### Sexual Orientation Minorities in College Counseling: Prevalence, Distress, and Symptom Profiles

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Sexual minority group members are at a higher risk for mental health difficulties than are heterosexual individuals. The results of this study showed that college student sexual minorities were common in counseling centers and that they were more likely than heterosexual students to seek counseling. The results also showed that sexual orientation groups differed in meaningful ways from one another, and many sexual orientation groups reported higher levels of psychological symptoms than did heterosexual students.

exual minority status has been linked to increased risk for mental health symptoms and psychological distress (e.g., Cochran & Mays, 1994, 2000a, 2000b; Cochran, Mays, & Sullivan, 2003; King et al., 2008; Marshal et al., 2008; Mays & Cochran, 2001). One recent meta-analytic review (King et al., 2008) found that nonheterosexuals (N = 11,971) experienced an increased lifetime risk of suicide attempts, depression, anxiety disorders, and substance use disorders. In a British sample, King et al. (2003) found that gay men and lesbian women were more likely than their heterosexual counterparts to express greater overall psychological distress and were also more likely to have recently consulted a mental health professional.

Within recent decades, minority stress theory has been applied to the experience of sexual minority populations to help account for this increased risk (e.g., Meyer, 1995, 2003; Meyer, Dietrich, & Schwartz, 2008; Schwartz & Meyer, 2010). There is now a substantial and growing literature base suggesting that this increased mental health risk in sexual orientation minorities is attributable, among other factors, to an increased likelihood of actual and perceived minority discrimination as well as internalized negative attitudes toward sexual minority orientations (Meyer, 2003).

However, less empirical work has examined possible heterogeneity of experience and distress between members of different sexual minority populations. Although differences between gay men and lesbian women have been found (e.g., lesbians in the King et al., 2003, study, but not gay men, reported higher incidence of verbal and physical abuse than did their heterosexual comparison group), research on other minority groups is still in its relative infancy. One example of heterogeneity between sexual minority groups is the somewhat inconsistent finding that homosexual men, but not homosexual women, are at increased risk for body image and eating disorder symptoms (see Nelson,

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Castonguay, & Locke, 2011; this issue). Also, theoretical (e.g., Ochs, 1996) and empirical investigations (e.g., Brewster & Moradi, 2010) of the different experiences of bisexual and homosexual individuals have suggested that bisexual individuals experience discrimination both from heterosexual and homosexual groups and have different health profiles (Russell & Joyner, 2001). Thus, there is good reason to investigate potential differences between homosexual and bisexual individuals' experience of psychological distress, and more research is needed on each of these groups in psychological settings (Bieschke, McClanahan, Tozer, Grzegorek, & Park, 2000). Even less empirical work has been conducted to compare the experiences of individuals who identify as other sexual minority groups such as questioning, queer, and asexual. Given the trend to include more identification labels in research and social settings (e.g., lesbian, gay, bisexual, transsexual, questioning, queer, and asexual; Moradi, Mohr, Worthington, & Fassinger, 2009), and the fast pace of societal change regarding attitudes toward nonheterosexual orientations, understanding the potential variability between these groups may be very important.

Counseling psychology, including college counseling, has much to offer in this area of research (Moradi et al., 2009). College students (and college-age individuals) are considered late adolescents, young adults, or, most recently, emerging adults (Arnett, 2000), and as such they are seen as proceeding through the development of individual identity. This process can be more complex when students' sexual identities are not set. In one recent latent profile analysis of more than 1,000 individuals who identified as gay (Friedman, Marshal, Stall, Cheong, & Wright, 2008), the authors found early, middle, and late developing groups of gay males. Although the early developing group reported that they decided they were gay when they were in 10th grade, the middle and largest group decided that they were gay at the age of 19 years, on average. This suggests that many college students may have uncertain sexual identities when they begin college. The process of coming out has received theoretical and empirical support as a time of stress and potential identity development and growth (Vaughan & Waehler, 2010); however, this identity questioning process is inherently difficult to study empirically. In theory, any sense of uncertain identity would be expected to produce less adaptive outcomes and more psychological symptoms than a less well-developed identity (Heatherington & Lavner, 2008). Compounding this process, individuals who attend college often are living away from family for the first time and develop new relationships with peers. These changes can be significantly distressing at times, and it may be that when sexual identity development occurs in this stressful context, sexual minorities may be less able to cope than are heterosexual students.

Given the limited available knowledge regarding sexual minority college students and their counseling needs, the main objectives of this study were to (a) examine the contemporary prevalence of sexual minority status in counseling centers and on college campuses in the United States and (b) compare the types of symptomatic distress experienced by members of different sexual orientation groups when seeking college counseling.

We hypothesized that (a) sexual minority groups would be more common in college counseling centers than indicated by national estimates in more general populations (which vary by gender but are often approximately 4% of the total population; e.g., see Cochran et al., 2003) and (b) the prevalence in college counseling would vary between sexual orientation minorities. On the basis of past literature, we hypothesized that members of sexual orientation minorities who were receiving counseling in a college center would report, overall, more distress at intake than would heterosexual students in counseling. We further hypothesized that there would be significant differences between the scores of sexual minority groups on subscales of the Counseling Center Assessment of Psychological Symptoms–62 (CCAPS-62), although we had no a priori hypotheses regarding the nature of these differences because of inconsistencies in the literature.

#### Method

#### **Participants**

The Center for Collegiate Mental Health (CCMH) clinical pilot data set and the CCMH–Student Affairs Administrators in Higher Education (NASPA) data set were the sources of data for the present study. Description of the overall sample demographics and data collection methods can be found in Hayes, Locke, and Castonguay (2011; this issue). For the present study, however, some cases from the original data sets were listwise excluded prior to any analyses because of missing data on any of the CCAPS-62 subscales, sexual orientation status, or gender (because these were variables of interest), or, in the CCMH pilot data set, a response of "prefer not to answer" regarding sexual orientation or gender (because the interpretation of this response is not clear for these purposes).

The remaining data from the CCMH pilot sample included 13,127 counseling center clients. Of these, 8,394 (63.9%) were women and 4,733 (36.1%) were men. Regarding percentages, 73.9% of the sample self-identified as White/Caucasian, 6.7% as African American/Black, 5.4% as Asian American/Asian, and 4.8% as Hispanic/Latino/a; no other racial/ethnic identification accounted for more than 4% of the overall sample. The remaining CCMH–NASPA data set included 17,009 college student participants. Of these, 10,987 (64.8%) identified as female and 6,022 (35.4%) as male. Moreover, 13,099 (77%) participants identified as European American/Caucasian, 1,121 (6.6%) identified as Asian/Pacific Islander, 779 (4.6%) identified as Latino(a)/Hispanic, and 545 (3.2%) identified as African American/Black; the remaining racial/ethnic identifications accounted for a total of 5.6% of the sample. The current samples closely resembled the initial samples in each study.

#### Materials and Procedure

For a description of the measures and procedures from each data set, please see Hayes et al. (2011). Of note, the demographics questionnaires used in the CCMH pilot data set and the CCMH–NASPA data set were slightly different, although they overlapped. This led to three additional sexual orientation

identifications listed in the CCMH-NASPA data that were not available to participants in the CCMH pilot study.

#### Data Analysis

To address the first aim of the study, we calculated frequencies and percentages of each sexual orientation group within each data set. In addition, within the CCMH–NASPA data set, we removed participants who reported current psychiatric or psychological services so that we could identify a proxy group of "healthy control" participants. Because the different sampling methods and sexual orientation options used in these two data sets might have made a combination or comparison of the data sets difficult to interpret, we used only the CCMH–NASPA data set to assess whether sexual orientation minority participants were more likely than heterosexual participants to report being in counseling on campus. To investigate this question, we calculated two different overall chi-square tests of independence—one for heterosexual versus sexual orientation minorities and one comparing each sexual orientation group simultaneously. We also calculated a third chi-square test of independence on a subset of these data, removing the heterosexual participants, to address differences in on-campus counseling use among only sexual minority groups.

To investigate the second aim of the study, we first calculated mean scores for each subscale of the CCAPS-62, for each sexual orientation in both data sets. To compare differences between sexual orientation groups on the CCAPS-62 subscales, we conducted a multivariate analysis of covariance (MANCOVA) with gender as a covariate for each subscale in the CCMH pilot study data. Gender was included as a covariate because of its demonstrated correlation with psychological symptoms and its close relationship with sexual orientation status. To test whether there are differences between sexual orientation minority students, we then conducted a similar MANCOVA (with gender as a covariate) on the CCAPS-62 subscales while excluding the heterosexual participants. We set alpha at .05 and used Bonferroni correction within each analysis to examine all post hoc pairwise comparisons.

#### Results

# Prevalence of Sexual Minority Status in Counseling Centers and on College Campuses

Frequencies and distributions of sexual orientation identification groups within each data set are presented in Table 1. Although the inclusion of three additional sexual orientation identifiers in the CCMH–NASPA survey precludes direct comparisons between samples, some notable features are present. First, in a national survey including 17,009 participants, 13% of college student responders (and 12.3% of the non-treatment-seeking subsample) indicated that their sexual orientation was not heterosexual. Second, in counseling centers

TABLE 1
Sexual Orientation Groups' Prevalence in College
Counseling Centers

			CCMH-NASPA								
								CI	CPCC		
	CCMF	l Pilot	То	tal	No Trea	atment	N	0	Υ	es	
Variable	n	%	n	%	n	%	n	%	n	%	
Heterosexual	12,096	92.1	14,797	87.0	12,455	87.7	14,068	95.7	635	4.3	
Sexual minority	1,031	7.9	2,212	13.0	1,742	12.3	2,051	93.2	150	6.8	
Gay	301	2.3	252	1.5	200	1.4	228	90.8	23	9.2	
Lesbian	173	1.3	115	0.7	81	0.6	101	87.8	14	12.2	
Bisexual	385	2.9	519	3.1	388	2.7	475	91.7	43	8.3	
Questioning	172	1.3	209	1.2	155	1.1	185	89.8	21	10.2	
Asexual			934	5.5	788	5.6	901	97.1	27	2.9	
Queer			77	0.5	50	0.4	66	85.7	11	14.3	
Other			106	0.6	80	0.6	95	89.6	11	10.4	
Total	13,127	100.0	17,009	100.0	14,197	100.0	16,119	95.4	785	4.6	

Note. Number of participants endorsing each sexual orientation and the percentage of either the column or the group (e.g., bisexual group from the CCMH–NASPA sample) are reported. The options "asexual," "queer," and "other" did not appear in the CCMH pilot study. Individuals in the CCMH–NASPA data set who indicated current psychiatric medication or on-campus or off-campus psychological counseling were excluded from the No Treatment column. The row Sexual Minority contains all participants included in the rows Gay, Lesbian, Bisexual, Questioning, Asexual, Queer, and Other. Cases with missing data for the current treatment item were listwise deleted in order to calculate the final two columns. CCMH = Center for Collegiate Mental Health; NASPA = Student Affairs Administrators in Higher Education; CPCC = currently participating in counseling on campus.

included in the CCMH pilot data, nonheterosexual students accounted for 7.9% of the individuals who answered this question.

The frequencies and percentages of each sexual orientation group and current on-campus counseling among participants in the CCMH-NASPA data are presented in Table 1. The chi-square test of independence between sexual orientation and reported current use of on-campus counseling service was significant, using the dichotomous sexual orientation variable,  $\chi^2(1, 16904)$ = 26.939, p < .001,  $\phi = .04$ ; 4.3% of heterosexual and 6.8% of sexual minority participants reported that they were currently receiving counseling on campus. When sexual orientation was divided into all available groups and compared, the result was still significant,  $\chi^2(7, 16904) = 90.126$ , p < .001, Cramer's V = .073, which suggests that different sexual orientation groups attend college counseling at different rates. Removing heterosexual participants did not change the significance of this finding,  $\chi^2(6, 2201) = 44.060$ , p < .001, and the overall effect size was slightly larger for this test compared to the others (Cramer's V = .141). Examination of the results in Table 1 suggests that although most sexual minority groups use services at a higher rate than do heterosexual students, the largest sexual minority by population (asexual) has a lower counseling rate (2.9%) than do heterosexual participants (4.3%). In contrast, individuals who identified as queer were more than 3 times more likely than heterosexuals to report that they currently received on-campus counseling (14.3%). It also is noteworthy that in this sample, only 635 participants out of the total 785 participants who reported current oncampus counseling identified as heterosexual. This is 80.9% of the on-campus counseling population, suggesting that almost 1 out of every 5 students in college counseling identifies as a sexual minority.

## Symptomatic Distress of Sexual Orientation Groups Seeking College Counseling

Means and standard deviations for each sexual orientation group in both data sets on the subscales of the CCAPS-62 are presented in Table 2. Results of the CCMH pilot MANCOVA supported overall significant differences between sexual orientation groups on the subscales of the CCAPS-62, F(32, 48179.247) = 9.642, p < .001, Wilks's  $\Lambda = .977$ . Examination of the univariate tests of each CCAPS-62 subscale indicated that the sexual orientation groups differed significantly (p < .001) on the Depression, Eating Concerns, Generalized Anxiety, Hostility, Social Anxiety, and Family Distress subscales. However, using the Bonferroni correction, we found that differences were nonsignificant on the Academic Distress subscale (p = .045) and the Substance Use subscale (p = .171). Estimated means (covaried with gender) with pairwise comparisons are presented in Figure 1. Participants who identified as either gay or questioning reported significantly higher Depression scores than did heterosexual participants, although only the questioning group was significantly higher than were lesbian and bisexual participants. It is interesting that individuals who identified as lesbian showed significantly lower Eating Concerns subscale scores than did heterosexuals, and gay and questioning groups were significantly higher. On the Hostility subscale, only bisexual participants were significantly higher than were heterosexual participants. Perhaps of most interest, the only subscale on which all sexual minorities were significantly elevated compared to heterosexuals was Family Distress, and the gender-controlled effect of sexual orientation status was remarkably similar across minority groups.

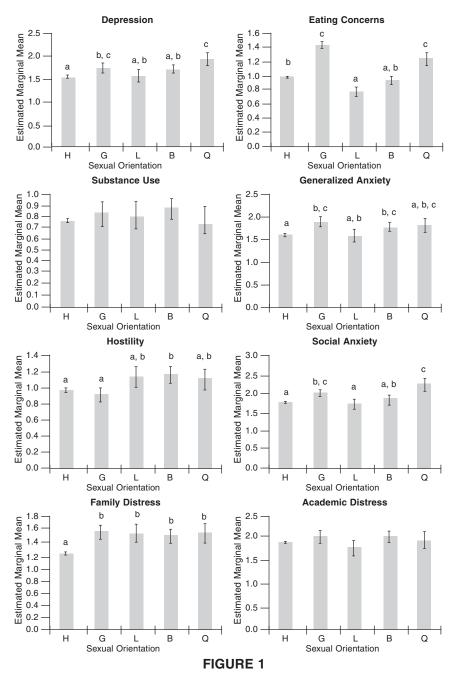
The results of the MANCOVA after removing heterosexual participants supported overall significant differences between sexual orientation minorities in the CCMH pilot study data, F(24, 2950.211) = 3.266, p < .001, Wilks's  $\Lambda = .927$ . Examination of the univariate tests of the CCAPS-62 subscales indicated that the sexual minority groups differed significantly on the Eating Concerns (p < .001), Social Anxiety (p < .001), and Depression (p = .002) subscales and did not differ significantly on the Generalized Anxiety (p = .168), Hostility (p = .436), Family Distress (p = .968), Academic Distress (p = .116), or the Substance Use (p = .173) subscales. On all three significant subscales (Eating Concerns, Depression, and Social Anxiety), the questioning group reported significantly more distress than did most or all other sexual minorities.

TABLE 2

Means and Standard Deviations of Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62) Subscales by Sexual Orientation and Sample

							CC	CCAPS-62 Subscales	Subsca	les						
			Eating	ing	Substance	ance	Generalized	alized			Family	ily	Academic	emic	Social	ial
	Depre	Depression	Concerns	erns	Use	e	Anxiety	iety	Hostility	ility	Distress	ess	Distress	ess	Anxiety	ety
Variable	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Heterosexual CCMH pilot	1.53	26 O	96.0	68 0	0.74	0.85	1.56	96.0	86	0.85	1.17	0.93	1.87	1.03	1 77	0.93
CCMH-NASPA	0.84	0.76	1.00	0.81	0.69	0.83	1.03	0.76	0.67	0.69	0.79	0.78	1.24	0.85	1.53	0.84
Gay	7	0	7	0	3	1	,	Ċ	0	1	9	Ċ	,	7	,	0
CCMH-NASPA	1.10	0.80	1.1	0.92	0.89	0.95	1.16	0.76	0.92	0.78	1.05	0.84	1.47	06.0	1.93	0.90
Lesbian																
CCMH pilot	1.60	0.89	0.94	0.82	0.72	0.91	1.67	0.89	1.16	0.93	1.54	0.99	1.78	1.02	1.76	0.95
CCMH-NASPA	1.18	0.95	1.19	0.87	0.82	0.93	1.35	0.85	0.81	0.70	1.20	0.89	1.50	0.99	1.75	0.97
Bisexual																
CCMH pilot	1.72	0.89	1.04	06.0	0.80	0.86	1.79	0.92	1.19	0.87	1.49	0.95	2.01	1.03	1.88	0.92
CCMH-NASPA	1.28	0.92	1.19	0.90	0.87	0.94	1.43	0.89	1.01	0.86	1.23	0.97	1.50	0.97	1.87	0.93
Questioning																
CCMH pilot	1.93	0.82	1.28	0.95	0.70	0.81	1.79	0.88	1.13	0.85	1.50	0.95	1.93	0.93	2.25	0.83
CCMH-NASPA	1.48	0.87	1.39	0.95	0.89	0.99	1.51	0.86	1.09	0.81	1.27	0.87	1.60	0.92	2.12	0.85
Queer																
CCMH pilot																
CCMH-NASPA	1.09	0.78	1.13	0.97	0.85	0.92	1.33	0.81	0.82	0.80	1.20	1.00	1.42	0.80	1.60	0.88
Asexual																
CCMH-NASPA	0.84	0.74	1.07	0.86	0.62	0.79	1.03	0.75	99.0	0.74	0.73	0.69	1.34	0.85	1.51	0.81
Other																
CCMH pilot																
CCMH-NASPA	1.19	0.92	1.08	0.89	0.74	0.79	1.42	0.97	0.92	0.82	1.08	0.82	1.33	0.88	1.86	0.88
lotal																
CCMH pilot	1.54	0.92	0.99	0.90	0.75	0.85	1.58	0.95	0.99	0.85	1.19	0.93	1.88	1.03	1.79	0.93
CCMH-NASPA	0.87	0.77	1.02	0.83	0.70	0.84	1.05	0.77	69.0	0.71	0.81	0.79	1.26	98.0	1.56	0.85

Note. The options "asexual," "queer," and "other" did not appear in the CCMH pilot study. CCMH = Center for Collegiate Mental Health; NASPA = Student Affairs Administrators in Higher Education.



Counseling Center Assessment of Psychological Symptoms-62 Subscale Means by Sexual Orientation Group

*Note.* Means that are not significantly different (p > .05, Bonferroni corrected) within each subscale share a letter above their data column. Standard errors are represented by error bars attached to each column. H = heterosexual; G = gay; L = lesbian; B = bisexual; Q = questioning.

#### Discussion

The goal of this study was to investigate mental health issues experienced by sexual minorities on college campuses. Using two large national samples, we examined the utilization of college counseling services as well as the level of psychological distress reported by individuals of different sexual orientations when seeking counseling on campus. Following are the findings and their implications regarding the specific questions investigated.

#### Prevalence of Sexual Minority Students

The hypothesis that sexual minority students would be highly prevalent in counseling seemed to have been supported. It is important to note, though, that this conclusion may be tempered by an overall surprisingly high percentage of sexual minorities in the CCMH–NASPA sample, which is comprised largely of nonclinical college students. The 13% of college students in this sample who identified as nonheterosexual was larger than other estimates (particularly those using behavioral assessments of sexuality, such as those reported by Cochran et al., 2003) and about 5% larger than the estimate found in counseling centers in the CCMH pilot data set. However, it was still lower than the 19.1% who identified as a sexual minority among students in counseling in the CCMH–NASPA sample. The most conservative conclusion would be that roughly 8% of college counseling clients nationwide identify as a sexual minority (based on the CCMH pilot data set), but that variability in research methods can increase this to approximately 20%.

The higher estimate (i.e., that 20% of counseling clients are sexual minorities) should be taken with caution, however, because the results in the CCMH–NASPA sample could reflect a number of factors. These include the sampling method (online, optional survey in the CCMH–NASPA sample vs. in-person form completion preceding an intake appointment at a counseling center in the CCMH pilot sample), available options, institutions sampled, and privacy concerns (e.g., the likelihood of discussing sexuality with a counselor after endorsing a minority sexual orientation). Results from voluntary surveys (e.g., the CCMH–NASPA sample) also have been known to produce biased results.

Perhaps most surprising, however, was the high number of individuals in the CCMH–NASPA sample who identified as asexual (5.5%), given that one of the most widely cited large-scale studies suggested that individuals who experience little to no sexual desire only made up roughly 1% of a large British probabilistic sample (Bogaert, 2004). This difference may be accounted for by increasing public knowledge and acceptance of the concept and identity of asexuality (e.g., as evidenced by the large international membership of the Asexual Visibility and Education Network) and also may be accounted for by the opportunity in this study for participants to self-identify as asexual, which is not typical of large studies and may assess a different type of asexuality than do ratings of attraction or behavior (Hinderliter, 2009).

Although some researchers have begun to examine individuals identifying as asexual (e.g., Brotto & Yule, 2009; Scherrer, 2008), more work is clearly required because this group represented greater than 1 in 20 college student participants. One alternative but not mutually exclusive possibility is that some participants may have interpreted this option in several ways, such as meaning that they were currently not in a sexual relationship or that they planned to abstain from sexual activity indefinitely. Because self-reported limited sexual desire has been found to be so much less common than asexual identity was in the present study (e.g., Bogaert, 2004), future research should address the possibility of misinterpretation.

### College Counseling Service Utilization Among Sexual Minority Students

Results of the comparisons within the CCMH–NASPA data set showed that, overall, sexual minority students were more likely than heterosexual students to report current on-campus college counseling (6.8% vs. 4.3%) and that there was significant heterogeneity of utilization rates among sexual minority groups, ranging from 2.9% of asexual responders to 14.3% of queer responders. In fact, other than asexual responders, all sexual minority groups were almost 2 to 3 times more likely than heterosexuals to report that they currently received counseling on campus. This suggests that the overall differences between sexual orientation minorities and heterosexuals in treatment utilization may sometimes obscure significant differences between sexual minorities.

Comparing utilization rates (see Table 1) to CCAPS-62 subscale scores (see Table 2) across sexual orientation groups suggests some intriguing conclusions. The asexual group seemed to be generally low in distress and utilization. This finding makes sense because people who are not distressed would be unlikely to seek treatment; and apart from the underrecognition of this sexual identity in contemporary culture, the types of stigma and minority stress experienced by these individuals may be qualitatively and quantitatively different than they are with other sexual minorities. However, the queer responders had the highest utilization rate (14.3%) of any sexual minority yet did not report the highest levels of distress on the CCAPS-62 subscales. This may reflect several possible causes. Individuals who identify as queer would be expected to experience similar types of discrimination and minority stress as other sexual minorities, but (a) may be more integrated into pride groups and other supportive environments (which would provide an environmental buffer against distress), (b) may seek treatment more frequently because they are more aware than other sexual minorities of the psychological effects of minority stress on themselves, or (c) may be recipients of successful counseling more frequently. Perhaps surprisingly, individuals who identified as bisexual were less likely than individuals who identified as gay or lesbian to report that they received counseling. Given theory and empirical findings suggesting that bisexuality is less accepted by both heterosexual and sexual minority individuals (Mulick & Wright, 2002; Ochs, 1996), as well as results from the present CCMH pilot sample (see Figure 1) that suggest the bisexual group's average distress across subscales is comparable to or higher than that of gay and lesbian students, the lower college counseling service utilization rate of this population was discrepant. Bisexual students may represent a truly underserved population relative to their levels of minority stress and psychological distress. Another important source of variability may be due to outreach and community resources that are available to some sexual minorities on college campuses but may not be available to, or effective with, all minorities at the same rate. In fact, it could well be that outreach programs are working very effectively in attracting certain minority students into college counseling (e.g., lesbian students) but may need to also focus on others (e.g., bisexual students).

### Differences in Psychological Distress Between Sexual Orientation Groups When Seeking College Counseling

The results of the comparisons between sexual orientation minorities' CCAPS-62 subscale scores in the CCMH pilot study suggest that sexual orientation groups reported different types of psychological distress and symptoms at their first appointment in college counseling, when controlling for gender. In addition, there were significant differences between the sexual minority groups when controlling for gender. The results of these analyses clearly suggest that sexual minority groups were more distressed, on the whole, than were heterosexual individuals, even within an all-treatment-seeking sample: With one exception (i.e., lesbians on the Eating Concerns subscale), when significant differences between sexual minority groups and heterosexual participants existed, the difference reflected increased distress on the part of the sexual minority group. Every sexual minority group was significantly elevated compared to heterosexuals on at least one subscale of the CCAPS-62.

Although members of all sexual minority groups are likely to experience stigma and stress as a result of being minorities (American Psychological Association [APA], 2000; Meyer, 2003), the results suggest that sexual minority groups differed either in the type and severity of stress experienced and/or their reactions to that stress. Differences between sexual orientation minorities may be due to multiple causes. There is some evidence to suggest that, recently, homosexuality and especially female homosexuality has become more culturally accepted, particularly among young people (Herek, 2003); however, bisexual individuals have often reported lower levels of perceived social support than have homosexual individuals (Balsam & Mohr, 2007; Sheets & Mohr, 2009). In addition, individuals who indicate that they are questioning their sexuality may be in a period of uncertain identity, which may create additional stress in and of itself, above and beyond any potential for internalized homophobia. Indeed, if individuals who identified as questioning are going through the coming-

out process, there is reason to believe that they may be in acute distress (Heatherington & Lavner, 2008), which may explain the fact that on all three subscales of the CCAPS-62 that show significant differences between sexual minority groups (Depression, Social Anxiety, and Eating Concerns), the questioning group's distress scores were among the highest. It also should be noted that in some analyses, significant pairwise differences were found between sexual minority groups that did not reflect the results of univariate omnibus tests. For instance, participants in the bisexual group reported significantly higher Hostility scores, controlling for gender, than did individuals who self-identified as gay. This pattern of results could indicate that significant heterogeneity between sexual minority groups could be masked by null omnibus effects in the absence of high statistical power. Future researchers should address the unique profiles of distress for each sexual orientation rather than grouping sexual minorities together.

It is interesting that there seems to be only one domain of psychological symptoms on which all sexual minorities showed nearly identical scores that were significantly higher than those of the heterosexual students—Family Distress. Because the CCMH pilot sample is a treatment-seeking sample, and family support has been found to be an important factor in the risk for experiencing mental health concerns among sexual minority individuals, it is not surprising that sexual minorities seeking treatment would report more distress than would heterosexuals. This may have been because some students perceived a lack of support for alternative sexual orientations within their family, conflicts due to this perception, and/or an unwillingness to disclose, which has itself been linked to increased psychological symptoms (see Goldfried, 2001).

It also should be noted that when controlling for gender, the mean Eating Concerns subscale score of lesbians was significantly lower than that of individuals in all other sexual orientation groups, including heterosexuals. This indicates that identifying as a lesbian may be considered a buffering factor rather than a risk factor for eating and body image concerns among treatment-seeking college students. This difference has sometimes been noted in past literature and is consistent with other research in college counseling centers on food and eating concerns (see Nelson et al., 2011).

### Implications for Practice

The results of these analyses have many implications for providing college counseling for individuals who are sexual minorities. First, it is suggested that college counselors would be professionally wise, and perhaps ethically obliged, to seek training and experience in working with members of sexual minority groups. A considerable body of literature is developing on counseling and psychotherapy with individuals who are sexual minorities (Lyons, Bieschke, Dendy, Worthington, & Georgemiller, 2010); given that it is likely that somewhere between 8% and 19% of counseling center

clients identify as a sexual minority, competence with this portion of clients is essential. In addition, the results imply that further outreach for college students who identify as sexual minorities may be necessary, especially among those who seem to endorse distress but may not seek counseling as commonly as other groups (e.g., bisexual and questioning students). Lyons et al. (2010), for example, discussed the importance of developing competence in working with sexual minority clients and provided resources and guidelines for counselors who wish to do so.

Regarding symptom profiles, clinicians are advised that members of different sexual minorities are likely to endorse different kinds of psychological distress. Counselors should be aware of what the most likely symptoms are that their clients will experience, not only because these may be a focus of treatment but also to note that divergence from these profiles may be clinically important. For instance, a client who identifies as bisexual but reports very good relations with his or her family may be expected not to endorse many other forms of distress; however, high scores on Social Anxiety might indicate a failure to connect with peers. Counselors who recognize differences between sexual minority groups, while also seeking to understand individual clients' unique sources of distress, are likely to conform to APA's (2000) *Guidelines for Psychotherapy With Lesbian, Gay, and Bisexual Clients* and may enrich their own understanding of the sources of their clients' stress.

## Limitations and Directions for Future Research

Although this study has numerous findings that are relevant to the field of college counseling with sexual minorities, there are some important limitations. The first is that two very different methods of sampling were used to select the two samples included in these studies, and sexual orientation identification was assessed in different ways. Although the CCMH pilot study sample is closely representative of the population of counseling center clients across a large number of institutions with minimal sampling bias, the CCMH–NASPA sample was drawn from a national survey conducted using different incentives and methods across numerous institutions. Therefore, the possibility for sampling bias and error is stronger in the CCMH–NASPA sample. In addition, the two samples were drawn from overlapping but not identical colleges and universities. Direct comparisons between the samples, therefore, are difficult to interpret, although within-sample comparisons should be internally valid.

There are also many areas of study that have yet to be fully understood. Perhaps especially important, future research is needed on the causes of sexual minority stress in college counseling clients as well as the differences between sexual minority groups in terms of psychological distress. Future research on this topic should investigate the many possible mechanisms that would cause

different psychological distress profiles among sexual orientation groups. Differences between groups in psychological distress may be caused by many factors, including phenomenological experience of interpersonal or minority stress, (re-)appraisal of that stress, perceived support from family or friends, activation of coping skills and resources, or different susceptibility to different disorders (e.g., eating disorders among gay males; see Nelson et al., 2011). In addition, there is a clear need for research on psychological treatment for sexual orientation minority students.

Nevertheless, this study illustrates the importance of college counseling with sexual minority students because these students appear to have concerns that are distinct from those of heterosexual students. The fact that some of these populations are relatively small in proportion to the heterosexual population has previously made differences between sexual orientation groups difficult to discern, but the unusual size and scope of CCMH provides an opportunity to better understand these understudied groups. The results of this study suggest that these students are common in counseling centers, more likely than heterosexual students to report current counseling, frequently (but not universally) more distressed than heterosexual students both when assessed in counseling centers and in a largely non-treatment-seeking sample, and significantly different from one another in terms of the types of presenting concerns in college counseling.

#### References

American Psychological Association. (2000). Guidelines for psychotherapy with lesbian, gay, and bisexual clients. *American Psychologist*, 55, 1440–1451.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469–480.

Balsam, K. F., & Mohr, J. J. (2007). Adaptation to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, 54, 306–319.

Bieschke, K., McClanahan, M., Tozer, E., Grzegorek, J., & Park, J. (2000). Programmatic research on the treatment of lesbian, gay, and bisexual clients: The past, the present, and the course for the future. In R. M. Perez, K. A. DeBord, & K. J. Bieschke (Eds.), *Handbook of counseling and psychotherapy with lesbian, gay, and bisexual clients* (pp. 309–335). Washington, DC: American Psychological Association.

Bogaert, A. F. (2004). Asexuality: Prevalence and associated factors in a national probability sample. *Journal of Sex Research*, 41, 279–287.

Brewster, M., & Moradi, B. (2010). Perceived experiences of anti-bisexual prejudice: Instrument development and evaluation. *Journal of Counseling Psychology*, 57, 451–468.

Brotto, L. A., & Yule, M. (2009). Methodological issues for studying asexuality: Reply to Hinderliter (2009). *Archives of Sexual Behavior*, 38, 622–623.

Cochran, S. D., & Mays, V. M. (1994). Depressive distress among homosexually active African American men and women. *American Journal of Psychiatry*, 151, 524–529.

Cochran, S. D., & Mays, V. M. (2000a). Lifetime prevalence of suicide symptoms and affective disorders among men reporting same-sex sexual partners: Results from NHANES III. *American Journal of Public Health*, 90, 573–578.

Cochran, S. D., & Mays, V. M. (2000b). Relation between psychiatric syndromes and behaviorally defined sexual orientation in a sample of the US population. *American Journal of Epidemiology*, 151, 516–523.

- Cochran, S. D., Mays, V. M., & Sullivan, J. G. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology*, 71, 53–61.
- Friedman, M. S., Marshal, M. P., Stall, R., Cheong, J., & Wright, E. R. (2008). Gay-related development, early abuse and adult health outcomes among gay males. *AIDS and Behavior*, 12, 891–902. doi:10.1007/s10461-007-9319-3
- Goldfried, M. R. (2001). Integrating gay, lesbian, and bisexual issues into mainstream psychology. American Psychologist, 56, 977–988.
- Hayes, J. A., Locke, B. D., & Castonguay, L. G. (2011). The Center for Collegiate Mental Health: Practice and research working together. *Journal of College Counseling*, 14, 101–104.
- Heatherington, L., & Lavner, J. (2008). Coming to terms with coming out: Review and recommendations for family systems-focused research. *Journal of Family Psychology*, 22, 329–343.
- Herek, G. M. (2003). The psychology of sexual prejudice. In L. D. Garnets & D. C. Kimmel (Eds.), *Psychological perspectives on lesbian, gay, and bisexual experiences* (2nd ed., pp. 157–187). New York, NY: Columbia University Press.
- Hinderliter, A. C. (2009). Methodological issues for studying asexuality. *Archives of Sexual Behavior*, 38, 619–621. doi:10.1007/s10508-009-9502-x
- King, M., McKeown, E., Warner, J., Ramsay, A., Johnson, K., Cort, C., . . . Davidson, O. (2003). Mental health and quality of life of gay men and lesbians in England and Wales: Controlled, cross-sectional study. *British Journal of Psychiatry*, 183, 552–558.
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self-harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8, 70. doi:10.1186/1471-244X-8-70
- Lyons, H. Z., Bieschke, K. J., Dendy, A. K., Worthington, R. L., & Georgemiller, R. (2010). Psychologists' competence to treat lesbian, gay and bisexual clients: State of the field and strategies for improvement. *Professional Psychology: Research and Practice*, 41, 424–434.
- Marshal, M. P., Friedman, M. S., Stall, R., King, K. M., Miles, J., Gold, M. A., & Morse, J. Q. (2008). Sexual orientation and adolescent substance use: A meta-analysis and methodological review. *Addiction*, 103, 546–556. doi:10.1111/j.1360-0443.2008.02149.x
- Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health*, 91, 1869–1876.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36, 38–56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674–697. doi:10.1037/0033-2909.129.5.674
- Meyer, I. H., Dietrich, J., & Schwartz, S. (2008). Lifetime prevalence of mental disorders and suicide attempts in diverse lesbian, gay, and bisexual populations. *American Journal of Public Health*, 98, 1004–1006. doi:10.2105/AJPH.2006.096826
- Moradi, B., Mohr, J., Worthington, R., & Fassinger, R. (2009). Counseling psychology research on sexual (orientation) minority issues: Conceptual and methodological challenges and opportunities. *Journal of Counseling Psychology*, 56, 5–22.
- Mulick, P. S., & Wright, L. W. (2002). Examining the existence of biphobia in the heterosexual and homosexual populations. *Journal of Bisexuality*, 2, 45–64.
- Nelson, D. L., Castonguay, L. G., & Locke, B. D. (2011). Challenging stereotypes of eating and body image concerns among college students: Implications for diagnosis and treatment of diverse populations. *Journal of College Counseling*, 14, 158–172.
- Ochs, R. (1996). Biphobia: It goes more than two ways. In B. A. Firestein (Ed.), *Bisexuality: The psychology and politics of an invisible minority* (pp. 217–239). Thousand Oaks, CA: Sage.
- Russell, S. T., & Joyner, K. (2001). Adolescent sexual orientation and suicide risk: Evidence from a national study. *American Journal of Public Health*, 91, 1276–1281.
- Scherrer, K. (2008). Coming to an asexual identity: Negotiating identity, negotiating desire. Sexualities, 11, 621.

- Schwartz, S., & Meyer, I. H. (2010). Mental health disparities research: The impact of within and between group analyses on tests of social stress hypotheses. *Social Science & Medicine*, 70, 1111–1118. doi:S0277-9536(10)00003-1
- Sheets, R. L., & Mohr, J. J. (2009). Perceived social support from friends and family and psychosocial functioning in bisexual young adult college students. *Journal of Counseling Psychology*, 56, 152–163. doi:10.1037/0022-0167.56.1.152
- Vaughan, M. D., & Waehler, C. A. (2010). Coming out growth: Conceptualizing and measuring stress-related growth associated with coming out to others as a sexual minority. *Journal of Adult Development*, 17, 94–109.