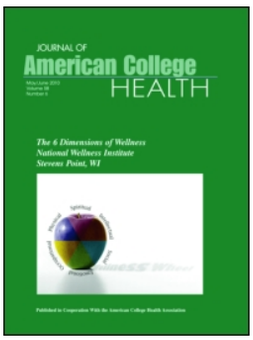

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# Trends in mental health service utilization among LGB+ college students

Jessica L. Bourdon, PhD[a], Amelia Liadis, MEd[b], Kaylin M. Tingle, MSW[c], and Trisha R. Saunders, MEd[b]

[a]Brown School of Social Work and Department of Psychiatry, Washington University in st. Louis, St. Louis, MO, USA; [b]The Wellness Resource Center, Virginia Commonwealth University, Richmond, VA, USA; [c]Health Promotion, Health and Well-being Unit, University of Richmond, Richmond, VA, USA

**ABSTRACT**

**Objectives:** 1) Compare service utilization among LGB+ and straight-identified students. 2) Assess rates of mental health concerns among LGB+ students only. **Participants:** Undergraduates ($N = 675$) reported on their sexual orientation, mental health conditions, and past service providers. **Methods:** Logistic regression was used for aim 1 and descriptive statistics for aim 2. **Results:** LGB+ students were more likely than straight-identified students to seek services for anxiety (odds ratio [OR] = 2.051; $p < .01$) or depression (OR = 3.058; $p < .001$) and from a counselor/therapist/psychologist (OR = 2.937; $p < .001$) or their university's counseling/health services (OR = 1.933; $p < .01$). Bisexual students utilized the most services. **Conclusions:** Colleges must ensure that programing, outreach, and overall support for the mental health needs of their LGB+ students are being met so that this vulnerable population continues to seek services.

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college students; LGB+; mental health; service utilization; sexual orientation

## Introduction

Established research shows that sexual minorities experience increased prejudice, discrimination, and thus unique stressors that contribute to increased mental health concerns when compared to their straight-identified counterparts.[1,2] LGB+ individuals have also been noted across studies to seek out more mental health services, likely as a way to cope, as a sign of resilience, and also because they may feel more comfortable seeking help for mental health concerns since their mental health is stigmatized relatively less than other aspects of their lives.[2,3] Much of this research on LGB+ minority stress and coping has been done in adult samples, yet there is ample reason to study the mental health and service utilization of college-age adults specifically. College is notably a high-risk period for the development and/or exacerbation of mental health concerns for all individuals[4–6] and increased bullying, discrimination, stigma, harassment, and similar other health disparities have been linked to increased mental health concerns among college students who are LGB+.[7–9] It is impertative for students to have access to services that are best suited to their needs. This includes on- and off-campus services that are tailored to reduce stress and stigma among minority students. It is currently unknown which services college LGB+ student utilize; understanding this can help with creating tailored programs in the future. The current study examined LGB+ college students' service use by looking at their utilization of specific services and for specific mental health concerns when compared to straight-identified students. It also provides the first descriptive statistics of which services are most used by individuals identifying across a wide range of each sexual minority identities. LGB+ is being used as an all-encompassing term for individuals who identify as LGB+ instead of the more comprehensive and typically used LGBTQ+. This is because the current study only examined sexual orientation, not gender, thus excluding transgender individuals and the "T." Additionally, some studies cited only provided a few sexual orientation options for participants but at a minimum, LGB were options.

In line with the minority stress model for adults regardless of college status,[1,2,10] many studies have shown that LGB+ college students are at increased risk for adverse mental health outcomes.[7,11] Common mental health concerns in college-age populations include anxiety and depression, with prevalence rates up to 15% for the former and 26% for the latter.[12] Students who are LGB+ report higher rates of symptoms related to anxiety and depression, such as feeling hopeless, overwhelmed, and sad, in the last 12 months compared to their straight-identified counterparts.[7] A recent systematic review also found increased risks for anxiety and depression among LGB+ individuals across adolescence and adulthood.[11] Despite research indicating these risks, treatment-seeking behaviors among college students who identify as LGB+ are not fully understood. LGB+ college students have been shown to utilize more mental health services (broadly defined) than their straight counterparts.[13–15] A recent study provided a rare look into the mental health needs of individuals who identify across specific LGB+ identities; bisexual, questioning, gay, and lesbian college students were shown to have higher scores on

CONTACT Jessica L. Bourdon jlbourdon@wustl.edu Brown School of Social Work and Department of Psychiatry, Washington University in St. Louis, 4560 Clayton Avenue, St. Louis, MO, 63110, USA

depression, anxiety, traumatic distress, and/or suicidality than heterosexual students.[16] Nevertheless, many studies still treat sexual orientation as a covariate to control[17] or one of many variables in a study without specific investigation into LGB+ students specifically.[18]

Unfortunately, the increased mental health concerns seen among LGB+ students and subsequent increased service utilization among these individuals does not always result in increased supportive services and programing that is specific to the LGB+ community. In an analysis of over 200 college counseling websites in the United States, it was found that mental health communication specifically targeted toward LGB+ students is scarce.[19] Of note are the findings that about 30% of college campus websites mentioned individual service options for LGB+ students, 16% employed counselors who discussed experience with LGB+ populations in their biographies, and 5% mentioned a campus LGB+ support group. While it is possible that other campus organizations provide such information, students in need likely turn to a counseling center first for help with mental health concerns (especially on smaller campuses that have fewer resources). A related problem is that many or all LGB+ identities are often excluded as options on surveys on college climate surveys[20] - surveys that inform mental health prevalence, health needs, service utilization, and related barriers.

The first step in creating curated services is to understand which mental health concerns drive LGB+ students to seek services (compared to straight students) as well as which services they seek out the most. Service utilization options for college students vary widely by university but typically fall into the following categories: medication received, on-campus therapy/counseling, off-campus therapy/counseling, and nonclinical counseling/support (i.e., friends, religious leader).[13] Thus, the aims of the current study are twofold. The first aim will compare treatment seeking behaviors for two of the most common mental health conditions among college students (anxiety, depression) and for specific on- and off-campus professionals (counselor/therapist, psychiatrist, another medical professional, college's counseling/health services) among students who are LGB+ compared to those who identify as straight. It is hypothesized that LGB+ students will seek more services regardless of mental health concern and service provider. The second aim is exploratory and will assess rates of service utilization for the aforementioned mental health concerns and by the aforementioned service providers only among students who are LGB+. Specifically, these rates will be examined among those who identify as asexual (individuals who do not experience sexual attraction), bisexual (individuals who feel attraction toward those of the same or another gender), gay (individuals who experience attraction toward those of the same gender), lesbian (women who experience attraction toward those of the same gender), pansexual (individuals who are attracted to anyone, regardless of sex or gender), queer (individuals who are not solely straight), questioning (individuals who are exploring their sexual orientation and/or gender or who may not be sure what their sexual orientation and/or gender identity are), another.[21]

## Methods

### Measure & participants

Data were analyzed from the American College Health Association (ACHA)'s National College Health Assessment II (ACHA-NCHA-II). The ACHA-NCHA-II is a voluntary survey administered to a randomly selected group of students biennially at participating universities around the country; there is no inclusion or exclusion criteria. Institutional review board approval was obtained for our university's participation in the survey for 2018. There are multiple sections to this survey: general health; disease and injury prevention; academic impact; violence, abusive relationships, and personal safety; tobacco, alcohol, and marijuana use; sexual behavior; nutrition and exercise; mental health; sleep; demographics and student characteristics. The 2018 ACHA-NCHA-II was sent via email to 5,000 randomly selected students at Virginia Commonwealth University, of whom 986 completed the survey. The current analyses were limited to undergraduate students in years 1–4. There were 675 students in the final sample with 170 identifying as LGB+. Note that sub-groups that made up less than 10% of the proportion were either eliminated or collapsed with other sub-groups to retain statistical power.[22] For example, those who identified as gender non-conforming were eliminated from analyses due to low representation and individuals who were Hispanic/Laitnx, American Indian/Alaskan Native, and biracial/multi-racial were collapsed into the category of "another race/ethnicity."

### Variables of interest

The variables of interest from the ACHA-NCHA-II included select treatment-focused questions from the "mental health" and "demographics and student characteristics" sections of the survey. These variables were divided by mental health concern and service provider. The "mental health concerns" and "service provider" variables below together constitute "service utilization," i.e. the main dependent variables.

### Mental health concerns

Participants were given a list of mental health concerns (anorexia, anxiety, attention deficit hyperactivity disorder, bipolar disorder, bulimia, depression, insomnia, other sleep disorder, obsessive compulsive disorder, panic attack, phobia, schizophrenia, substance abuse or addiction (alcohol or other drugs), other addiction (e.g., gambling, Internet, sexual), other mental health condition) and were asked whether they had been diagnosed or treated by a professional within the last 12 months for any of the concerns. The options for these question were not Likert, binary, or other typical options. Instead, participants who took the ACHA-NCHA-II were given a list of unique, treatment-focused options: no; yes, diagnosed but not treated; yes, treated with medication;

Table 1. Demographic breakdown of participants.

| | Full Sample (Aim 1) | LGB+ Sample (Aim 2) |
|---|---|---|
| Mean age | 20.90 years | 20.22 years |
| Race/ethnicity | | |
| White | $n = 309$; 52.50% | $n = 83$; 63.85% |
| Black or African American | $n = 92$; 15.51% | $n = 15$; 11.54% |
| Asian or Pacific Islander | $n = 94$; 15.83% | $n = 12$; 9.02% |
| Another race/ethnicity | $n = 98$; 16.16% | $n = 20$; 15.38 % |
| Gender | | |
| Woman | $n = 484$; 75.74% | $n = 111$; 79.29% |
| Man | $n = 155$; 24.26% | $n = 29$; 20.71% |
| Sexual Orientation | | |
| LGB+ | $n = 140$; 24.06% | $n = 140$; 100.00% |
| Asexual | $n = 6$; 1.20% | $n = 6$; 4.29% |
| Bisexual | $n = 64$; 10.23% | $n = 64$; 45.71% |
| Gay | $n = 13$; 2.11% | $n = 13$; 9.29% |
| Lesbian | $n = 12$; 2.11% | $n = 12$; 8.57% |
| Pansexual | $n = 15$; 2.86% | $n = 15$; 10.71% |
| Queer | $n = 7$; 1.80% | $n = 7$; 5.00% |
| Questioning | $n = 20$; 3.16% | $n = 20$; 14.29% |
| Another | $n = 3$; 0.60% | $n = 3$; 2.14% |
| Straight-identified | $n = 496$; 75.94% | – |
| Year in School | | |
| 1st year | $n = 176$; 27.54% | $n = 36$; 25.71% |
| 2nd year | $n = 134$; 21.56% | $n = 37$; 26.43% |
| 3rd year | $n = 197$; 30.69% | $n = 42$; 30.00% |
| 4th year | $n = 132$; 20.21% | $n = 25$; 17.86% |

*Notes:* The ACHA-NCHA-II restricts participants to one selection only for sexual orientation.
Sub-groups with <10% of the proportion were either eliminated or collapsed with other sub-groups.[22]

yes, treated with psychotherapy; yes, treated with medication and psychotherapy; yes, other treatment. The current study only analyzed the questions regarding anxiety and depression. These questions were re-coded to reflect treatment received for anxiety and depression in a binary (yes/no) fashion.

### Service provider

Another set of questions queried whether participants had received psychological or mental health services from any of the following: counselor/therapist/psychologist; psychiatrist; other medical provider (i.e., physician, nurse practitioner); current university's counseling/health services. These questions were not specific to any mental health concern. Response options were binary (yes/no) in the ACHA-NCHA-II and were not re-coded for the current analyses.

### Covariates

Race/ethnicity (white, black, Asian, another ["other," Hispanic, American Indian, biracial]; categorically coded), year in school (ordinally coded), and gender (woman, man; categorically coded) were all tested as potential covariates on the dependent variables for aim 1. Inclusion of covariates was not relevant for aim 2.

### Sexual orientation

For aim 1, sexual orientation was coded as binary (0 = straight-identified, 1 = LGB+) whereas for aim 2, all LGB+ sexual orientation identities were coded in a categorical manner. These identities were asexual, bisexual, gay, lesbian, pansexual, queer, questioning, and another.

### Statistical analyses

All analyses were done in the R software package.[23]

### Correlations among variables

Spearman correlation was used to examine the correlations among all variables in the full sample. Spearman correlation was chosen due to the mix of categorical, ordinal, and binary variables.[24]

### Covariates

Multiple logistic regression was used to test the effect of race/ethnicity, year in school, and gender on each service utilization variable. Specifically, six models were run where each service utilization variable was an outcome measure in one model. Significant effects were kept in the main analyses for aim 1.

### Aim 1

Multiple logistic regression was used to assess the effect of differences in service utilization among LGB+ and straight-identified students. All necessary covariates were included in these analyses. It was hypothesized that LGB+ students would experience significantly higher rates of utilization regardless of mental health concern or service provider.

### Aim 2

Descriptive statistics (frequencies, cross-tabs) were used to examine rates of service utilization behaviors among students who are LGB+ across multiple identities (asexual, bisexual, gay, lesbian, pansexual, queer, questioning, another).

## Results

See Table 1 for the full demographic breakdown of the sample. The mean age of the full sample was 20.90 years, with 52.50% white, 75.74% identifying as women, and 24.06% LGB+. Among LGB+ individuals, 63.85% were white, 79.29% identified as women, and most were bisexual (45.71%) followed by questioning (14.29%), and pansexual (10.71%).

### Correlations

The correlations among all variables in the full sample can be found in full in Table 2. Of note is the fact that sexual orientation was moderately positively correlated with all variables ($r = .12$–$.22$; $p < .01$) except race/ethnicity ($r = -.11$; $p < .01$), year in school (no correlation), and gender (no correlation). Due to the way the variables were coded, this implies that identifying as LGB+ is associated with receiving treatment for each mental health concern and with each service provider. Additionally, the relationships among all of the service utilization variables were strong ($r = .21$–$.58$; $p < .001$).

**Table 2.** Spearman correlations among variables.

| | Sexual orientation | Treatment for anxiety | Treatment for depression | Treatment by counselor/ therapist | Treatment by psychiatrist | Treatment by other medical health professional | Treatment by university health/ counseling | Race/ ethnicity | Year in school | Gender |
|---|---|---|---|---|---|---|---|---|---|---|
| Sexual orientation | – | – | – | – | – | – | – | – | – | – |
| Treatment for anxiety | .12** | – | – | – | – | – | – | – | – | – |
| Treatment for depression | .22*** | .58*** | – | – | – | – | – | – | – | – |
| Treatment by counselor/ therapist | .22*** | .44*** | .48*** | – | – | – | – | – | – | – |
| Treatment by psychiatrist | .15*** | .46*** | .48*** | .53*** | – | – | – | – | – | – |
| Treatment by other medical health professional | .14*** | .45*** | .44*** | .42*** | .43*** | – | – | – | – | – |
| Treatment by university health/ counseling | .16*** | .24*** | .31*** | .42*** | .21*** | .24*** | – | – | – | – |
| Race/ethnicity | −.11** | −.19*** | −.15*** | −.21*** | −.18*** | −.17*** | −.09* | – | – | – |
| Year in school | −.02 | −.03 | −.02 | −.02 | .02 | .04 | .08 | −.11** | – | – |
| Gender | −.04 | −.12** | −.12** | −.12*** | −.07 | −.10* | −.09* | −.07 | .04 | – |

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

*Notes:* Sexual orientation was coded as binary for aim 1 (straight-identified, LGB+) and categorically for aim 2 (asexual, bisexual, lesbian, pansexual, queer, questioning, another). Treatment for anxiety or depression and treatment by a counselor / therapist, psychiatrist, other medical health professional, or university health / counseling were coded as binary (yes/no). Race/ethnicity were coded categorically (white, black, Asian, another). Year in school was coded as ordinal (1st year, 2nd year, 3rd year, 4th year). Gender was coded categorically (woman, man).

### *Aim 1: Differences in service utilization among LGB+ and straight-identified students*

In the full sample, slightly more LGB+ participants had received treatment for anxiety (26.58%) than for depression (20.69%). The biggest proportion of participants sought services for mental health concerns from a counselor/therapist/psychologist (42.43%) compared to receiving treatment from a psychiatrist (20.58%), another medical provider (20.81%), or from their university's counseling/health services (19.94%).

The results of testing the effects of covariates on service utilization variables can be found in Table 3; the significant covariates were included in the primary analyses and these analyses will not be discussed further. The main results can be found in Table 4. Compared to identifying as straight, students who identify as LGB+ were 105% more likely to receive treatment for anxiety ($p < .01$), 206% more likely to receive treatment for depression ($p < .001$), 194% more likely to see a counselor/therapist ($p < .001$), and 93% more likely to seek treatment from their college's counseling/health services ($p < .01$). Sexual orientation had no effect on seeking treatment from a psychiatrist or another medical provider.

### *Aim 2: Service utilization rates among LGB+ students*

In the reduced sample of LGB+ students (asexual, bisexual, gay, lesbian, pansexual, queer, questioning, another), about a third sought treatment for anxiety (35.00%) and depression (35.71%). Over half have received treatment from a counselor/therapist/psychologist (61.43%) and over a quarter have received treatment from a psychiatrist (29.93%), other medical provider (29.50%), and current college's counseling/health services (30.71%).

Specific service utilization rates among LGB+ students revealed that students who are bisexual seek out the most treatment (see Table 5). Specifically, bisexual students made up the biggest proportion of treatment-seekers for each service (44.19%–64.00%). Those who identified as pansexual seemed to have elevated treatment-seeking behaviors for many services (10.20% for anxiety, 13.95% for depression, 18.60% for college's counseling/health services). Students who identified as gay, lesbian, or questioning seem had lower and comparable rates of service utilization while those who are asexual and queer reported the next-lowest amount of treatment-seeking behaviors. Finally, LGB+ students who identified as "another identity" rarely sought services (0.00%–2.33%).

## Discussion

The current study is an extension of past work examining service utilization rates regarding common mental health concerns among all college students[13,25,26] and specifically those who identify as LGB+.[14,19] Findings highlight and reiterate that LGB+ students are among the most vulnerable in a college setting and seek out more help overall than their straight counterparts.[13–15] Not only was identifying as LGB+ associated with all treatment-seeking variables regardless of mental health concern or service provider, but LGB+ students were significantly more likely to receive treatment for anxiety and depression and seek help from a counselor both on- and off-campus than their straight-

**Table 3.** Logistic regression parameter estimates showing relationship between various treatment efforts and covariates in the full sample. Significant covariates were included in the main analyses in Table 4.

| | Multiple Regression Odds Ratio [OR] (95% CIs) |
|---|---|
| Model 1 (DV = Treatment for anxiety) | |
| Race/ethnicity | |
| Black | .588 (.333 - 1.004) |
| Asian | .262*** (.127 - .497) |
| Another | .337*** (.177 - .605) |
| Year in school | |
| 2nd | .741 (.418 - 1.296) |
| 3rd | .738 (.448 - 1.213) |
| 4th | .805 (.461 - 1.392) |
| Gender | |
| Man | .487** (.291 - .789) |
| Model 2 (DV = Treatment for depression) | |
| Race/ethnicity | |
| Black | .523* (.269 - .959) |
| Asian | .302** (.135 - .604) |
| Another | .406** (.204 - .755) |
| Year in school | |
| 2nd | 1.335 (.731 - 2.436) |
| 3rd | 1.021 (.588 - 1.780) |
| 4th | .825 (.431 - 1.553) |
| Gender | |
| Man | .383** (.205 - .672) |
| Model 3 (DV = Treatment by a counselor / therapist) | |
| Race/ethnicity | |
| Black | .470* (.285 - .763) |
| Asian | .195*** (.106 - .339) |
| Another | .469** (.288 - .754) |
| Year in school | |
| 2nd | 1.097 (.666 - 1.806) |
| 3rd | 1.082 (.692 - 1.693) |
| 4th | .919 (.553 - 1.519) |
| Gender | |
| Man | .500** (.327 - .755) |
| Model 4 (DV = Treatment by a psychiatrist) | |
| Race/ethnicity | |
| Black | .408*** (.201 - .767) |
| Asian | .123** (.037 - .307) |
| Another | .493*** (.258 - .891) |
| Year in school | |
| 2nd | .732* (.376 - 1.394) |
| 3rd | 1.001 (.576 - 1.743) |
| 4th | 1.119 (.608 - 2.051) |
| Gender | |
| Man | .557** (.314 - .946) |
| Model 5 (DV = Treatment by another medical provider) | |
| Race/ethnicity | |
| Black | .254*** (.109 - .521) |
| Asian | .213*** (.086 - .451) |
| Another | .510*** (.272 - .911) |
| Year in school | |
| 2nd | 1.289* (.684 - 2.424) |
| 3rd | 1.380 (.787 - 2.449) |
| 4th | 1.297 (.690 - 2.437) |
| Gender | |
| Man | .519** (.293 - .880) |
| Model 6 (DV = Treatment by your current college's counseling or health services) | |
| Race/ethnicity | |
| Black | .912 (.495 - 1.617) |
| Asian | .742 (.393 - 1.335) |
| Another | .416* (.193 - .819) |
| Year in school | |
| 2nd | 1.558 (.824 - 2.954) |
| 3rd | 1.328 (.745 - 2.401) |
| 4th | 1.833 (.993 - 3.414) |
| Gender | |
| Man | .558* (.317 - .940) |

*Note.* Reference race/ethnicity = white; reference gender = woman; reference year in school = 1st year.
*$p < .05$; **$p < .01$; ***$p < .001$.

identified counterparts. This level of detail of service utilization in a college setting provides helpful insight to those individuals providing outreach and services to meet the needs of this population. Further, when analyses were restricted only to LGB+ students, the rates of service utilization were quite high for certain groups. Students who

**Table 4.** Logistic regression parameter estimates showing relationship between various treatment efforts and sexual orientation for aim 1 (significant covariates from Table 3 included).

| | Multiple Regression OR (95% CIs) |
|---|---|
| Model 1 (DV = Treatment for anxiety) | |
| Sexual orientation | |
| LGB+ | 2.051** (1.287 - 3.253) |
| Race/ethnicity | |
| Asian | .296*** (.142 - .564) |
| Another | .359*** (.189 - .643) |
| Gender | |
| Man | .473** (.268 - .802) |
| Model 2 (DV = Treatment for depression) | |
| Sexual orientation | |
| LGB+ | 3.058*** (1.935 - 4.818) |
| Race/ethnicity | |
| Black | .595 (.303 - 1.103) |
| Asian | .365** (.162 - .740) |
| Another | .452*(.226 - .847) |
| Gender | |
| Man | .406** (.216 - .718) |
| Model 3 (DV = Treatment by a counselor / therapist) | |
| Sexual orientation | |
| LGB+ | 2.937*** (1.935 - 4.500) |
| Race/ethnicity | |
| Black | .515** (.310 - .842) |
| Asian | .219*** (.118 - .385) |
| Another | .494** (.301 - .799) |
| Gender | |
| Man | .513** (.333 - .781) |
| Model 4 (DV = Treatment by a psychiatrist) | |
| Sexual orientation | |
| LGB+ | 1.977 (.982 - 3.913) |
| Race/ethnicity | |
| Black | .416 (.133 - 1.085) |
| Asian | .208 (.048 - .631) |
| Another | .386* (.147 - .897) |
| Year in school | |
| 2nd | .702* (.356 - 1.353) |
| Gender | |
| Man | .421 (.162 - .957) |
| Model 5 (DV = Treatment by another medical provider) | |
| Sexual orientation | |
| LGB+ | 1.387 (.678 - 2.754) |
| Race/ethnicity | |
| Black | .303* (.086 - .828) |
| Asian | .060** (.003 - .294) |
| Another | .410* (.166 - .911) |
| Year in school | |
| 2nd | 1.263 (.662 - 2.401) |
| Gender | |
| Man | .729 (.327 - 1.520) |
| Model 6 (DV = Treatment by your current college's counseling or health services) | |
| Sexual orientation | |
| LGB+ | 1.933** (1.166 - 3.184) |
| Race/ethnicity | |
| Another | .507* (.270 - .906) |
| Gender | |
| Man | .418** (.216 - .762) |

*Note.* Reference race/ethnicity = white; reference gender = woman; reference year in school = 1st year; reference sexual orientation = straight-identified.
*$p < .05$; **$p < .01$; ***$p < .001$.

**Table 5.** Service utilization rates among LGB+ students who sought treatment.

| LGBTQIA + Sexual Orientation | Treatment for Anxiety | Treatment for Depression | Treatment by a Counselor / Therapist | Treatment by a Psychiatrist | Treatment by Another Medical Professional | Treatment by College's Counseling / Health Services |
|---|---|---|---|---|---|---|
| Asexual | $n = 1$; 2.04% | $n = 2$; 4.00% | $n = 3$; 3.49% | $n = 2$; 4.88% | $n = 3$; 7.32% | $n = 1$; 2.32% |
| Bisexual | $n = 30$; 61.22% | $n = 32$; 64.00% | $n = 41$; 47.67% | $n = 21$; 51.22% | $n = 20$; 48.78% | $n = 19$; 44.19% |
| Gay | $n = 3$; 6.12% | $n = 4$; 8.00% | $n = 6$; 6.98% | $n = 4$; 9.76% | $n = 4$; 9.76% | $n = 5$; 11.63% |
| Lesbian | $n = 4$; 8.16% | $n = 3$; 6.00% | $n = 8$; 9.30% | $n = 4$; 9.76% | $n = 5$; 12.20% | $n = 2$; 4.65% |
| Pansexual | $n = 5$; 10.20% | $n = 4$; 8.00% | $n = 12$; 13.95% | $n = 3$; 7.32% | $n = 4$; 9.76% | $n = 8$; 18.60% |
| Queer | $n = 2$; 4.08% | $n = 2$; 4.00% | $n = 5$; 5.81% | $n = 4$; 9.76% | $n = 3$; 7.32% | $n = 3$; 6.98% |
| Questioning | $n = 4$; 8.16% | $n = 3$; 6.00% | $n = 9$; 10.47% | $n = 3$; 7.32% | $n = 2$; 4.88% | $n = 5$; 11.63% |
| Another | $n = 0$; 0.00% | $n = 0$; 0.00% | $n = 2$; 2.33% | $n = 0$; 0.00% | $n = 0$; 0.00% | $n = 0$; 0.00% |

identified as bisexual utilized the most services across provider type and mental health concern, a finding which is consistent with past literature.[14,27] Students who are pansexual also had moderate rates of service utilization, followed by gay, lesbian, and questioning students. Accordingly, students who identified as asexual, queer, or another sexual orientation reported the lowest service utilization across disorder and service provider. Few studies have intently studied differences between LGB+ identities,[16] and the current study is the first to provide such insight for this wide of a range of identities. The need for service providers who are tuned in to the unique needs and barriers of LGB+ college students is critical, both for providing a responsible level of care and in crafting programs and outreach to further reach often marginalized students.

There are many barriers to treatment seeking in college[26–28] that are compounded for LGB+ students due to additional prejudice, discrimination, and resulting minority stress.[1–3] To address some of these barriers, colleges must ensure that they are providing inclusive environments that allow for LGB+ students to engage safely and comfortably with culturally sensitive providers. This can be accomplished by providing LGB+ specific resources, programs, and hiring staff who openly identify as LGB+.[19] In addition, there are several guidelines and framework suggestions that include increasing access to services, properly training counseling graduate students and new faculty/staff, and conducting program evaluations and assessments to track progress toward serving LGB+ students.[28–31] The current findings can help guide collegiate health educators by paying attention to which services LGB+ students were more or equally likely to seek help for/from. First, health educators and providers can consider adopting LGB+-specific services for the treatment of anxiety and depression (where appropriate/available based on evidence-based practice) because current findings show that LGB+ students are more likely to seek help for those mental health concerns. Second, health educators and providers need to carefully examine how LGB+ friendly their on- and off-campus providers are. It cannot be assumed that counselors/therapists and on-campus counseling/health services are more inclusive than psychiatrists or other medical providers simply because LGB+ students are more likely to seek them out. Per the minority stress model,[1–3] these service providers may have a unique way of reducing, diminishing, and/or addressing the additional stress that LGB+ students face in addition to their mental health concerns and studying what these providers get "right" (e.g., representative staff, LGB+-focused events, appropriate outward messaging) could provide great insight. Conversely, these providers may not be LGB+ friendly or include LGB+ representation in its staff[19] despite the fact that LGB+ students seek their help more often. Assessing the fit of providers who LGB+ students seek out is crucial. All of these assessments can be done internally with the current study (and similar studies) serving as guidelines of what services/mental health concerns to take special note of.

It is important that colleges implement LGB+ focused prevention and intervention efforts for anxiety and depression, with emphasis on seeking counselors/therapists and on-campus counseling/health services. Such efforts should include not just broad LGB+ foci but include specific efforts to include the unique perspectives of single LGB+ identities. The current findings also indicate that bisexual students seek out the most services overall and thus on- and off-campus providers need to be sensitive when treating the needs of these individuals. There are likely unique stressors[1–3,15] to each LGB+ group that are largely unexplored (by this and other studies) but nevertheless need to be kept in mind. Researchers, educators, and providers alike need to stop grouping LGB+ individuals and study individuals with specific identities when possible. Accordingly, all identities across sexual orientations and gender identities, especially those that are less discussed but also experience high rates of mental health concerns, should be included in such efforts (e.g., trans, intersex, asexual, non-binary, gender non-conforming, pansexual, queer, questioning, demisexual, and other identities).

Accordingly, a major strength of the current analyses that is missing from extant studies are the expanded sexual orientation identities that students could select. Many studies collapse across sexual orientation *and* gender identities or only give limited response options (e.g., Eisenberg and colleagues[13]). It has been shown that providing a range of identities on surveys does help students to better identify themselves and therefore helps researchers and service providers better serve these students.[20] This study therefore serves as a reminder to college counseling/health centers that in order to provide adequate resources for all students, they must first ask and acknowledge their students' identities. Another strength includes treating race/ethnicity, gender, and year in school as potential covariates. While this does not directly assess intersecting identities, it can provide insight on how intersecting identities impact service utilization among LGB+ college students and can also inform clinical and health education professionals.

There are various limitations to this study. First, provider-specific service utilization questions included a college-specific option ("university's counseling/health services"). It is possible that students were not differentiating their on- and off-campus providers when answer the other question options ("counselor/therapist/psychologist," "psychiatrist," "another medical provider"). Second, the ACHA-NCHA-II does not ask students why they sought services, how often, or what their satisfaction was, limiting the scope of the current study. Studies of non-college LGB+ adults indicate significantly lower satisfaction with mental health services (<20%) when compared to adults who are straight-identified[10] and studies of college students indicate that LGB+ students are more likely to repeatedly seek mental health support (broadly defined).[18] It would be appropriate to examine these nuances of service utilization in an LGB+ college-specific sample. Relatedly, the questions that assess mental health concerns equates diagnosis without treatment and various types of treatment, making it difficult to analyze such questions other than collapsing across categories to create binary variables. Future surveys should be more specific

when wording questions about service use and take these limitations in mind when assessing utilization rates. Finally, the ACHA-NCHA-II has an expanded list of sexual orientation options but only allows students to pick one, eliminating any ability to capture students who identify as more than one sexual orientation or who are fluid in their orientation.

## Conclusions

This article explored the self-reported mental health help seeking behaviors of LGB+ identified college students compared to non-LGB+ students at a large, urban university, and the implications on programing this has for creating and maintaining culturally competent services. It was found that LGB+ students are more likely to seek services specifically for anxiety and depression and specifically from a counselor/therapist or university counseling/health service provider than students who identify as straight. There were high rates of service utilization across many LGB+ identities, but those who were bisexual used the most services. When taken in the context of the fact that many universities do not offer LGB+-specific services, these findings imply that services targeting the aforementioned disorders or offered by the aforementioned providers need to include mental health resources, providers, and care that are specific to the needs of their LGB+ students. Future studies should assess the best practices for offering LGB+-specific on-campus mental health services.

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## ORCID

Jessica L. Bourdon http://orcid.org/0000-0002-7291-1431

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