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Mental Health Issues Facing a Diverse Sample of College Students: Results from the College Student Mental Health Survey

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Over the past 5 years there has been increased attention given to mental health issues on college and university campuses across the country. However, few research efforts have been conducted to systematically investigate the mental health of college students. The College Student Mental Health Survey was undertaken as a first step towards gaining a better understanding of the broad range of mental health issues that face the college student population. This exploratory study describes the mental health history and current distress and coping of 939 college students from a large Midwestern public university, with an approximate enrollment of 40,000 students. Implications for research, policy, and practice are discussed.

Given the increased attention that colleges and universities are giving to college student mental health, higher quality data, collected in a

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systematic manner, are needed to increase understanding of how current cohorts of college students are experiencing these issues. The counseling center profession does an extensive job in collecting "local" data from clients on individual campuses, but these are rarely shared nationally. Further, samples of students who don't come to counseling centers need to be investigated to examine similarities and differences between clinical (those who seek mental health treatment) and nonclinical populations. Finally, an intentional focus on reaching diverse groups of college students is needed to ensure the understanding of similarities and differences both *among* and *between* identity groups.

Most research on college student mental health has focused on the students who seek help at college counseling centers (Benton, Robertson, Tseng, Newton, & Benton, 2003; Furr, Westefeld, McConnell, & Jenkins, 2001) and on broader health issues (American College Health Association [ACHA], 2003). For example, Benton et al. conducted a longitudinal study that charted the presenting issues of college student clients from 1988–2001. Their results support the evidence from other colleges and universities in the United States that have been reporting an apparent rise in both the presence and severity of mental health issues among students (Kitzrow, 2003; Pledge, Lapan, Heppner, Kivlighan, & Roehilke, 1998; Rudd, 2004). In addition, for the past 4 years the ACHA has conducted the National College Health Assessment (NCHA), an informative survey of college student health that includes limited questions on mental health issues such as medication use, depression, and suicide.

Although these efforts have provided us with some information about mental health issues facing college students, little is known about the breadth and depth of mental health issues on college campuses. First, information is needed about the broad range of mental health challenges within the context of the college student life beyond depression and suicide—for example, including issues such as anxiety, academic functioning, and posttraumatic stress disorder (PTSD). Second, data need to be collected on what the general student body, including those who do not seek help, may face. Therefore, the College Student Mental Health Survey (CSMHS) was undertaken as a first step towards gaining a better understanding of the current mental health status of both the clinical and nonclinical college student population.

Literature Review

The landscape of college student mental health is changing both in terms of needs and in terms of how universities are responding to those needs. There has been considerable discussion about the perceived increase in the quantity and complexity of student mental health issues. However, the data reflect inconsistent findings and results. Some studies show no changes in severity, while others have shown changes in certain areas (Benton et al., 2003; Pledge et al., 1998). In their longitudinal study of counseling center client presenting problems, Benton et al. charted trends in college student client presenting issues on intake from the period 1988–2001. Of significance, the authors noted a rather dramatic increase in having suicidal thoughts (4.8% from 1988–1992 to 9.0% in 1996–2001). Other trends included increased depression, increased sexual assault issues, and increased stress or anxiety. While this was an informative study, follow-up studies are needed to explore these trends on other campus and with diverse populations of students. Further, universities are reporting between a 40–55% increase in students coming to counseling in the last 5 years. Clearly, these changes have a great impact on the academic performance, overall college student experience, and the retention rates of students (Kitzrow, 2003). Due to these changes, a more complete understanding of these complexities is needed; however, the current literature provides limited information on college student mental health.

One area that has received a good deal of attention in college students is depression and suicide (Fergusson, Beautrais, & Horwood, 2003; Furr et al., 2001). The only study that provides national data (ACHA, 2005), reports that depression is the fourth ranked health problem that college students experience. There have been several studies investigating depression alone, and also investigating the role of depression with other student issues such as alcohol use, academic functioning, eating disorders, social functioning, and more (Fergusson et al., 2003; Furr et al., 2001; Weitzman, 2004). The overall finding is that depression plays a significant role in college student functioning. With the increased national and media attention on suicide, many colleges and universities are implementing innovative strategies to address this issue.

Interestingly, anxiety is often reported as the second most prevalent mental health issue for adults, and it is reported by the NCHA as the sixth ranked health problem for college students (ACHA, 2005). Additionally, counseling centers around the country report anxiety as one of the top issues students present at intake (Benton et al., 2003; Smart, 1968). However, there has been little research investigating this issue specifically with college students.

Although it is perceived that eating disorders are prevalent on college campuses, especially among females, there has been little investigation of the unique symptomatology and manifestations of eating issues for college students. Unlike for some other mental health issues, however, there are instruments that have been developed specifically for assessing eating disorders in college students (Eberly & Eberly, 1985; Kurth, Krahn, Nairn, & Drewnowski, 1995), with norms and profiles developed for college women. Issues such as problem-solving skills, relationship attributes, social support, and the "athletic triad" have been explored with college women (Holt & Espelage, 2002; Thompson & Gabriel, 2004) Yet, one current gap is the lack of understanding surrounding college men and eating issues. There is evidence of a growing trend towards teenage males developing eating issues and body dysmorphia; however, little is understood about how this is translating to college campuses (Pope, 2000).

In the past 10 years, attention around Attention Deficit and Hyperactivity Disorder (ADHD) has increased dramatically for school age children. As these children enter higher education, colleges and universities are working to provide appropriate services and accommodations for these students. Additionally, it used to be thought that ADHD was a condition that children could outgrow. However, current research suggests that while hyperactivity may decrease as the child ages, attention difficulties may continue well into adulthood. It has also been suggested that college students with ADHD may represent a unique population with this diagnosis (Heiligenstein, Conyers, Berns, & Smith, 1998). Concerns have arisen around over diagnosis and abuse of prescription medications for ADHD (Kadison, 2005). Although it has been estimated that ADHD affects 2-4% of the college population (Weyandt et al., 2003) little is known about the true extent of this disorder's effect on college students and the most appropriate assessment and treatment for this population.

PTSD has typically not been a mental health issue that researchers and institutions have thought to study in college populations until September 11, 2001. At this time, colleges and universities were pressed to provide services to large numbers of students reacting to the events of that day (Blanchard, Rowell, Kuhn, Rogers, & Wittrock, 2005; Rothman, 2004). Despite the knowledge that college students may be at particular risk for certain types of trauma, little research has been done to explore the prevalence and attributes of PTSD on college campuses. For example, it is estimated that 1 out of 4–5 women will experience an attempted or completed sexual assault during her college career (Adams-Curtis & Forbes, 2004; Koss, Gidyca, & Wisniewski, 1987). Additionally for this age group (15–24 years), accidental death, homicide and suicide are the top three causes of death, creating trauma reactions for individuals within their college communities (Centers for Disease Control and Prevention, 2001). For this reason, some counseling centers have developed trauma response teams, yet the rates of and contributing factors to PTSD for this population are not well understood (Scott, Fukuyama, Dunkel, & Griffin, 1992).

Methods

Participants

Data were collected from a large Midwestern public university with an approximate enrollment of 40,000 students. About 57% of students are residents of the state, with 32% of students coming from outside of the state and 12% of students being international students. A total of 1,056 students began the survey. After deleting those students that did not complete at least 75% of the main survey instrument or had inconsistent responses, the total sample equaled 939 students. The mean age of the sample was 22.3 (SD = 5.0) with an age range of 18–55 years. Of the 939 participants, approximately 62% were female, 4.7% were Black/African/African American, 20% Asian/Asian American, 66% White, 2.9% Latino/a, 1.3% Middle Eastern, 3.7% Multiracial, 1.1% other, and less than 1% Native American. Twenty percent of the sample was freshman, 14.5% sophomores, 13% juniors, 18.6% seniors, 25.8% graduate students, and 7.1% professional students (i.e., medicine, law, business, and dentistry). International students made up 13.6% of the sample. Ninety three percent of students

identified as heterosexual, with 5.4% identifying as lesbian, gay male, bisexual, or "other." Table 1 compares the survey sample with the university population. With the exception of the greater number of women and Asian/Asian American students and lesser number of Black/African/African American students, the demographics matched the university population.

Table 1
Comparison of CSMHS Sample (N = 939) with UM Population*

Variable		CSMHS Sample		UM Population
		%	*n*	%
SEX	Female	61.9	581	48
	Male	38.1	357	52
RACE/ETHNICITY	African American	4.7	44	7
	Asian American	20.0	187	11
	White	66.0	618	58
	Latino/a	2.9	27	4
	Middle Eastern	1.3	12	NA
	Multiracial	3.7	35	NA
	Native American	.4	4	.8
	Other	1.1	10	6
LEVEL IN SCHOOL	Undergraduate	66.0	620	63
	Graduate	26.8	251	28
	Professional	7.1	67	9
CITIZENSHIP	International	13.6	127	12
	U.S. born	86.4	806	78
SEXUAL ORIENTATION	LGB	5.4	51	NA
	Heterosexual	93.9	822	NA

Note: * UM percentages from Fall 2004. NA = data not available.

Procedure

Data for this project were gathered from November 2004 to January 2005. After obtaining Institutional Review Board approval, a list of 5,000 random e-mail addresses of currently enrolled students was obtained from the university registrar. A letter inviting the students to participate was sent out by E-mail with a Web link that led them to a survey at a third party Web site. After completing the informed consent, each participant filled out information about current as well as past mental health issues and concerns; and the Counseling Center Assessment for Psychological Symptoms (CCAPS) (Sevig, Soet, Malofeeva, & Dowis, 2006), a 70-item instrument. At the end of the survey, students were asked if they would like to enter a drawing for one of ten $50 cash prizes.

Measures

Counseling Center Assessment for Psychological Symptoms (CCAPS). The CCAPS was created to assess mental health concerns in a college student population. The 70-item instrument includes nine subscales that measure: depression, eating issues, substance use, general anxiety, hostility, social role anxiety, family of origin issues, academic stress, and spirituality; as well as 5 freestanding items of clinical utility that relate to dissociative symptoms, cultural/ethnic identity, violent thoughts, and history of abuse. Each item is rated on a 5-point Likert scale from 0 "Not at All" to 4 "Extremely Well." Students are asked to respond to the question, "How well does this item describe you?" within a time frame of the past 2 weeks.

The use of this instrument is an important strength of this study in that the measurement of typical psychological symptoms has been tested and normed on college students. Also, concerns unique to college students were assessed such as academic difficulties. The results of multiple studies reveal support for the factor structure and reliability of the nine CCAPS subscales with reliability coefficients ranging from .80 to .93 and evidence of both convergent and discriminant validity. In addition, reliability by identity group (race/ethnicity, gender, international student status) has been studied and found to be satisfactory for all groups. Both exploratory and confirmatory factor analysis support the factor structure of CCAPS (Sevig et al., 2006).

Mental Health History. Several questions were included in the survey to assess past and current use of mental health services, lifetime prevalence of psychiatric diagnoses, and the use of psychotropic medications.

Analysis

The analysis of the data was conducted using SPSS 10.0. For the description of mental health history and current distress and coping, the chi-square statistic was used to examine differences by groups for categorical variables. Standardized residuals were used to locate differences when more than two categories of identity were compared. To examine group differences for continuous measures, *t* tests and one-way ANOVAs were used. Because of the exploratory nature of this study, no adjustments were made for multiple analyses. Alpha values are given for all significant tests at the $p < .05$ level.

Results

Description of Mental Health History

Overall, almost 30% ($n = 277$) reported ever having been in counseling. Of those people, approximately 20% ($n = 53$) were currently in counseling; 8% were participating in therapy for the first time, while 12% had received counseling in the past as well as currently. As Table 2 shows, there were significant differences in the proportion of people reporting having ever been in counseling by sex, race/ethnicity, level in school, national origin, and sexual orientation. Female, Caucasian, graduate/professional, domestic and lesbian, and gay male or bisexual (LGB) students were more likely to report having been in counseling; whereas males, Asians, undergraduates, international, and straight students were less likely to have engaged in counseling.

Table 3 depicts the proportions of specific psychiatric diagnoses that students self-reported, with the top 5 being: depression—14.9%, eating disorders—6.1%, anxiety—5.9%, attention deficit/hyperactivity disorder—4.2%, and PTSD—3.4%. There were differences found by sex for depression and eating, with females being more likely to report both types of diagnoses. There were also differences in depression by

level in school and sexual orientation. Graduate and professional students were almost twice as likely to report depression as undergraduate students. And LGB students were three times as likely to report having been diagnosed with depression. There were no differences by international student status.

Table 2
Significant Differences in Having Ever Been in Counseling or Therapy

Variable		Yes	No	X^2	*p*
SEX	Female	35.3	64.7	23.794	.000
	Male	20.3	79.7		
RACE/ETHNICITY	African American	29.5	70.5	56.997	.000
	Asian American	9.2	90.8		
	White	35.0	65.0		
	Latino/a	59.3	40.7		
	Multiracial	25.7	74.3		
LEVEL IN SCHOOL	Freshman	19.1	80.9	29.746	.000
	Sophomore	18.5	81.5		
	Junior	15.2	65.3		
	Senior	19.9	68.0		
	Graduate	38.4	61.6		
	Professional	34.3	65.7		
CITIZENSHIP	International	9.4	90.6	28.749	.000
	U.S. born	32.8	67.2		
SEXUAL ORIENTATION	LGB	54.9	45.1	16.349	.000
	Heterosexual	28.3	71.7		

Table 3
Self-Reported Diagnoses by Group Identity

Diagnosis	Depression	Bipolar	Anxiety	Social Anxiety	OCD	Eating	PTSD	Substance	ADHD	Psychotic
TOTAL	14.9	2.6	5.9	3.2	3.2	6.1	3.4	2.9	4.2	1.7
SEX										
Female	**18.2**	3.1	7.1	3.4	3.6	**9.0**	4.3	2.8	3.6	1.9
Male	**9.2**	1.7	3.9	2.8	2.5	**1.4**	2.0	3.1	5.0	1.4
RACE										
Af. Am.	**11.4**	2.3	0	2.3	0	2.3	0	2.3	0	0
As. Am.	**9.1**	3.2	3.7	3.7	3.7	6.4	3.2	3.2	3.7	3.2
White	**16.0**	2.3	6.8	3.2	3.4	6.3	3.4	2.8	4.7	1.5
Latino	**29.6**	7.4	0	0	0	7.4	11.1	0	0	0
Mult.	**20.0**	2.9	11.4	2.9	2.9	5.7	5.7	5.7	5.7	2.9
LEVEL										
Freshman	**11.7**	4.3	4.3	4.8	4.8	7.4	3.7	3.2	5.3	3.2
Soph.	**8.8**	2.2	4.4	2.2	4.4	5.1	2.2	3.7	4.4	2.2
Junior	**12.3**	.8	4.9	.8	1.6	6.6	1.6	3.3	3.3	.8
Senior	**13.2**	2.3	6.3	2.9	2.3	5.2	2.3	1.7	3.4	.6
Graduate	**22.3**	2.8	7.2	4.0	3.2	4.8	5.2	3.2	3.6	1.6
Profess.	**17.9**	1.5	9.0	3.0	1.5	10.4	4.5	1.5	6.0	1.5
CITIZENSHIP										
Internat'l.	11.0	3.1	3.9	3.1	3.1	7.1	3.1	2.4	3.1	2.4
U.S. born	15.5	2.4	6.2	3.2	3.2	6.0	3.5	3.0	4.3	1.6
SEXUAL ORIENT.										
LGB	**41.2**	2.0	9.8	5.9	5.9	3.9	3.9	0	3.9	0
Straight	**13.4**	2.6	5.6	3.1	3.1	6.2	3.4	3.1	4.2	1.8

Note: Those in bold showed a significant difference ($p < .05$) in reporting of diagnoses by group.

A total of 14.2% of students reported having ever taken psychoactive medications in the past; 6.8% were currently taking medications (Table 4). There were significant differences found in that women were almost twice as likely as men to be currently taking medication, and Caucasian individuals were more likely than Black/African American and Asian/Asian American students to both currently and in the past take medication. Domestic students were much more likely than international students to currently be taking medication. LGB students were much more likely to have taken medications in the past compared to heterosexual students.

Current Distress and Coping

Significant differences were found between clinical and nonclinical students (defined as those students not currently in counseling and those who had past counseling at least 3+ years ago) on all nine CCAPS subscales. All of these findings were in the expected direction, with the clinical group showing more distress and less coping.

Table 5 shows the results from multiple analyses of identity group differences in current distress and coping. Females were more likely than males to report higher scores on eating issues and family of origin concerns. Domestic students were more likely to report problems with substance use and academics, and international students were more likely to report a higher importance placed on religious/spiritual issues. Undergraduates were more likely than graduate students to report higher scores on depression, substance use, and academic issues. For racial/ethnic identity groups that had large enough samples to conduct an ANOVA with posthoc comparisons, there were significant differences found for eating, substance use, anxiety, social role, and spirituality between African American/Black, Asian/Asian American, and Caucasian students (Table 6).

Finally, individual items were analyzed to give a picture of some specific issue areas that may be particularly relevant to college students. These proportions represent those students that answered from a 1 to a 4 on each item. Approximately 66% of students reported mild to severe difficulties with sleep, 33% stated that they drink more than they should, 75% had some concerns about their ability to succeed

Table 4
Differences by Group Identity in Medication Use

Medication History	Never	Current	Past, not currently
TOTAL	85.3	6.8	7.4
SEX*			
Female	83.5	**8.3**	8.2
Male	89.4	**4.3**	6.3
RACE**			
African American	90.2	**4.9**	**4.9**
Asian American	94.5	**2.2**	**3.3**
White	83.6	**8.3**	**7.9**
Latino	69.2	**11.5**	**19.2**
Multiracial	85.3	**5.9**	**8.8**
LEVEL**			
Freshman	92.2	5.6	**2.2**
Sophomore	91.6	5.3	**3.1**
Junior	87.3	5.9	**6.8**
Senior	84.6	5.9	**9.5**
Graduate	79.8	8.9	**11.3**
Professional	78.8	9.1	**12.1**
CITIZENSHIP**			
International	94.4	**.8**	4.8
U.S. born	84.4	**7.8**	7.8
SEXUAL ORIENTATION***			
LGB	68.0	10.0	**22.0**
Heterosexual	86.8	6.7	**6.5**

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; bold areas indicate where the standardized residuals suggest significant differences.

Table 5
Differences in Current Distress and Coping by Identity Group

Subscale	Depression	Eating	Substance Use	Anxiety	Hostility	Social Role	Family of Origin	Academic Issues	Spirituality
SEX									
Female	1.22	1.26***	.89	1.09**	.73	1.43	1.02*	1.47	2.33
Male	1.16	.87	.98	.96	.81	1.51	.90	1.46	2.46
LEVEL									
Undergrad.	1.22*	1.12	.99**	1.02	.77	1.45	1.01*	1.54***	2.31
Grad./Prof.	1.16	1.09	.80	1.10	.74	1.49	.91	1.34	2.34
CITIZENSHIP									
Internat'l.	1.16	1.09	.67***	1.08	.90**	1,58	.94	1.32*	2.11*
Domestic	1.21	1.12	.97	1.04	.73	1.45	.98	1.49	2.36
SEXUAL ORIENT.									
LGB	1.33	1.12	.87	1.27*	.94*	1.46	1.12	1.45	2.60
Hetero.	1.20	1.12	.93	1.02	.75	1.46	.97	1.47	2.31

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 6
Analysis of Variance for Current Distress and Coping by Racial/Ethnic Groups

Scale	Black/African American	Asian/Asian American	White/European American
Depression	1.06	1.17	1.22
Eating*	.92[a]	1.03[a]	1.16[b]
Substance use*	.45[a]	.68[b]	1.03[c]
Anxiety*	.72[a]	1.02[b]	1.07[b]
Hostility	.72	.83	.72
Social role*	1.30[a]	1.58[b]	1.45[a]
Family of origin	.95	.94	.97
Academic issues	1.50	1.45	1.47
Spirituality*	1.43[a]	2.21[b]	2.42[b]

Note: *denotes those scales that had significant differences between groups $p < .05$; means that are significantly different are noted with different letters.

academically, and 76% reported some dissatisfaction with their weight. Twenty-two percent of students reported some history of abuse in their family. Almost 23% of the student sample reported having some suicidal thoughts in the past 2 weeks. Except for by sex, there were no differences by identity groups in suicidal ideation. Men were more likely to endorse the "middle" of the scale (2); women were more likely to endorse either end of the scale (0–1 or 3–4) ($p < .05$).

In relationship to coping, of those who participated, 73% indicated that spirituality and religion were integral to their identity, and 60% stated that they have a strong cultural or ethnic identity. This finding differed by racial/ethnic identity with the greatest proportion of Black/African American students reporting a strong ethnic identity (77% choosing a 3 or 4), followed by Asian/Asian American student (43%) and only 11% White/European American students reporting having a strong cultural identity ($p < .000$).

Discussion

Filling in a gap in the current knowledge of college student mental health, this study was an initial attempt to examine a broad spectrum

of mental health issues facing a wide range of college students, including clinical and nonclinical students as well as students from a wide array of social identity groups. Because this was a single-campus study, first the data were compared to the scant national or single-campus data available to provide some guidance as to the extent to which the data were reliable and generalizable. Once there was evidence that the data were an accurate reflection based on past studies of mental health issues on college campuses, the overall results as well as differences by identity group were examined more in depth.

Comparison to Other Data

In comparing our data to current national data from the 2004 NCHA, we found that our sample of students was very similar to national averages of students reporting diagnoses of depression, anxiety, eating disorders, and substance abuse. For example the NCHA found that 14.9% of students nationally reported ever having a diagnosis of depression, with 18% of woman and 9% of men reporting the diagnosis. This matches our findings almost exactly. Other diagnoses were similar to NCHA findings, with 7.7% of students reporting anxiety (compared to 5.9% for the CSMHS), 5.7% reporting an eating disorder (v. 6.1%), and 2.1% reporting a substance abuse disorder (v. 2.9%).

In addition, we compared the findings of the CSMHS to reports from other studies. Although, there have not been many published reports from the counseling center profession regarding survey findings, there have been a few studies looking at individual topics. For example, Furr et al. (2001) conducted a follow-up study to their 1987 study (Westefeld & Furr) that examined depression and suicide in college students. In the 1987 study, 32% of the respondents reported having suicidal ideation, with 1% reporting having made a suicide attempt. In the 2001 study, 9% of respondents reported "having thought about committing suicide," with 1% having made a suicide attempt. For comparison, in the current CSMHS project, we found 22.8% of the respondents had some degree of suicidal ideation ("I have thoughts of ending my life."). The similarities in the findings suggest that overall our data were a reasonably accurate picture of college student mental health concerns.

Mental Health History

Much has been written about the increase in college students' past history with mental health professionals; in other words, more and more students are coming to college having already seen a mental health professional or having received psychiatric medications. Thus, data were reviewed to gain an accurate snapshot from this sample, with the hopes of establishing a baseline picture that can be used in the future for comparison. Almost one third of this sample has engaged in counseling at some point in their lifetime, with approximately 20% of those people reporting being currently in counseling. This is compared to about 9.7% of the general population seeking mental health treatment within a year. Almost 15% of students reported ever having taken medication, with almost 7% reporting taking medication currently. This is compared to 7.7% of adults in the general population taking psychoactive medication within a year (U.S. Department of Health and Human Services, n.d.).

Although there are little data to compare within the population of college students, these data provide student affairs professionals with important information about the likelihood that a student will have some experience, either personally or through a friend, with counseling. Not surprisingly, depression was the most common diagnosis that respondents reported (14.9%), with the next common being eating disorders (6.1%), anxiety (5.9%), and ADHD (4.2%). Interestingly, the fifth most common was PTSD before reports of social anxiety, obsessive-compulsive disorder, substance abuse, and psychosis. This finding suggests the need for further investigation into the prevalence and potential causal factors of PTSD in college students. Although less prevalent than counseling, a significant number of students reported having ever taken psychotropic medication (14.2%); and of these, 6.8% were currently taking medication. Again, although we are unable to draw conclusions about increases in mediation usage of this population, it does suggest that psychotropic medication use may be a familiar phenomenon to this generation of college students.

Differences by Identity Groups

By far the greatest differences were found between international and domestic students. International students reported similar rates of mental health diagnoses, indeed there were no significant differences

for any diagnostic category. And in terms of levels of distress, with a few notable exceptions (substance use, hostility, academic issues, and spirituality), international students reported similar levels of distress as domestic students. However, international students were significantly less likely to have sought or currently be seeking mental health services. The large disparity between these two groups suggest some targeting intervention may be needed to help international students receive the services their rates of diagnoses and distress indicate they may need.

In relationship to differences between undergraduate and graduate students, our findings provide some support for the recent report by the Berkeley Graduate and Professional Schools Mental Health Task Force (Hyun, Quinn, Madon, & Lustig, 2006). In their study they found that graduate and professional students reported mental health issues at a higher rate than undergraduates. In the CSMHS, graduate students were more likely to report ever having counseling, being diagnosed with depression, and taken medication in the past. However our undergraduate students were more likely to report higher score on scales measuring current depression, academic difficulties, and substance abuse symptoms.

Some interesting results arose from comparisons of Black/African American, Asian/Asian American, and White/European American in relationship to current distress. Contrary to findings in the adult population (Bolden & Wicks, 2005), African American students consistently reported less distress on multiple mental health measures than Asian and White students. In addition, there were no differences across groups on academic distress, which seems to run counter to popular perceptions of differences among racial groups in experiencing academic challenges. This represents one example of how data can be used to deepen the understanding or challenge current perceptions of how issues are affecting students.

Finally, important differences were noted between males and females as well as LGB and heterosexual students. Although these differences followed similar patterns as in the adult population (APA, 1994), it is important to note that this is the first study in which these trends were noted in the college student population. These results, in addition to

the above findings, suggest there may be important differences and similarities between college students and the general adult population.

Limitations

The limitations of this study include first that the sample was taken only from one university, and so it is not possible to generalize these findings. However much of the data were similar to the data found nationally. More research is needed on the broad spectrum of mental health issues for college students across the nation. Although the sample was representative of the general population on the campus and data were collected on most demographic variables, there were a greater number of women and Asian/Asian American students who filled out the survey; this may have led to a bias in the data reported. For example, women tend to be diagnosed with depression in greater numbers. Finally, all data are self-report. This may affect particularly the information given for mental health history, which could not be verified through other means.

Implications

These data can be used to improve service delivery and programming for a variety of students. The data in this study have been used in a number of ways to inform the university community about mental health issues on campus and to provide ways to talk with students about these issues. For example, a letter went out to many University Housing residents that used some of the survey statistics and gave the message "you are not alone." The message stressed that there are other students dealing with depression, anxiety, academic concerns, and other issues; and it then gave resources for assistance. These results may also be used to identify issues that are prominent in certain groups of students and to tailor interventions for various identity groups. For example, multiple projects are underway to address the unique issues and challenges faced by international students including addressing sexual violence issues, in-depth examination of health and safety issues among international students, and educational efforts about resources available to international students and their spouses. In addition there is currently an initiative by the graduate school to address stress and coping for graduate students, which has included

symposia, the hiring of a health coordinator for graduate students, and media and education campaigns.

Another implication for this data is the continued need for collection of systematized, standardized data on a national level. Toward that end, the CCAPS instrument has been made available, free of charge, to any counseling center interested in using it as an intake tool. It is also under consideration for use at the national level for the Center for the Study of College Student Mental Health (Ben Locke, personal communication, June 29, 2006). There are other instruments as well that are emerging in the counseling center field that were created and normed for this population. This is a positive step in bringing the profession together in providing accurate, effective tools that will allow for comparison across multiple dimensions both of the institution (e.g., institution size, geographic region) and individual students (e.g., social identity groups, level in school, major in school).

Finally, data are ultimately best used when they lead to creating fundamental changes in institutional functioning and resource allocation with the goal of creating a healthier environment for students. Specifically, the data presented in this study point to the need for student affairs divisions to further engage in research, to examine policies around student mental health, to allocate resources appropriately to mental health units, and to engage in data-based preventive programming and interventions.

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