

2017

Barriers to Mental Health Service Access at a Large Public University

Auburn Beebe
Portland State University

Let us know how access to this document benefits you.

Follow this and additional works at: <https://pdxscholar.library.pdx.edu/mcnair>

Recommended Citation

Beebe, Auburn (2017) "Barriers to Mental Health Service Access at a Large Public University," *PSU McNair Scholars Online Journal*: Vol. 11: Iss. 2, Article 2.
[10.15760/mcnair.2017.2](https://pdxscholar.library.pdx.edu/mcnair/2017.2)

This Article is brought to you for free and open access. It has been accepted for inclusion in PSU McNair Scholars Online Journal by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

Abstract

College students are dealing with serious mental health issues and represent an important population to access when providing mental health services. Though most universities provide free mental health counseling services, many students are unaware or reluctant to use those services. Many factors contribute to this reluctance such as lack of knowledge about services and perceived stigma. Though many studies have shown that women are both diagnosed with anxiety and depression more often than men as well as seek mental health counseling more than men, few have identified the reasons for this disparity and examined the gender differences in collegiate men and women's usage of on-campus mental health services. This study seeks to add to the existing body of literature on college student mental health by identifying barriers to mental health service access at Portland State University, while uniquely focusing on identifying barriers for both men and women and how those barriers might differ. This study used a self-report survey administered online to 37 students at Portland State University. The survey assessed knowledge of services, perceived need for services, actual usage of services, as well as reasons for non-use. Results suggest that students prefer to utilize off-campus counseling services rather than on-campus services.

Barriers to Mental Health Service Access at a Large Public University

College students today are facing a host of mental health issues, including depression and anxiety. The American College Health Association (2011) found that in a sample of over 100,000 U.S. college students, 31.1% reported feeling “so depressed it was difficult to function” in the last twelve months and 50.6% reported “overwhelming anxiety” at some point in the last twelve months. Likewise, the MIT Mental Health Task Force (2001) found that 74% of undergraduate students reported having an emotional problem that interfered with daily functioning.

Considering that depression is a significant predictor of lower GPA and a higher probability of dropping out (Eisenberg, Golberstein & Hunt, 2009), convenient access to mental health care is critical both to student psychological health and student success within any given institution.

Gender Disparities in Diagnosis and Service Use

There are marked gender disparities in both the diagnosis of common psychological disorders and in the usage of mental health services. Women report more mental health problems overall than men (Whiteford et al., 2013; Hyun, Quinn, Madon & Lustig, 2006; Mallinckrodt & Leong, 1992), and in particular are more likely to be diagnosed with depression (Rai, Zitko, Lynch and Araya, 2013). In a meta-analysis assessing global trends in anxiety and depression prevalence over 30 years, Baxter et al. (2014) found that women are nearly twice as likely as men to be diagnosed with anxiety, and 63% of all cases of depression included in the study were women. Of particular relevance to the college student population, Patten et al. (2006) found that depression is more than twice as prevalent in young women (ages 14-25) than young men of the same age group, though this difference declines somewhat with age.

It is important to note that men may be systematically underdiagnosed with depression due to multiple factors. Firstly, depression may present differently in men than in women. Depression in men can include irritability, anger, hostile-aggressive behavior, and alexithymia (Bech, 2001). Because these symptoms are somewhat compatible with socially and culturally accepted behaviors for men, this may lead to underdiagnosis and undertreatment of depression in men (Möller-Leimkühler, 2002). In a study of 160 physicians (131 male and 39 female), Stoppe, Sandholzer, Huppertz, Duwe, & Staedt (1999) found that physicians were significantly more likely to diagnose a female in a vignette with depression than a male in a vignette, when the vignettes were identical except for gender. Men were also more likely to be diagnosed with physical conditions as opposed to psychological conditions.

Due to this probable underdiagnosis of men, it is important to consider reasons for this disparity other than women actually having mental health problems at twice the rate of men. Though research has found that women do have slightly more emotional problems than men overall, most of this disparity can be explained by the fact that women translate nonspecific feelings of distress into conscious recognition of an emotional problem more readily than do men (Kessler, Brown & Broman, 1981).

Research also shows that women are more likely to seek counseling services than men (Hyun et. al., 2006; Moller-Leimkuhler, 2002), which could be a contributing factor to the gender disparity in anxiety and depression diagnoses. There are a number of reasons why women might access counseling services more than men. Research has found that the rate at which women seek help for mental illness tends to fall in line with actual prevalence rates (Möller-Leimkühler, 2002), while men seek help at a lower rate than women when they have comparable

emotional problems (Kessler et al., 1981). An Australian study of 715 adolescents found that males were less likely to seek help for many different ailments. Of those who had emotional distress, only gender and willingness to disclose information remained significant predictors of help seeking (Rickwood & Braithwaite, 1994).

This reluctance by men to seek help for mental health issues can be explained by a number of factors. Firstly, traditional male gender role expectations reward inexpressiveness and independence, which may discourage help seeking and particularly the disclosure of emotional problems. In support of this idea, Grossman and Wood (1993) found men to be less emotionally expressive both on self-report and physiological measures.

Secondly, negative affectivity and illness can be experienced as a threat to masculine identity. In a study of gender disparities in coping with chronic illness, Williams (2000) found that men were less likely to integrate illness into their identity, and also that their identity was more threatened by the illness than women's.

If men's identities are threatened by a mental illness as they are by a physical illness, and they have been socialized to not disclose emotional problems, and doctors are less likely to diagnose them, this seems likely to create perfect conditions for both underdiagnosis and undertreatment of men's psychological problems. It is important that these and other specific barriers to mental health help seeking are identified for men, and specifically collegiate men, in order to reach this population with counseling services.

Other Barriers to Service Use

The mental health needs evident in the college population point to the critical importance of convenient, accessible, on-campus mental health services. Moreover, research has shown an

increasing need for mental health services in the college student population. A 13 year longitudinal study spanning from 1988-2001 found that in college counseling centers, the number of students seen with depression doubled, the number of students seen showing suicidality tripled, and the number of students seen after a sexual assault quadrupled (Benton, Robertson, Tseng, Newton, Benton, 2003). Though the total number of students seeking counseling did increase over the course of this study, this increase is not steep enough to account for the rising number of students seen with serious issues. This points to the idea that students are not only more likely to seek counseling in general, but are also seeking treatment for more serious issues than they have in the past.

Although most higher education institutions provide these much needed mental health services, they are generally underutilized. In a study conducted at a large public university, Eisenberg, Golberstein and Gollust (2007) found that 30% of students perceived a need for mental health services, but only 15% accessed any kind of counseling or used any psychotropic medications in the last year. Similarly, the MIT Mental Health Task Force (2001) found that while 74% of undergraduates in their study reported an emotional problem that interfered with daily functioning, only 28% made use of mental health services.

The reluctance to access these services could be due to a number of factors. Research has identified multiple barriers to mental health service access among college student populations. Among these barriers are lack of knowledge about service options, lack of knowledge about health insurance coverage for mental health, the belief that stress is normal in college (Eisenberg et al., 2007), and perceived stigma (D'amico, Mechling, Kemppainen, Ahern & Lee 2016).

In regard to knowledge about services, Eisenberg et. al. (2007) found that 49% of students would know where to go for mental health care, and 59% were aware of free on-campus counseling services. This leaves nearly half of the campus population who either would not know where to go for care, or were unaware that the care is free. In another study at a large public university, Hyun et. al. (2006) found that 74.2% of students knew about on-campus counseling services. Though this is a higher percentage than the one found in the Eisenberg et al. (2007) study, it still leaves over one-quarter of the student body who are unaware of on-campus mental health resources.

Additionally, Eisenberg et. al. (2007) found that a majority of students (54%) did not know whether they had insurance coverage for mental health services or not, and 13% thought they did not have coverage for mental health services (when in fact they did). Though the institution in this study provides counseling at no extra charge, this lack of knowledge about services as well as about insurance coverage could act as a barrier to seeking services. If students do not know about services in general, it is unlikely that they will know that the services are free.

Eisenberg et. al. (2007) also found that 51% of participants reported that “stress is normal in school” and thus this belief serves as a barrier to student help seeking. It may be difficult for students to discern between normal levels of stress and emotional distress that warrants seeking help.

Another significant barrier to student help-seeking is social stigma against mental illness and specifically against seeking help with mental health issues. Social stigma in this context is defined as the fear that others might judge a person negatively if she or he sought help for a problem (Deane & Chamberlain, 1994). D’amico et. al. (2016) found that students who perceive

stigma from family and friends are less likely to seek mental health services. An especially strong factor may be perceived stigma from parental figures, as parental attitudes about therapy significantly influence the likelihood that students will seek help (Vogel, Michaels, & Gruss, 2009).

Stigma against people seeking help for mental illness is both an issue within the college student population as well as within the general population. Ben-Porath (2002) found that when people were presented with vignettes of either a mentally ill person who had sought help or a mentally ill person who had not sought help, the person who had sought help was rated as more emotionally unstable than the one who had not. This shows that there is social stigma around not only having a mental illness, but specifically around seeking help for that illness. In another study, undergraduates rated people who they were told were counseling center clients as more awkward, cold, defensive, insecure, sad, and unsociable than people who they were told were not counseling center clients (Sibicky & Dovidio, 1986). Likewise, in a study of over 1,700 adults in Great Britain, people with mental illness were perceived as unpredictable, dangerous, and difficult to talk with (Crisp, Gelder, Rix, Meltzer, Rowlands, 2000). The effects of widespread social stigma could act as a significant barrier to students seeking help for mental health problems, and might be especially strong for men because of the gender-specific factors discussed previously.

Purpose of this Study

Due to the increasing need for accessible mental health services for students, the current study seeks to add to the body of literature on barriers to mental health help seeking among a college student population, while uniquely focusing on gender disparities in on-campus mental

health service usage and what barriers might be exceptionally strong for college men. Though many studies have shown that women are both diagnosed with anxiety and depression more often than men as well as seek mental health counseling more than men, few have identified the reasons for this disparity and examined the gender differences in collegiate men and women's use of on-campus mental health services. The results from this study could help inform future interventions to increase use of on-campus counseling services for students who need them.

Research Questions

This study will be guided by six main questions: 1) At what rate do students use on-campus counseling services at one large public University? 2) Is there a gender disparity in the rates that students use on-campus counseling services? 3) Is there a disparity between the number of students who feel they could benefit from using on-campus counseling services and the number who actually access the services? 4) What barriers prevent students from accessing on-campus counseling services? 5) Do those barriers differ by gender? 6) Do students prefer seeking counseling services off-campus over on-campus?

Methods

Participants

This study used an anonymous online survey (see appendix A) administered to a convenience sample of students at Portland State University which has a total student population of 27,229. Participants were recruited by contacting professors via email and requesting that they distribute the survey to their students. The sample was comprised of 38 participants. One participant was removed because they took significantly less time than average to complete the survey. Of the remaining 37 participants, 54.1% were psychology majors, while the other 45.9%

included a range of other majors such as sociology, social work, quantitative economics, physics, health studies, art, computer engineering and others. The reported ages of participants ranged from 18 to over 50 years old. In total, 37.8% of participants were 21-26 years old, 18.9% were 40-50 years old, 16.2% were 18-20 years old. In regards to gender, 64.9% of participants were women, while 24.3% were men, and 10.8% were gender nonconforming (e.g., non-binary, genderqueer).

Measures

Within this study we operationally defined “campus mental health services” as the counseling services provided by the Student Health and Counseling Center (SHAC) in order to avoid confusion with other campus resources such as the resource centers (i.e. the queer, veteran, and women’s resource centers which provide a safe space and resources to these groups) as well as academic counseling services. The mental health counseling that takes place at SHAC is different than other on-campus resources, as it is specifically geared toward professional mental health help. We used the online survey building website SurveyMonkey to create and administer this survey.

The survey included questions regarding to what extent students are aware of on-campus counseling services, perceived need for mental health services (i.e. “Have you ever felt you could benefit from on-campus counseling while attending PSU?”), actual usage of services (i.e. “Have you ever used the counseling services at the Student Health and Counseling Center?”), and reasons for not using services if they haven’t used them. There was skip logic built into the survey so that certain questions such as “have you ever felt you could benefit from on-campus counseling while attending PSU?” were only asked of students who reported never seeking

counseling at SHAC. Questions about what barriers might have prevented the participant from seeking counseling at SHAC were only asked of participants who had reported never seeking counseling at SHAC.

The survey also included questions about perceived stigma (i.e. “Do you feel your friends or family might judge you if they found out you used counseling services?”). Finally, the survey asked about student demographics/ characteristics, including gender, age, and major.

Participants were presented with an informed consent document before beginning the survey. Regarding confidentiality issues, the survey asked for demographic data but no personally identifying information. The fact that survey respondents’ identities will never be tied to these data ameliorates most confidentiality issues.

Results

Student Usage of Counseling Services

Results showed that over half (51.4%) of all students surveyed had accessed some kind of mental health counseling services, while only 24.3% of all students surveyed had ever used on-campus mental health counseling services. This answers the first guiding question of this study, which concerns overall usage rates of on-campus services.

Gender Disparities in Usage

The second guiding question of this study deals with gender disparities in usage of on-campus services. We found that of those sampled, 55.6% of men ($n = 5$), 75% of gender nonconforming people ($n = 3$), and only 4.2% of women ($n = 1$) had used on-campus services. These results are contradictory to past research which has shown that men tend to seek therapy less often than women. Our results also showed that of those sampled, 66.7% of men ($n = 6$) had

used any (on or off-campus) mental health services while attending college, while only 37.5% of women ($n = 9$) had. All gender nonconforming participants in the study ($n = 4$) reported seeking some kind of mental health services (on or off-campus) while attending college.

Using a chi-square test, we found the association between gender and usage of services to be statistically significant at a p -value of .001. Though this link is statistically significant, it should be interpreted with caution because of the small sample size and unequal participant numbers across gender groups. The sample of men and the sample of gender nonconforming people both had fewer than 10 participants (9 men, 4 gender nonconforming people), while the sample of women had 24 participants.

Disparity between Perceived Benefit and Actual Access

The third guiding question of this study asked if there is a disparity between the number of students who feel they could benefit from using on-campus counseling and the number that have actually accessed those services. Of the students sampled who had never used on-campus services, 39% reported that *yes*, they could benefit from using on-campus services, and 50% reported that they could *maybe* benefit from using on-campus services (see Figure 1). Combined, 89% of students who had never used on-campus services reported that they could or maybe could benefit from using them. This shows an unmet need and leads us to the discussion of barriers to student access of on-campus counseling services.

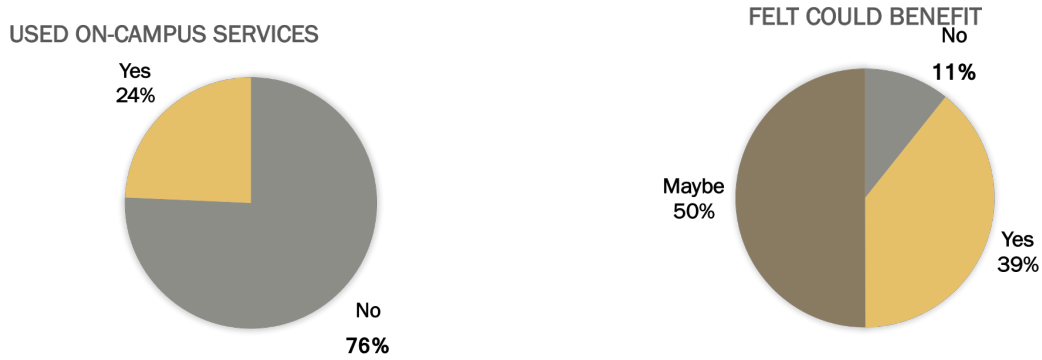


Figure 1. Frequency of service use vs. perceived benefit.

Barriers to Access

The number one reported barrier to student use of on-campus mental health services was that students would rather seek counseling off-campus. Almost half (43%) of students surveyed who had never used on-campus services reported this as a barrier. The second most reported barrier was being too busy (39.3%), the third was “other” (35.7%), and the fourth was being nervous about talking to a therapist (21.4%). Please note that participants were able to select more than one barrier. The fact that the number one barrier to on-campus service use was desire to seek counseling off-campus is consistent with the finding that though 51.4% of students sampled had sought some type of counseling, only 24.3% did so on-campus. (See Figure 2 for frequencies of all barriers). Chi-square tests did not reveal any statistically significant differences in barriers by participant gender.

Barrier	Frequency Selected	Percent
“I’d rather seek counseling off-campus”	12	42.9%
“I haven’t had time or I’m too busy”	11	39.3%
“Other”	10	35.7%

“I’m nervous to talk to a counselor/therapist”	6	21.4%
“I’m not sure my problems are serious enough to talk to a counselor”	5	17.9%
“I wouldn’t know where to go or who to call”	3	10.7%
“The counselor/therapist probably wouldn’t understand my problem anyway”	3	10.7%
“My friends or family would think it was weird, or I would be embarrassed if people found out I sought counseling”	1	3.6%

Figure 2. *Distribution of reported barriers to using on-campus counseling services.*

Discussion

In addition to highlighting potential gender disparities in mental health service usage and identifying barriers to service access, the findings of this study reflect a clear preference for seeking counseling off-campus. There are many different possible explanations for this, among them being the fact that at this particular counseling center, there is a waiting list for individual counseling which can sometimes stretch to be weeks or months long. Students are still able to see a counselor on a walk-in basis, and there are group counseling services available as well. However, it would be reasonable to think that a weeks-long waiting list may deter some students from seeking individual therapy on-campus. Further research would need to be done to substantiate this claim. If this were the case, it would mean we would need to look more closely

at college counseling centers to determine if they have the resources to meet the needs of every student who feels they could benefit from on-campus counseling. This study has focused mainly on student opinions and behaviors, but perhaps it would be more pertinent to focus on whether or not college counseling centers are equipped to handle more student usage.

We did not find a statistically significant association between gender and which barriers to service use were selected, or total number of barriers selected. This addresses the fifth guiding question. This is not to say that there is no link between gender and barriers, but further research with a larger sample size would need to be done to confirm or disconfirm this link. The sixth and final guiding question for this study asks if students would rather seek counseling off-campus. The answer to this is clearly 'yes', but further research needs to be done to determine why exactly this is.

We found that certain barriers identified in Eisenberg et al. (2007), such as lack of knowledge of available services, did not appear to be considerable problems for this sample. For example, 94.6% of participants reported knowing what the Student Health and Counseling Center (SHAC) is, and 89.2% of participants were aware that mental health counseling services available at SHAC are covered by tuition and fees. Somewhat contradictory to this is the finding that 11% of those who had never used on-campus services reported that not knowing where to go or who to call to make an appointment was a barrier to accessing on-campus services. Additionally, when students who had never used on-campus counseling services were asked if they would know where to go or who to call should they decide to seek services, 32% reported being unsure of where to go or who to call to make an appointment. Perhaps many students are aware that the services exist, but some are unsure of the exact process to access them.

Likewise, the effects of stigma did not appear to be a large issue for this sample. Only 4% of participants reported being embarrassed to seek therapy. Additionally, when asked if they felt that friends or family might judge them negatively if they found out they sought counseling, 70% of participants said no, while 22% of participants said maybe, and only 8% said yes. It is possible that the relatively high proportion of psychology majors (46%) caused the effects of stigma to be underrepresented. It is also possible that the population of students who would voluntarily take a survey about counseling services might hold less stigma about counseling services. Further research would need to be done with this population to determine the effects of stigma.

Limitations

The primary limitation of this study is the small sample size. Our total sample was 37 participants, comprised of 24 women, 9 men, and 4 gender nonconforming individuals. Women are overrepresented in this sample, and it is overall quite small. In particular, because the sample of gender nonconforming individuals consisted of fewer than five participants, the chi-square test results should be interpreted with caution.

Another potential limitation of this study is the proportion of psychology majors to non-psychology majors in the sample. There is a chance that the psychology student population may be more aware of mental health services or more likely to utilize those services due to their education about psychology and counseling practice. Results from this population may over-represent knowledge about services. In addition, it may under-represent the effects of social stigma because of increased knowledge of and exposure to topics related to mental health and counseling. We have attempted to mitigate this problem by recruiting across departments instead of only from the psychology department. We were moderately successful at this, with less than

half of the sample being comprised of psychology majors, and the other half comprised of a wide range of other majors.

A third limitation involves the fact that the measure used is not a previously normed measure shown to be reliable and valid. Despite this potential limitation, it seems appropriate to use a measure we have built ourselves due to the specific nature of the line of questioning, and because we were not attempting to place participants into diagnostic categories or assess their actual mental health status.

A fourth limitation is the lack of open-ended questions. Due to the closed-ended nature of the survey questions, students were not given the opportunity to report barriers that were not already conceptualized by the researchers. This leaves us without conclusive answers for why students choose to go off-campus for counseling, as well as for what the “other” barriers are that 37% of students reported to exist.

Future Directions for Research

There are many different directions that future research could take to build and expand upon the current study. Firstly, a study with a larger sample size could confirm or disconfirm the relationship between gender and types of barriers to seeking counseling. Secondly, future research could explore reasons why students tend to choose off-campus counseling instead of using on-campus services. Following from this, future research could determine if the average college counseling center is equipped with the resources needed to serve every student who could benefit from counseling. Thirdly, future studies could explore, in an open ended fashion, other barriers preventing students from seeking counseling. Many studies have focused on reasons intrinsic to the student for not seeking counseling (e.g., lack of knowledge of services,

stigma against counseling, being too busy), but fewer have focused on reasons intrinsic to the college mental healthcare system for why students may not elect to use these services. Finally, future research could collect more detailed demographic data to explore barriers specific to ethnic or cultural groups in order to encourage more culturally sensitive counseling on college campuses. The findings of the current study shed light on barriers to mental health service use among college students, but further research is clearly needed to address this important issue.

References

- American College Health Association (2011). *American College Health Association-National College Health Assessment II: Reference Group Executive Summary Spring 2011*. Hanover, MD: American College Health Association.
- Baxter, A. J., Scott, K. M., Ferrari, A. J., Norman, R. E., Vos, T., & Whiteford, H. A. (2014). Challenging the myth of an “epidemic” of common mental disorders: Trends in the global prevalence of anxiety and depression between 1990 and 2010. *Depression and Anxiety, 31*(6), 506-516.
- Bech, P. (2001). Male depression: Stress and aggression as pathways to major depression. In: Dawson, A., Tylee, A. (Eds). *Depression—Social and Economic Timebomb* (pp. 63-66). London: British Medical Journal Books.
- Ben-Porath, D. (2002). Stigmatization of individuals who receive psychotherapy: An interaction between help-seeking behavior and the presence of depression. *Journal of Social and Clinical Psychology, 21*(4), 400-413.
- Benton, S. a., Robertson, J. M., Tseng, W.-C., Newton, F. B., & Benton, S. L. (2003). Changes in counseling center client problems across 13 years. *Professional Psychology: Research and Practice, 34*(1), 66–72.
- Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatization of people with mental illnesses, 4–8.
- D’Amico, N., Mechling, B., Kemppainen, J., Ahern, N. R., & Lee, J. (2016). American College

- Students Views of Depression and Utilization of On-Campus Counseling Services.
Journal of the American Psychiatric Nurses Association.
- Deane, F. P., & Chamberlain, K. (1994). Treatment fearfulness and distress as predictors of professional psychological help-seeking. *British Journal of Guidance & Counselling*, 22(2), 207.
- Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and access to mental health care in a university student population. *Medical Care*, 45(7), 594–601.
- Eisenberg, D., Golberstein, E., & Hunt, J. B. (2009). Mental health and academic success in college. *The B. E. Journal of Economic Analysis & Policy*, 9, 40.
- Grossman, M., & Wood, W. (1993). Sex differences in intensity of emotional experience: a social role interpretation. *Journal of Personality and Social Psychology*, 65(5), 1010–22.
- Hyun, J. K., Quinn, B. C., Madon, T., & Lustig, S. (2006). Graduate Student Mental Health: Needs Assessment and Utilization of Counseling Services. *Journal of College Student Development*, 47(3), 247–266.
- Kessler, R.C., Brown, R. L., & Broman, C. L. (1981). Sex Differences in Psychiatric Help-Seeking : Evidence from Four Large-Scale Surveys. *Journal of Health and Social Behavior*, 22, 49-64.
- Mallinckrodt, B., & Leong, F. T. L. (1992). Social support in academic programs and family environments: Sex differences and role conflicts for graduate students. *Journal of Counseling & Development*, 70(6), 716–723.
- MIT Mental Health Task Force. (2001). Mental health task force report.
- Möller-Leimkühler, A. M. (2002). Barriers to help-seeking by men: A review of sociocultural

- and clinical literature with particular reference to depression. *Journal of Affective Disorders*, 71(1-3), 1-9.
- Patten, S. B., Wang, J. L., Williams, J. V. A., Currie, S., Beck, C. A., Maxwell, C. J., & el-Guebaly, N. (2006). Descriptive epidemiology of major depression in Canada. *The Canadian Journal of Psychiatry / La Revue Canadienne De Psychiatrie*, 51(2), 84-90.
- Rai, D., Zitko, P., Jones, K., Lynch, J., & Araya, R. (2013). Country- and individual-level socioeconomic determinants of depression: Multilevel cross-national comparison. *British Journal of Psychiatry*, 202(3), 195–203.
- Rickwood, D. J., & Braithwaite, V. A. (1994). Social-psychological factors affecting help-seeking for emotional problems. *Social Science & Medicine*, 39, 563-572.
- Sibicky, M., & Dovidio, J. F. (1986). Stigma of Psychological Therapy: Stereotypes , Interpersonal Reactions, and the Self-Fulfilling Prophecy, *Journal of Counseling Psychology*, 33(2), 148–154.
- Stoppe, G., Sandholzer, H., Huppertz, C., Duwe, H., & Staedt, J. (1999). Gender differences in the recognition of depression in old age. *Maturitas*, 32(3), 205–212.
- Vogel, D. L., Michaels, M. L., & ... (2009). Parental Attitudes and College Students' Intentions To Seek Therapy. *Journal of Social and Clinical Psychology*, 28(6), 689-713.
- Williams, C. (2000). Doing health, doing gender: Teenagers, diabetes and asthma. *Social Science & Medicine*, 50(3), 387–396.
- Whiteford, H. A., Degenhardt, L., Rehm, J., Baxter, A. J., Ferrari, A. J., Erskine, H. E., ... Vos, T. (2013). Global burden of disease attributable to mental and substance use disorders:

Findings from the Global Burden of Disease Study 2010. *The Lancet*, 382(9904), 1575–1586.

Zhang, N., & Dixon, D. (2003). Acculturation and attitudes of Asian international students toward seeking psychological help. *Journal of Multicultural Counseling and Development*, 31, 205–222.

Appendix A

1. Do you know what the Student Health and Counseling Center (SHAC) is?

-Yes

-No

2. Are you aware that there are mental health counseling services available at SHAC that are covered by your tuition and fees?

-Yes

-No

-I didn't know what SHAC was prior to this survey

3. Have you ever used any (on or off-campus) mental health counseling services while attending PSU?

-Yes

-No

4. Have you ever used the counseling services at SHAC while attending PSU?

-Yes

-No

(Note: If selected yes, participant was skipped to #9)

5. Have you ever felt like you could benefit from on-campus counseling services while attending PSU?

-Yes

-No

-Maybe

6. If one day you decided to seek counseling at SHAC, would you know where to go or who to call to make an appointment?

-Yes

-I'm not sure

7. What has stopped you from seeking services at SHAC? (Check all that apply).

-I wouldn't know where to go or who to call

-I'm nervous to talk to a counselor/therapist

- The counselor/therapist probably wouldn't understand my problem anyway
- I haven't had time or I'm too busy
- My friends or family would think it was weird, or I would be embarrassed if people found out I sought counseling
- I'm not sure my problems are serious enough to talk to a counselor
- I'd rather seek counseling off-campus
- Other

8. Do you feel that your friends or family might judge you negatively if they found out you sought counseling?

- Yes
- No
- Maybe

9. With which gender do you most identify?

- Agender
- Genderqueer
- Man
- Non-Binary, including genderfluid and gender non-conforming
- Questioning or unsure
- Trans Man
- Trans Woman
- Woman
- Prefer not to answer
- Identity not listed

10. What is your age?

- 18-20
- 21-23
- 24-26
- 27-30
- 31-35
- 36-40
- 40-50
- 50+

11. What is your major? (*Note: Participants selected from a drop-down menu of all available majors at this university*)