.

The scale yields a single unidimensional score with a high score indicating externality, that is, the number of external test items that were chosen. The possible range of scores is 0 to 23. Rotter (1966) reported a series of studies using adult and adolescent subjects with individual means ranging from 5.94 to 10.00 and an overall mean of 9.56. Relatively speaking then, a moderate-to-strong internal orientation would be interpreted as the norm for a positively adjusted individual. However, extreme scores in either direction would be cause for concern.

Rotter (1966) reported internal reliability to be .70. Test-retest reliability ranged widely from .49 to .83, and these lower coefficients are suspect. Validity studies that examined internal and external locus of control as an independent personality trait often had mixed results, but generally they found the scale to be a valid measure of this construct (Anastasi, 1988).

Procedure

Before the start of each test session, the students were instructed to respond to the statements as honestly as they could based on what is usually most true for them. Although their anonymity was assured at the outset, they were also told that they could privately discuss the results of their tests with the supervising professor, in which case confidentiality would be maintained. At this point, each participant was given a number-coded test packet that identified group membership. The students were then asked to begin the tests.

The packets were compiled in the following order: (a) cover sheet (informed consent), (b) Friel Co-Dependence Assessment Inventory, (c) Rotter Internal-External Locus of Control Scale, and (d) Tennessee Self-Concept Scale.

Following completion of the tests, the packets were collected and checked for omitted responses. The scores were then tallied and transcribed onto individual and group summary score sheets and statistically analyzed.

Results

An independent two-tailed t test of the group data from the Friel Codependency Assessment Inventory revealed a significant difference between the occupational therapy group (m = 21.2) and the HIA group (m = 28.3) \( t(28) = 2.258, p = .05 \). No other significant differences at the 05 level were noted between groups for the other test scores. Table 2 shows a comparison of the ranges and means for the group scores for each of the test instruments.

Pearson product-moment correlation coefficients were calculated across groups between the Friel Co-Dependency Assessment Inventory score ranges and the other test scores. For codependency scores between 10 and 20 (i.e., mild concerns) \( (n = 9) \), there was a low correlation with Tennessee self-esteem scores \( r = - .144 \) and Rotter locus of control scores \( r = - .166 \). For codependency scores between 21 and 30 (i.e., mild-to-moderate concerns) \( (n = 15) \), there was a low correlation with Tennessee self-esteem scores \( r = .149 \) and Rotter locus of control scores \( r = .247 \). For codependency scores between 31 and 60 (i.e., moderate-to-severe and severe concerns) \( (n = 6) \) there was a strong correlation with Tennessee self-esteem scores \( r = - .974 \) and a moderate correlation with Rotter locus of control scores \( r = .683 \).

Table 2

<table>
<thead>
<tr>
<th>Instrument</th>
<th>OT Group</th>
<th></th>
<th>HIA Group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Friel Co-Dependency Assessment (Friel, 1985; Friel &amp; Friel, 1987)</td>
<td>10-29</td>
<td>21.2</td>
<td>12-52</td>
<td>26.8</td>
</tr>
<tr>
<td>Tennessee Self-Concept Scale (Fitts, 1965)</td>
<td>200-390</td>
<td>549.5</td>
<td>272-390</td>
<td>347.8</td>
</tr>
<tr>
<td>Rotter Internal-External Locus of Control Scale (Rotter, 1966)</td>
<td>2-22</td>
<td>10.1</td>
<td>4-16</td>
<td>9.7</td>
</tr>
</tbody>
</table>

Note. OT = occupational therapy; HIA = health information administration.

*Normal range = 318-421, normal \( M = 345.57 \); Normal \( M = 9.56 \).
Discussion

Hypothesis 1, which stated that there would be no significant difference between the codependency scores of the two student groups, was not supported by the results. Six students in the occupational therapy group had mild codependent concerns, and the remaining 9 students had mild-to-moderate concerns. Thus, none of the students from the occupational therapy group had scores that fell at the moderate-to-severe range or above. In contrast, 3 students in the HLA group had mild codependency concerns, 6 had mild-to-moderate concerns, 4 had moderate-to-severe concerns, and 2 had severe concerns. None of the students had scores that were less than 10 (i.e., few concerns).

Although it was expected that the groups would not differ on this variable, the fact that the HLA group actually scored higher than the occupational therapy group was an interesting outcome. This is especially so given that the literature makes much of the point that codependent persons are drawn to caregiving professions, while at the same time downplaying the incidence of codependency in professions that are not caregiving oriented (Laing, 1989b; Reverby, 1987; Sherman et al., 1989; Wegscheider-Cruse, 1984; Wilson-Schaef, 1987). As stated previously, this could lead the reader to conclude that codependency is not prevalent among other professions and consequently ignore the implications of codependency with respect to those professions. The results of our study show that codependent concerns can be just as prevalent and severe, in fact, more so, among students that are pursuing a career in a profession that is not caregiving oriented as among students that are pursuing a career that is caregiving oriented.

One explanation for this result is that perhaps the HLA students who scored high on the codependency factor may have made their career choices in part because they recognized that their codependent behavior had a negative influence on their interpersonal relationships. Although they may not have recognized this behavior as codependent per se, they may have felt uncomfortable or dissatisfied with the quality of their interpersonal relationships, and as such they may have viewed a caregiving-oriented profession, in which these relationships are the focal point, as inappropriate for them. This argument is based on the assumption that some of the students considered caregiving as a primary career choice before opting for a career that is not caregiving oriented. This assumption may be an erroneous one. It must be acknowledged that many of the students may have chosen health information administration because it appealed to them on some intrinsic level rather than because of codependency concerns. Nevertheless, the results raise some interesting questions in this regard.

Conversely, the occupational therapy group had a relatively low level of codependent concerns. These students may have felt more comfortable with the quality of their interpersonal relationships because their milder codependency concerns did not tend to negatively influence these interactions. Consequently, they may have seen caregiving as an appropriate career choice.

Although the students in the occupational therapy group had codependency scores that were significantly lower than those of the students in the HLA group, this should not overshadow the prevalence of codependency within both groups. Recall that Wegscheider-Cruse (1984) stated that an estimated 83% of all nurses were considered to be codependent based on association (e.g., being in a relationship with an alcoholic). In the occupational mild-to-moderate range of codependency, that is, a score of 21 to 30. In the HLA group, 12 of the 15 students (80%) scored within this range or above. Because one purpose of the range classification system of the codependency inventory is to distinguish between persons with various levels of codependency concerns, we must ask the following: At what point along the range is a person codependent, that is, what point is indicative of dysfunction?

Although the results of the present study cannot answer this question definitively, a tentative answer can be formed. The results showed that only those students that had codependency scores of 31 and above, that is, moderate-to-severe and above, tended to have low self-esteem and high locus of control scores. If these results are considered in combination with the research done by Friel and Friel (1987), which reports that persons in treatment for codependency score between 30 and 35, the implication is that dysfunction may become an issue for persons with moderate-to-severe or severe concerns. Further research is needed to test this hypothesis.

Hypotheses 2 and 3 stated that there would be no significant differences between the student groups with respect to those professions. The results showed that, for example, the scores within the range classification system of the codependency inventory is to distinguish between persons with various levels of codependency concerns, we must ask the following: At what point along the range is a person codependent, that is, what point is indicative of dysfunction?

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correlation coefficient. The results showed that for codependency scores within the range of mild and mild-to-moderate concerns, that is, 10 to 20 and 21 to 30, respectively, low correlations were found between these two constructs. However, for codependency scores of 31 and above, the correlations were strong ($r = -0.974$). Only high codependency scores tended to be associated with low self-esteem scores.

Hypothesis 5 stated that there would be no correlation between codependency and high locus of control scores (i.e., externality). Once again, such correlations were found only for the codependency scores of 31 and above ($r = 0.683$). Therefore, only high codependency scores tended to be associated with high locus of control scores.

These results suggest that perhaps only those persons with extremely high levels of codependency concerns would tend to have problems with low self-esteem and an externally oriented locus of control. The results further suggest that perhaps the literature should distinguish between mild and severe manifestations of codependency when associations between these constructs are made. Although limitations with respect to sample size and sampling procedures may not allow for a complete and accurate inference of these generalizations, the suggested implications of the results do warrant further research.

The limitations that may have weakened the potential accuracy of such generalizations were that (a) the subjects were not randomly chosen; (b) the sample size was small; (c) the student sample groups may not have been truly representative of the health and rehabilitation professions; (d) the assumption that the two groups differed with respect to caregiving orientation may have been in error; and (e) denial may have precluded accurate answers to the test items. Because denial is a potential confounding variable in self-report data of any type, it would seem to be more so for the assessment of codependency behavior (Beattie, 1987, 1989; Friel & Friel, 1988; Wilson-Schaef, 1986, 1987).

**Conclusion**

Although many of the issues related to codependency found support in the results of the present study, some did not. Concerning the relationship between caregiving and codependency, there was no tendency for the occupational therapy students to score higher on the measure of codependency than the HIA students. Further, only those students who scored at the moderate-to-severe level and above on the codependency inventory tended to exhibit low self-esteem and externally oriented locus of control. If the latter characteristics are in fact associated with only extreme codependency concerns, then how many other phenomena commonly referred to in the literature follow this pattern as well, for example, chemical dependency and abuse, stress-related problems and symptoms, and denial? Further research is needed to answer such questions.

Perhaps to some extent codependency, self-esteem, and locus of control issues may have influenced these students' choice of professions. Some of the HIA students may have recognized codependency, self-esteem, and locus of control issues as problematic with respect to their interpersonal relationships. Consequently, they may have seen caregiving as an inappropriate choice as the therapeutic relationship is a focal point. Conversely, the students in the occupational therapy group did not appear to have problems with these issues and therefore may have felt more comfortable with themselves and the quality of their interpersonal relationships. They may have seen caregiving as an appropriate career choice.

If the various ranges of the inventory are accurate indicators of the severity of codependency, then all the participants in the present study exhibited some degree of this behavior. However, many of the test items in the inventory are worded such that it is highly unlikely that anyone would not have a score of at least 10 on the scale. Further, the range classification system precludes a range for no concerns and allows only for the score of 0 to fulfill this function. Virtually everyone will have at least a few codependent concerns. Further research with respect to construct validity of the inventory may be needed.

If virtually everyone is codependent to some extent and if future research provides additional support to the results of the present study, then it is important that the literature make the distinction between mild, moderate, and severe manifestations of this behavior and how this classification affects function. Additionally, some degree of codependence may be healthy. Subjective and unquantified references to a relationship between caregiving, codependent behavior, low self-esteem, and external locus of control should be tempered with reference to the severity of codependency. Until such time as objective and quantitative data can be gathered, to which the present study has contributed, generalizations should be avoided. To do otherwise only propagates a negative conception of the caregiving professions.

Other implications for the study might include consideration of incorporating into academic preparation of occupational therapy students such information and self-assessment of codependency. Students could examine, in a qualitative manner, their own needs to care and nurture others and how this may affect their ability to engage in self-nurturing.

Future studies could include a replication of this study in both registered occupational therapists and certified occupational therapy assistants nationwide to determine to what extent these findings might be applicable. Further establishment of norms for the Friel Co-Dependence Assessment Inventory may assist in determining...
when codependency concerns may be functional or disfunctional. ▲

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References