Comparison of Symptom Severity between Clients at a University Counseling Center and a Community Mental Health Agency

Joshua E. Gunn, Frederick G. Grieve, Richard M. Greer, Adrian Thomas

The present study examined the levels of psychological distress of clients presenting at both a university counseling center and a community mental health center in the same mid-south city. Clients completed the Brief Symptom Inventory (BSI) at intake. Clients presenting at both units showed a significant symptom severity. Clients presenting to the community mental health center had significantly higher levels of psychopathology; nevertheless, 64% of the college sample met criteria for psychiatric disturbance.

University counseling centers have been in a constant state of transition since their inception. Many variables, including economics, the social and political climate on and off campus, staff interests, and changing consumer needs have driven the direction of the modern counseling center (Heppner & Neal, 1983). Throughout the more than 70 years that university counseling centers have served student populations, researchers have spent a great deal of effort in characterizing every aspect of the counseling center client. The purpose of this study was to examine how counseling center clients differ from community mental health center clients.

It may seem intuitive that clients of a counseling center would present with less severe symptoms than clients of a community mental health center. However, Aniskiewicz (1979) found no difference between students requesting psychotherapy and personal counseling at a counseling center and those who requested similar services at a mental health unit. Additionally, recent work by Benton, Robertson, Tseng, Newton, & Benton (2003) suggests that people with psychological difficulties are now enrolling in college, who previously would not have been able to attend because of those psychological problems. This might mean that if differences did exist in the past that they may no longer exist today.

* Joshua E. Gunn is a graduate student in counseling psychology at Purdue University. Frederick G. Grieve is an associate professor of psychology at Western Kentucky University. Richard M. Greer is director of the University Counseling and Testing Center at Western Kentucky University. Adrian Thomas is an associate professor of psychology at Auburn University. Correspondence concerning this article should be sent to rick.grieve@wku.edu
University Counseling Centers: Typical Clients and Services

The trend over the last two decades has been that the number of students seeking counseling services and the severity of their problems are increasing (Aniskiewicz, 1979; Benton et al., 2003; Gallagher, 2002; Johnson, Ellison, & Heikkinen, 1989). For over 20 years Gallagher (2002) has conducted the National Survey of Counseling Center Directors, a project that aggregates questionnaire data from 274 counseling center directors across the United States. The latest survey (2002) reported that students with severe psychological problems are a concern for 83.0% of counseling centers, and 83.5% of counseling center directors reported an increase in the severity of psychological disorders among their clientele over the past five years. The survey reported that more campuses are offering psychiatric services and that the mean number of psychiatric consultation hours provided had doubled from the previous year.

Despite the claim that this is a recent phenomenon (i.e., Kitzrow, 2003), older research indicates that the clients at counseling centers have been presenting with psychopathology for a while. In 1989, Johnson et al. used the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1983) to assess the type and severity of psychological symptoms of all counseling center clients for one year. Nearly two thirds of counseling center clients, 65.1% of males and 62.0% of females, had scores suggestive of a psychiatric disorder.

Beyond traditional studies looking only at services rendered, examination of other indices also reveals an increase in the number of students requiring psychological services. Comparing current data with past data indicates that there has been an increase in the number of college and university students being hospitalized and an increase in the number of third parties who had to be warned because of potential harm students posed to themselves or others (Gallagher, 2002). It has been suggested (May, 1988) that the frequency of psychiatric hospitalizations can serve as a rough index of the level of acute distress experienced by college students and also of the strain being placed on college and university counseling services.

Benton et al. (2003) examined the problems of college students across a 13-year period by reviewing archival data from 1988 to 2001 of the Case Descriptor List (CDL), an instrument that provides a count of the problems addressed during therapy using general categories such as relationship issues, depression, and personality disorders. Analysis of the CDL data revealed that, of the 19 problem areas addressed, 14 showed significant increases across time in the percentages of clients having difficulties. Also of note, up until 1994 relationship problems were the most frequently reported client problem, but during 1994 and the following years stress/anxiety problems were reported most frequently.
Taken together, the results of extant research suggest that university counseling centers are seeing more complex problems of both the normal college developmental and relational nature, and of a more serious nature including anxiety, depression, and personality disorders. Therefore, an examination of how the presenting problems of college students compare to the population in general would seem especially relevant to university administrators and psychological service providers.

Such an empirical examination will also help address a potential methodological problem with the existing research. One popular method of determining the severity of college student problems has been to poll counseling center staff and directors. Though the results of such surveys have been consistent, as Gilbert (1992) points out, they lack operational definitions for many of their terms and fail to assess the magnitude of the increases they propose. Further, such polls are subject to the biases of the counseling center staff.

**Community Mental Health Centers: Typical Clients and Services**

Results of research conducted in community mental health centers also suggest that young adults are experiencing more severe psychological symptoms, echoing the results of college and university counseling center research. Silverman (1980) used data from a midwestern community mental health center to examine the distribution of presenting problems of its clientele. Results indicated that younger persons had higher instances of suicide attempts, drug/alcohol abuse, and interpersonal problems, while older persons reported more emotional and cognitive disorders.

Bell, LeRoy, Lin, and Schwab (1981) conducted an epidemiologic field survey of 3,674 individuals living in the southeastern United States. Results showed that 15.1% of the sample had profiles similar to those of a known psychiatric population. Contrary to expectations, these data suggested that late adolescents and young adults were experiencing increasingly severe psychological symptoms. This is further supported by the fact that the suicide rate is rapidly increasing, almost doubling from 1960 to 1980. More recent statistics show that in 2000, suicide was the third leading cause of death among 15- to 24-year-olds (Office of Statistics and Programming, 2004).

**University Counseling Centers Compared to Community Mental Health Centers**

Past studies, such as Johnson et al. (1989) have successfully examined the type and severity of psychological symptoms of counseling center clients, yet failed to provide any comparison with a relevant non-student population. Similarly, Aniskiewicz (1979) compared symptom severity at a counseling center and a mental health unit; however, both units were a part of the same university. It remains unclear if similar results would be found if the mental health unit was not an on-campus service, especially considering the noted increase in psychological symptom severity in counseling centers since the study was conducted. Further, even though there appears to be an increase in levels of...
psychopathology being seen at college counseling centers, there is no a priori reason to believe that such individuals will have levels of psychopathology as great as individuals who present at a community mental health center.

The present study was designed to offer some insight into the question of comparable levels of psychopathology by comparing the presenting levels of symptom severity at intake of clients seeking therapy at a university counseling center with the level of symptom severity at intake of clients seeking therapy at a community mental health center in the same area. The research hypothesis for this study was as follows: The psychological symptoms of clients at a university counseling center are less severe than those of clients of a community mental health center.

Method

Participants and Design

The participants of this study were 27 clients of a counseling center in a medium size, public, southeastern university, and 19 clients from a community mental health center in the same area. In both settings, participants were asked at intake if they would be willing to participate in a study comparing clients of university counseling centers and community mental health centers. The university counseling center clients were 66.7% female and 33.3% male, were mostly single (92.6%), were in their senior year of college (40.7%), reported being financially dependent on their parents, and had never received counseling before (77.8%). The community mental health center clients were 68.4% female and 31.6% male, were equally likely to be single (36.8%), married (36.8%), or divorced (21.1%), were financially independent, and had not received counseling before (57.9%). The community mental health center clients (M age = 30.1, SD = 8.3) were significantly older than the university counseling center clients (M age = 23.4, SD = 6.1), t (1, 44) = -3.15, p = .003, while the university counseling center clients (M = 14.9 years, SD = 1.3) had a significantly higher level of education than the community mental health center clients (M = 12.4 years, SD = 1.8), t (1, 44) = 5.51, p < .001.

The study used a between-groups design. The independent variable was the treatment setting (university counseling center vs. community mental health center), and the dependent variable was the severity of psychological symptomology.

Measures

Demographic Survey. All participants filled out a brief questionnaire that assessed age, race, gender, level of education, income level, marital status, and previous counseling.

Symptom Checklist. The Brief Symptom Inventory (BSI; Derogatis, 1993) measures severity of psychological symptomology. The BSI is an abbreviated form of the Symptom Check List-90-Revised (SCL-90-R; Derogatis, 1983), and correlates well with the SCL-90-R, with r's ranging from .92 to .99 (Derogatis,
The BSI consists of 53 items that are answered on a four-point scale ranging from not at all (0) to extremely (4). The scale asks clients to rate the level of distress by that problem during the past seven days. The BSI yields nine scale scores (Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism). In addition, a Global Severity Index (GSI) can also be calculated. The nine scale scores are computed by calculating the mean score per item for each scale. Thus, the scale scores range from 0 to 4. The GSI is also calculated by computing the mean per item answered and ranges from 0 to 4. These mean scores are then transformed into T-scores. A T-score greater than 63 (90th percentile) on the GSI indicates the presence of a psychiatric disorder. According to Derogatis (1993), the GSI provides the most accurate measure of psychological disturbance.

Data Collection Procedures

We gave participants a packet that contained the informed consent document, the demographic questionnaire, and the BSI. Participants read and signed the informed consent form. They then completed the demographic questionnaire and the BSI, and replaced the contents of the packet, excluding the informed consent document, which was stored separately.

Data Analysis Procedures

The nine scale scores and the GSI scale of the BSI were subjected to a Multivariate Analysis of Variance (MANOVA). We used setting (university counseling center vs. community mental health center) as the independent variable. We followed up with a series of univariate ANOVAs to further explore the results of the MANOVA.

Results

The results of the MANOVA showed a main effect, \( F(1, 35) = 5.08, p < .001, \eta^2 = .59 \). Results of the univariate ANOVAs indicated that participants at the university counseling center had significantly lower levels of overall symptom severity than participants at the community mental health center. In addition, students at the university counseling center scored significantly lower on each of the nine scale scores than clients at the community mental health center (see Table 1). Effect sizes (eta squared) ranged from .15 to .40 with all but one effect size exceeding .20. Across the 10 dependent variables the average eta squared was .30, meaning that the setting accounted for on average 30% of the variance on the dependent variable.

We also analyzed the current data from a diagnostic perspective. The BSI manual states that GSI scores of 63 or greater, or two scale scores of 63 or greater, constitute psychiatric disturbance. When these cut scores are applied to the current data, a similar pattern emerged. While only 64% of university counseling center clients would be classified as having psychiatric disturbance,
fully 100% of community mental health center clients would meet these criteria.

**Discussion**

The purpose of the present study was to compare the severity of psychological symptomology between university counseling center and community mental health center clients. The hypothesis that the psychological symptoms of clients at a university counseling center would be less severe than those of clients of a community mental health center was supported.

The present study found a high incidence of psychiatric disturbance in both a community mental health center, where it was expected, and a university counseling center, where it was not necessarily expected. The rate of psychiatric disturbance at the university counseling center was about 65% of the clients and the rate at community mental health centers was 100% of the clients. This is consistent with Johnson et al. (1989), who found that 65% males and 62% of females in their counseling center met the same criteria on the SCL-90-R (which is the expanded version of the BSI).

### Table 1

**Comparison of BSI Scale Scores and Global Severity Index between UCC\(^a\) clients and CMHC\(^b\) clients**

<table>
<thead>
<tr>
<th>BSI Scale</th>
<th>UCC (n = 27)</th>
<th>CMHC (n = 19)</th>
<th>F</th>
<th>p</th>
<th>(\eta^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somatization</td>
<td>0.47 (0.61)</td>
<td>1.72 (1.16)</td>
<td>22.77</td>
<td>&lt;.001</td>
<td>.34</td>
</tr>
<tr>
<td>Obsessive Compulsive</td>
<td>1.18 (1.17)</td>
<td>2.43 (1.21)</td>
<td>12.36</td>
<td>.001</td>
<td>.22</td>
</tr>
<tr>
<td>Interpersonal Sensitivity</td>
<td>1.26 (1.16)</td>
<td>2.56 (0.96)</td>
<td>16.03</td>
<td>&lt;.001</td>
<td>.27</td>
</tr>
<tr>
<td>Depression</td>
<td>1.19 (1.20)</td>
<td>2.51 (0.88)</td>
<td>16.66</td>
<td>&lt;.001</td>
<td>.28</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.82 (1.04)</td>
<td>2.38 (1.01)</td>
<td>25.62</td>
<td>&lt;.001</td>
<td>.37</td>
</tr>
<tr>
<td>Hostility</td>
<td>1.11 (1.06)</td>
<td>1.98 (1.06)</td>
<td>7.61</td>
<td>.008</td>
<td>.15</td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>0.28 (0.49)</td>
<td>1.69 (1.22)</td>
<td>29.50</td>
<td>&lt;.001</td>
<td>.40</td>
</tr>
<tr>
<td>Paranoia</td>
<td>0.85 (0.95)</td>
<td>2.17 (1.02)</td>
<td>20.30</td>
<td>&lt;.001</td>
<td>.32</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>0.93 (1.00)</td>
<td>2.05 (0.91)</td>
<td>14.88</td>
<td>&lt;.001</td>
<td>.25</td>
</tr>
<tr>
<td>GSI</td>
<td>0.89 (0.76)</td>
<td>2.17 (0.85)</td>
<td>28.63</td>
<td>&lt;.001</td>
<td>.34</td>
</tr>
</tbody>
</table>

\(\text{a. UCC=University Counseling Center} \)

\(\text{b. CMHC=Community Mental Health Center} \)

---

FALL 2005 ~ VOLUME 25, NUMBER 1
These findings offer no direct comment on previous research (Kitzrow, 2003) that suggests the level of psychiatric disturbance is increasing on college campuses. These data only give a picture of the current level of psychiatric disturbance. Unfortunately, since no baseline data were available at the research location, no statement can be made about the changes in the rate of psychiatric disturbance in recent years. Nonetheless, the incidence rate of 64% for university counseling center clients indicates a high level of presentation of severe psychiatric disturbance, and mirrors the reported increase in symptom severity found at other university counseling centers (Kitzrow, 2003).

In addition to the apparent increase in symptom severity, a clear result of the current study is that individuals presenting at a university counseling center are very different from individuals presenting at community mental health centers. As presented in Table 2, those presenting at the university counseling center were significantly younger and had more years of education than those presenting at the community mental health center. There was no difference in the gender distribution of those presenting. In both the university counseling center and the community mental health center, the gender distribution was approximately 2:1 female. These rates are similar to the gender distribution typically seen among those who are seeking professional services.

The two settings also clearly differed dramatically in terms of symptom severity. Clients at the university counseling center reported many fewer psychiatric symptoms than clients at the community mental health center. This is contrary to the findings of Aniskiewicz (1979), who found no difference between students at a university counseling center and students presenting at a mental health clinic. Though there is a significant difference in frequency, the present results have implications for university counseling centers. As Sharkin (2004) suggested,

it is important that counseling center practitioners possess strong skills in assessment and diagnosis of presenting problems and degree of severity, and it is particularly important to be skilled in differential diagnosis of problems that are primarily developmental versus those that are psychopathological in nature. In addition, college counseling centers need to be as equipped as possible for handling student problems that are considered severe, for example, by having procedures in place for hospitalizing students and access to psychiatric consultation for medication. (p. 315)

Despite the apparent increase in severity of problems experienced by clients presenting at university counseling centers, these individuals still present with far fewer psychiatric symptoms than are seen in the general community. There were differences in both the global assessment of psychopathology and each of the individual subtests. These differences are not entirely unexpected. Community mental health centers typically draw clients who have severe psychopathology. While the clientele of university counseling centers is
increasing in psychopathology, the likelihood of a person having severe psychopathology and still being able to function well enough to continue with a college education is unlikely. Further, many disorders (e.g., schizophrenia and major depressive disorder) tend to increase in severity over time. College-aged students are most likely to be in the beginning stages of these disorders and, therefore, will present with fewer psychological symptoms.

This is not to say that university counseling centers do not treat serious cases. The number of students needing to be hospitalized for suicidal ideation has increased across time (Gallagher, 2002). Thus, counselors in university counseling centers are seeing clients with severe psychological disorders, but just not at the same rate as at mental health centers.

The most obvious limitation of the present study is sample size. The small sample size and discrepant demographic characteristics between the two client groups greatly reduce the generalizability of the results, and the findings should be considered as a preliminary examination. A similar study with a larger sample would provide further information about the similarities and differences of the two populations that could be beneficial to clinicians in both settings.

Even with small sample sizes the current study had no issue with a lack of power. In fact, the effect sizes generated by the differences between the samples were impressive. The environment in which people presented for treatment accounted for 30% of the variance in BSI scores.

Still, perhaps all that can be really known from this study is that the counseling center and community mental health center from which data were collected serve two distinct groups, demographically and pathologically. However, the differences do not negate the rather large percentage of counseling center clients whose BSI scores indicated psychiatric disturbance.

University counseling center directors can use the results of this study to justify the need for their services in a budgetary environment where that need may be challenged. In society and on campus there has been debate over where those in need of mental health services should receive such services, and more importantly, who is going to pay for them. Managed care has surely had a dramatic effect on off-campus mental health service units (Olfson, Marcus, Druss, & Pincus, 2002), and university counseling centers have had their own related issues. Today’s university counseling centers are under greater pressure than ever to provide justification for their increasing budgetary needs and, in some cases, their existence on campus. Counseling center directors have identified two concerns in regard to providing services to students: (a) counseling centers are seeing more students overall and more students with severe problems, and (b) the directors constantly have to justify the need for their services and the need for adequate and oftentimes additional staff (Bishop, 1990). The present study provides evidence for the first concern: that, although counseling centers are serving a less severe population than community mental health centers, they are still providing services to a large
number of diagnosable persons. The continued need for quality mental health services on college and university campuses is certainly supported.

References


