

Factors Associated with College Students' Propensity toward Mental Health Service Utilization on Historically Black Colleges and University Campuses

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Abstract

This study investigated attitudes towards help-seeking among students on Historically Black University (HBCU) campuses. The sample included 407 students between the ages of 18 and 31 attending an HBCU. The Attitude toward Seeking Professional Psychological Help Scale (ATSPPHS) by Fisher and Turner (1970) was used as the data collection tool. In the data analysis, the following descriptive analyses were used: analysis of variance (ANOVA) was used to compare the mean values of more than two groups; independent samples t-tests were used to compare the mean values of the two groups in normal distribution; and Turkey's test was run to perform a post hoc analysis. This research indicates that there are statistically significant relationships between student demographics in terms of age, gender, and classification level and students' attitudes towards help-seeking. These findings may be helpful to university professionals and policy-planners in addressing the decision-making challenges facing African American students regarding their utilization of campus-based mental health services.

Keywords: attitudes, help-seeking, mental health utilization, planned behavior.

1.0 Introduction:

The need for mental health services on college and university campuses continues to be a growing concern. This is evidenced by a national survey by Gallagher (2013) of 203 college and university counseling centers, in which 95% of the counseling directors who responded reported that over the past five years, they have witnessed an increase in the number of students with severe psychological problems. Universities have also reported a 40% to 50% increase in students utilizing counseling centers on campus (Soet & Sevig, 2006). Research has further shown that mental health problems have had a profound impact on all aspects of campus life affecting students' physical, emotional, cognitive, and interpersonal functioning; in addition, they have significantly affected academic performance, retention, and graduation rates leading to increased academic failure (Hayes, 2013; Kitzrow, 2003).

For example, in a 2015 survey of college students by the American College Health Association (ACHA), it was found that 62.3% of women and 45.4% of men reported experiencing episodes of "overwhelming anxiety" in the past year, and 36.6% of women and 29.8% of men reported a period in the last year of feeling so depressed it was difficult to function (ACHA-NCHA, 2015). Additionally, their report noted 9% of women and 8.3% of men, "seriously considering attempting suicide" in the previous year (ACHA-NCHA, 2015).

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Still more, according to a study of college students with mental health conditions by the National Alliance on Mental Illness (2011) nearly three fourths reported having experienced a mental health crisis while in school. Roughly, one third of students meet diagnostic criteria for a psychiatric disorder (Eisenberg, Hunt, & Speer, 2013). The majority of these students are not receiving mental health services (Blanco et al., 2008; Eisenberg, Golberstein, & Gollust, 2007; Eisenberg, Hunt, Speer, & Zivin, 2011) despite the fact that most large 4-year colleges and universities offer free mental health services (Golberstein, Eisenberg, & Downs, 2016). However, Kitzrow (2003) reported that when students receive help for their psychological problems, positive impacts on personal well-being, academic success, and retention were noted.

The number of African American students attending higher education in the U.S. continues to increase. According to data from the U.S. Department of Education, National Center for Education Statistics (2011), African Americans attending institutions of higher education increased from 9% to 14% from 1978 to 2009. Despite these increases in higher education participation, the literature suggests African American students underutilize mental health services (Rosenthal & Wilson, 2008; Yorgason, Linville, & Zitzman, 2008; Mori, 2000; Davidson, Yakushka, Sanford-Martens, 2004; Soet & Sevig, 2006). Underutilization refers to “an evaluative term applied to situations in which individuals who might benefit from services do not use them” (Rosenthal & Wilson, 2008, p. 61). Some studies even suggest that African American college students, in particular, reported an unwillingness to seek help for psychological difficulties and identified more negative help-seeking attitudes, relative to their white same-aged peers (Gloria, Hird, & Navarro, 2001). Attitudes decide the extent to which an individual has a positive or negative appraisal of a specific behavior (Mesidor & Sly, 2014).

For many who live with mental health problems, stigma is a significant contributor to negative help-seeking attitudes. This is evidenced in previous research which noted that stigma in society can deter the initiation of help by an individual suffering from mental health problems (Byrne & Morrison, 2010). Stigma, in this context, may be defined as a multidimensional negative attitude toward a group of people who are construed to be lacking appropriate skills or abilities (Masuda et al., 2009). Oftentimes, African American students attach stigma to mental illness and this association prevents them from seeking the necessary services in fear that they will be stigmatized (Wells, 2010). In a study by Masuda et al., (2009) results revealed that African American college students tend to have greater mental health stigma and less favorable help-seeking attitudes than their white counterparts. Mental health stigma is conceptualized as a set of negative attitudes toward people with a psychological disorder, such as being unpredictable or hopeless in recovery (Corrigan, 2004; Masuda & Latzman, 2011).

According to the literature, cultural mistrust, attitudes toward mental health problems, African American spirituality, and socioeconomic status have also been frequently cited rationales accounting for low mental health service utilization and negative attitudes by African Americans (Duncan & Johnson, 2007; So, Gilbert, & Romero, 2005). Given their higher rates of mental health service underutilization, there is a great need to pay attention to African American college students' attitudes towards mental health. So et al. (2005) report that the more likely African American students at Historically Black Colleges and Universities (HBCU's) were to recognize their own needs, the more likely they were to experience attitudinal changes, access mental health services, and have confidence in mental health practitioners.

1.2 Purpose of the Study

As previous literature suggests that the underuse of mental health services among African American college students warrants ongoing study, the current exploratory study will investigate the main factors associated with the help-seeking behaviors and attitudes of African American students by exploring their propensity toward utilization of available mental health services on HBCU campuses (Barksdale & Molock, 2009; Wallace & Constantine, 2005). The significance of the current study is evidenced in a study by So et al. (2005), who reported that the more likely African American students at HBCUs were to recognize their own needs, the more likely they were to experience attitudinal changes, access mental health services, and have confidence in mental health practitioners. The present study investigates HBCU attitudes pertaining to help-seeking. As a result of the above discussion, the following question will be addressed:

Q: What relationships exist between attitudes towards the utilization of mental health services and contextual factors (demographic variables) among African American students on HBCU campuses?

2. Theoretical Background

2.1 Description of the Theory of Planned Behavior

The theory of planned behavior was developed by Icek Ajzen; it builds upon Fishbein and Ajzen's (1975) theory of reasoned action, which was designed to explore behavioral intentions as the main predictors of behaviors. The theory of planned behavior expounded on this theory by introducing a third element: the concept of perceived behavioral control (Ajzen, 1991). The theory of planned behavior postulates that the most immediate and important determinants of specific behaviors are their behavioral intentions concerning its performance (Sheeran, Norman, & Conner, 2001). More specifically, it has been designed to predict an individual's intention to engage in a behavior at a specific time and place. Behavioral intention refers to the motivational factors that influence a given behavior where the stronger the intention to perform the behavior, the more likely the behavior will be performed. Behavioral intention is the central factor in the theory of planned behavior; behavioral intentions are influenced by the attitude about the likelihood that the behavior will have on the expected outcome, the subjective evaluation of the risks and benefits of the outcome, and the ability to perform the behavior (Ajzen, 1991).

The theory of planned behavior is comprised of three core constructs that predict behavioral intentions: attitude toward the behavior, subjective norms, and perceived behavioral control. The first construct, attitude, is the degree to which an individual has a favorable or unfavorable evaluation of the behavior of interest (Ajzen, 1991). Subjective norms refer to whether most people approve or disapprove of the behavior. Subjective norms relate to a person's perceptions about the social pressures associated with carrying out the behavior. Perceived behavioral control indicates that a person's motivation is influenced by their perception of the ease or difficulty of performing the behavior of interest. Underlying beliefs are also determinants of a person's intention and actions. These beliefs include behavioral beliefs, which can impact attitudes toward the behavior, normative beliefs, which guide subjective norms, and control beliefs, which influence perceptions of behavioral control (Ajzen, 1991).

Essentially, the theory of planned behavior contends that high levels of intention to perform a behavior are connected with positive attitudes and subjective norms regarding a behavior, and heightened perceived behavioral control (Sheeran, Norman, & Conner, 2001). Correspondingly, the stronger the intention to take part in a behavior, the more likely the behavior will be performed (Ajzen, 1991).

3. Research Method

3.1 Participants

The present quantitative study was conducted at a small, four-year HBCU located in a rural area of Texas. This institution was selected as it is a primarily African American serving institution and provided the researchers with a target rich population for exploring mental health utilization among African American students. At the time of the study, the total enrollment for the university was 8,343 students (83% African American, 5% Hispanic, 3% White, 3% Asian, 3% International 2% Mutli-racial and 1% Unknown). Of the 8,343 students, 61% were female and 39% were male, and the average age of students was 24. Participants were recruited from social sciences course within the College of Arts and Sciences. Approximately 407 undergraduate participants from various ethnic backgrounds completed a survey package (see Table 1). Student participants ranged in age from 18 to over 31 years of age ($M_{age} = 20$ years). The majority of the respondents were senior students ($N = 175$, 43%). Most participants identified themselves as full-time ($N = 378$; 92.9%) students. The majority ($N = 365$, 89.7%) of students self-identified as African American, while 4.4% self-identified as Hispanic/Latinos, 2% as Europeans, and 2.5% as other. Data reported that of the 407 students, 76% were female ($N = 308$) and 24% were male ($N = 97$).

Table 1: Demographic Characteristics

Characteristic	<i>N</i>	%
Mean age of respondents		20
Gender		
Female	308	75.7
Male	97	23.8
Enrollment Status		
Full-time	378	92.9
Part-time	23	5.7
Marital Status		
Married	17	4.2
Divorced	11	2.7
Separated	2	0.5
Never married	327	80.3
Other	48	11.8
Ethnicity		
European American	8	2.0
African American	365	89.7
Asian American	4	1
Latino/Hispanic American	18	4.4
Native American	1	0.2
Other	10	2.5
Class level		
Freshman (less than 30 credit hours completed)	15	3.7
Sophomore (30-59 credit hours completed)	96	23.6
Junior (60-89 credit hours completed)	118	29.0
Senior (90-credit hours or more completed)	175	43.0
Income		
Less than \$10,000	60	14.7
\$10,001 - \$25,000	73	17.9
\$25,001 - \$40,000	70	17.2
\$40,001 - \$55,000	62	15.2
\$55,001 - \$70,000	35	8.6
\$70,001 - \$85,000	36	8.8
\$85,001 - \$100,000	24	5.9
Over \$100,000	25	6.1
Grade Point Average		
D = 60 - 69	6	1.5
C = 70 - 79	111	27.3
B = 80 - 89	216	53.1
A = 90 - 100	72	17.7

3.2 Instrumentation

Help-seeking attitudes. The Attitude toward Seeking Professional Psychological Help Scale (ATSPPHS) (Fisher & Turner, 1970) was used to measure attitudes toward seeking help.

According to Lee, Lee, Kim & Lee (2013) help-seeking attitude is a critical factor that predicts help-seeking behavior and the ATSPPHS is the most commonly accepted instrument that measures attitudes about mental health treatment. The scale contains 29-items; (18 negatively stated and 11 positively stated items) which consisted of 4 dimensions: Dimension I - recognition of the need for psychotherapeutic help (8 items), Dimension II - stigma tolerance (5 items), Dimension III - interpersonal openness (7 items), and Dimension IV - confidence in mental health practitioners (9 items). The items were scored on a 4-point Likert-type scale from 0 (strongly disagree) to 3 (strongly agree). Items in Dimension I determine whether or not respondents recognized that psychotherapeutic help is needed. Dimension II consists of items that assess respondents' perspectives regarding the threat of stigmatization as a result of seeking professional help. Items in Dimension III describe respondents' willingness to reveal/disclose their psychological problems to an appropriate professional and Dimension IV is composed of items that convey the amount of trust respondents have in the mental health profession and its practitioners (Fisher & Turner, 1970). Higher scores on this measure will reflect a more positive ATSPPHS. Additionally, relevant demographic and student characteristics (age, gender, academic level, Grade Point Average [GPA], and enrollment status) were also explored.

Psychometric measurements for the ATSPPHS instrument reported moderately high internal reliability ranging from .83 to .87 (Fischer & Turner, 1970). Prior research reported the four-week test-re-test reliability to be .80. Known-groups validity (i.e., those who actually sought help versus those that had not) was also assessed; the point-biserial correlation between having sought help or not, and the participant's scale score was .39 ($p < .0001$).

3.3 Procedure

The present study was reviewed and approved by the Institutional Review Board (IRB) at the university with which the present authors were affiliated. Participants were selected by criterion sampling (Patton, 1990), which allowed the authors to review and study cases that met predetermined criteria. Students were required to meet the following criteria in order to be deemed suitable for participation: be 18 years of age or older and enrolled in courses at the main campus of the university. The researchers visited the College of Arts and Sciences courses with consent forms and survey instruments for prospective participants. The purpose of the study and instructions for responding were presented. Those who chose to participate were given consent forms, which they subsequently signed indicating their consent for participation. The researchers collected the signed consent forms and administered the survey instrument to those who agreed to participate.

Participants were asked to complete a battery of questions that assess attitudes associated with help-seeking behaviors and the utilization of mental health services. The prospective participants were asked to return the completed survey to the research assistant upon completion during the class period. Respondents were informed that all participation was completely voluntary and responses would be kept confidential. Prospective respondents were also informed that neither their names nor any identifying information would be associated with the completed survey.

3.4 Analysis

The research approach involved quantitative methods to test the hypotheses and answer the research questions. The data analysis for this study included measures of central tendency, frequency distribution, two and three group comparisons, one-way between group analysis of variance and independent samples t-tests; the latter were conducted to assess the relationships between the demographic variables under study and attitudes towards help seeking behaviors. Respondents' information was input into the Statistical Packages for Social Sciences (SPSS) (SPSS 21). Descriptive statistics were used for reporting the demographic characteristics of the participants.

4. Results

A one-way between-groups analysis of variance was conducted to explore the impact of age on African American students' attitudes toward the use of mental health services, as measured by the ATSPPHS. Subjects were divided into five groups according to their age (group 1: 18 and under; group 2: 19-22; group 3: 23-26; group 4: 27-30; group 5: 32 and older). There was a significant effect of age on African American students' attitudes toward the use of mental health services at the $p < .05$ level [$F(4, 402) = 11.30, p = 0.000$] (see Table 2).

Post hoc comparisons using the Turkey HSD test indicated that the mean scores for group 1 ($M = 2.74$, $SD = .34$) and group 2 ($M = 2.78$, $SD = .35$) were significantly lower than group 4 ($M = 3.13$, $SD = .51$) and group 5 ($M = 3.17$, $SD = .43$). The mean score for group 3 ($M = 2.98$, $SD = .40$) was significantly higher than group 2, but not statistically different from groups 1, 4, or 5. These results suggest that the older participants have a more positive attitude toward the use of mental health services than the younger participants do.

Table 2: ANOVA Results Related to Student Age and Perceived Attitude toward Mental Health Services

Source	df	SS	MS	F	p
Between groups	4	5.98	1.49	11.30	.000
Within groups	402	53.17	.13		
Total	406	59.15			

An independent samples t-test was conducted to compare the scores of male and female participants in their attitudes toward the use of mental health services, as measured by the ATSPPHS. There was a statistically significant difference between male participants ($M = 2.63$, $SD = .35$) and female participants ($M = 2.91$, $SD = .37$) in their attitudinal scores; $t(403) = -6.54$, $p = .000$. These results suggest that female participants have a more positive attitude toward the use of mental health services than male participants (see Table 3).

Table 3: Results of t-test Related to Students' Gender and Attitude toward the Use of Mental Health Services

	Male			Female		
	n	M (SD)	p	n	M (SD)	p
Attitude	97	2.63 (.35)	.000	308	2.91 (.37)	.000

A one-way between-groups analysis of variance was conducted to explore the impact of classification year on African American students' attitudes toward the use of mental health services, as measured by the ATSPPHS. Subjects were divided into four groups according to their year of study (group 1: freshman; group 2: sophomore; group 3: junior; group 4: senior). There was a significant effect of classification year on African American students' attitudes toward the use of mental health services at the $p < .05$ level [$F(5, 401) = 12.38$, $p = 0.000$] (see Table 4). Post hoc comparisons using the Tukey HSD test indicated that the mean score for group 4 ($M = 3.00$, $SD = .40$) was significantly higher than groups 2 ($M = 2.67$, $SD = .28$) and 3 ($M = 2.77$, $SD = .33$). There was no significant relationship between group 1 ($M = 2.83$, $SD = .42$) and the other groups or between groups 2 and 3. These results suggest that seniors have a more positive attitude toward the use of mental health services than participants in their sophomore and junior years of study.

Table 4: ANOVA Results Related to Student Relationship between Classification year and Perceived Attitude toward the Use of Mental Health Services

Source	df	SS	MS	F	p
Between groups	5	7.91	1.58	12.38	.000
Within groups	401	51.24	.13		
Total	406	59.15			

An independent samples t-test was conducted to compare the scores of full-time and part-time participants in their attitudes toward the use of mental health services, as measured by the ATSPPHS. There was not a statistically significant difference between the full-time ($M = 2.85$, $SD = .39$) and part-time ($M = 2.89$, $SD = .29$) participants in their attitudinal scores; $t(399) = -.59$, $p = .56$.

A one-way between-groups analysis of variance was also conducted to explore the relationship between ethnicity [$F(5,400) = .47$, $p = .80$], income [$F(7,377) = 1.46$, $p = .18$], and GPA [$F(3,401) = 1.47$, $p = .22$] on African American students' attitudes toward the use of mental health services, as measured by the ATSPPHS. There was not a significant effect of these demographic variables at the $p < .05$ level. These results suggest that there is no relationship between participants' enrollment status, ethnicity, income, or GPA and attitudes toward the use of mental health services.

5. Discussion

The theory of planned behavior contends that attitudes, subjective norms, and external factors on behavior impact behavioral intentions and perceived behavioral control (Sheeran, Norman & Conner, 2001). This study investigated the attitudes towards help-seeking behaviors of African American students on HBCU campuses and examined the external variables that may influence help-seeking behaviors. Previous studies have shown that older adults were more likely to hold more positive attitudes towards seeking psychological help than younger adults (Mackenzie, Gekoski & Knox, 2006). Our findings show that older students have higher positive attitudes toward mental health service utilization, which supports the first hypothesis that a positive association exists between attitudes towards help-seeking behaviors and age. This suggests that the older one becomes the more their attitude regarding mental health services changes, which subsequently could impact their behaviors regarding seeking help from behavioral health specialists. Correspondingly, social networks influence help-seeking behaviors among adults; evidence shows that there is a greater likelihood for younger adults to seek psychological help from family and friends (Mackenzie, Knox, Smoley & Gekoski, 2004).

Gender has been found to be a significant factor that impacts help-seeking behavior (Tedstone Doherty & Kartalova-O' Doherty, 2010). This study maintains this notion by showing that female students display more positive attitudes towards help-seeking behaviors than male students. Although studies show that men are not psychologically healthier than women, women are seeking mental health services at a higher rate than men (Courtenay, 2000). More specifically, among college students, males seek psychological services half as frequently as females (Smith, Tran, & Thompson, 2008). Smith, Tran, and Thompson (2008) reiterate that traditional masculinity ideology can be associated with negatives attitudes towards seeking counseling. Gender role conflict among men, such as success, power, and competition; conflicts between work and family relations; restrictive emotionality and restrictive affectionate behavior between men, has been connected to an unwillingness to seek psychological treatment (Lane & Addis, 2005).

Additionally, our findings reveal a positive relationship between classification levels and attitude toward the use of mental health services. As such, it can be inferred that as African American students attain more knowledge over their academic careers, their behavior intentions are modified thus creating more attitudes that are favorable for African American students regarding help-seeking from behavior health specialists. It can also be concluded that the longer students are in post secondary education, the more exposure they will have to university counseling centers (So, Gilbert & Romero, 2005). This positive attitudinal change could increase the potential for this group to be motivated to seek professional help. Skogstad, Deane, and Spicer (2006) propose that socio demographic variables are linked to help-seeking behaviors; the results of the current study show that attitudes toward psychological help-seeking are important in explaining the relationship between demographic factors and intentions to seek psychological help.

6. Implications for Practice

The present study has several implications for practice. The present findings may be beneficial to university academic counselors, professors, administrators and policy planners, and counseling service program planners as they plan future psychological intervention services for students attending HBCUs across the nation. Information on attitudes towards utilizing mental health services may assist university advisors, professors, mental health counselors, and administrators in preparing effective intervention strategies for increasing student utilization of mental health services.

It is vital for university personnel, specifically college counselors to identify and become involved in outreach strategies to reach students. Initially, this may include working to increase the dissemination of information related to the identification of mental health services by African American students on HBCU campuses. Using this information, professionals can work to broaden the dissemination of knowledge regarding mental health services by establishing educational interventions that improve self-awareness of mental health issues in an effort to change help-seeking attitudes and behaviors among college students on HBCU campuses (Yamaguchi, Mino, & Uddin, 2011). For example, online training modules that focus on strategies for promoting the utilization of college counseling centers could be developed for identified stakeholders. The modules could be made be available through the university's online learning management system.

The broader impact is that through training, college advisors, academic advisors, and course instructors will be better able to recognize the signs of mental health issues and the procedures to follow to assist students with gaining access to support programs on HBCU campuses. By adopting these strategies, HBCUs can work to assist the student population in modifying their help-seeking attitudes regarding mental health, enhance their understanding of the impact of mental health on young students, and subsequently increase student utilization of needed university counseling services.

7. Limitations

The present study has some notable limitations to be taken into account. First, the present findings were derived from a state-operated university located in a rural area of Southwest United States. As such, the university culture might have affected participants' help-seeking attitudes, stigma, and other psychological factors (Masuda, Anderson, & Edmonds, 2012). Secondly, the study's sample limits the generalizability of the findings such that the findings might only apply to the context of this university in a rural area of Southwest United States.

Furthermore, the theory of planned behavior posits that attitudes, subjective norms, and perceived behavior control are important predictors of behaviors; however, the instrument utilized in the current study primarily measured the overall attitudes of psychological help-seeking behaviors. Future studies research should include in-depth components of subjective norms and perceived behavioral control that explain psychological help-seeking behaviors.

8. Conclusions

This research discovered that age, gender, and classification level, were of statistical significance in terms of students' attitudes towards help-seeking and utilization of campus-based mental health services systems. Despite its limitations, the present study provides useful information about the attitudes toward the utilization of mental health services among African American students on HBCU campuses. The results of this research can be used to broaden knowledge of mental health issues and service availability on HBCU campuses. The broader impact can include developing a larger dissemination stream of strategies across all HBCU campuses. This research aims to further improve awareness of mental health issues and services through knowledge dissemination in an effort to change help-seeking attitudes and behaviors of students at HBCUs.

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11. References

- Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S. M., & Olfson, M. (2008). Mental health of college students and their non-college-attending peers: Results from the national epidemiologic study on alcohol and related conditions. *Archives of General Psychiatry*, 65(12), 1429-1437.
- Byrne, R., & Morrison, A. P. (2010). Young people at risk of psychosis: A user-led exploration of interpersonal relationships and communication of psychological difficulties. *Early Intervention Psychiatry*, 4, 162-168.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614-625.
- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well being: A theory of gender and health. *Social Science and Medicine*, 50, 1385-1401.
- Davidson, M., Yakushka, O. F., & Sanford-Martens, T. C. (2004). Racial and ethnic minority clients' utilization of a university counseling center: An archival study. *Journal of Multicultural Counseling & Development*, 32(2), 59-271.
- Duncan, L. E., & Johnson, D. (2007). Black undergraduate students' attitude toward counseling and counselor preference. *College Student Journal*, 41(3), 696-719.
- Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: variation across student subgroups and across campuses. *The Journal of Nervous and Mental Disease*, 201(1), 60-67.
- 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., Hunt, J., Speer, N., & Zivin, K. (2011). Mental health service utilization among college students in the United States. *The Journal of Nervous and Mental Disease*, 199(5), 301-308.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fischer, E & Turner, J. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, 35 (1), 79-90.
- Gloria, A.M., Hird, J. S., & Navarro, R. L. (2001). Relationships of cultural congruity and perceptions of the university environment to help-seeking attitudes by socio race and gender. *Journal of College Student Development*, 42, 545-562.
- Golberstein, E., Eisenberg, D., & Downs, M. F. (2016). Spillover effects in health service use: Evidence from mental health care using first-year college housing assignments. *Health Economics*, 25(1), 40-55.
- Hayes, D. (2013, October 9). World mental health day heightens awareness of college student woes. *Diverse Issues in Higher Education*. Retrieved from <http://diverseeducation.com/article/56583/#>
- Kitzrow, A. (2003). The mental health needs of today's college students: Challenges and recommendations. *NASPA Journal*, 41(1): 165-179.
- Lane, J. M., & Addis, M. E. (2005). Male gender role conflict and patterns of help seeking in Costa Rica and the United States. *Psychology of Men & Masculinity*, 6(3), 155-168.
- Lee, J., Lee, M., Kim, A. & Lee, S. (2013). Psychological factors in college students' attitudes toward seeking professional psychological help: A meta-analysis. *Profession Psychology: Research and Practice*, 44(1), 37-45.
- Mackenzie, C.S., Gekoski, W.L. & Knox, V.J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging & Mental Health*, 10(6), 574-582.
- Mackenzie, C.S., Knox, V.J., Smoley, J., & Gekoski, W.L. (2004). The influence of age and gender on advice given to depressed people. *Journal of Mental Health and Aging*, 10, 311-324.
- Masuda, A., Anderson, P. L., & Edmonds, J. (2012). Help-seeking attitudes, mental health stigma, and self-concealment among African American college students. *Journal of Black Studies*, 43, 773-786.
- Masuda, A., & Boone, M. S. (2011). Mental health stigma, self-concealment, and help-seeking attitudes among Asian American and European American college students with no help-seeking experience. *International Journal for the Advancement of Counselling*, 33, 266-279.
- Masuda, A., Hayes, S. C., Twohig, M. P., Lillis, J., Fletcher, L. B., & Gloster, A. T. (2009). Comparing Japanese international college students' and U.S. college students' mental health related stigmatizing attitudes. *Journal of Multicultural Counseling & Development*, 37(3), 178-189.
- Mesidor, J. K., & Sly, K. F. (2014). Mental health help-seeking intentions among international and African American college students: An application of the theory of planned behavior. *Journal of International Students*, 4(2), 137-149.

- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling & Development*, 78(2), 137-144.
- Rosenthal, B., & Wilson, W. (2008). Mental health services: Use and disparity among diverse college students. *Journal of American College Health*, 57(1), 61-68.
- Sheeran, P., Conner, M., & Norman, P. (2001). Can the theory of planned behavior explain patterns of health behavior change? *Health Psychology*, 20, 12-19.
- Sheu, H., & Sedlacek, E. (2004). An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. *Measurement & Evaluation in Counseling & Development*, 37, 130 –143.
- Skogstad, P., Deane, F. P., & Spicer, J. (2006). Social-cognitive determinants of help-seeking for mental health problems among prison inmates. *Criminal Behavior and Mental Health*, 16, 43–59.
- Smith, J., Tran, G. & Thompson, R. (2008). Can the theory of planned behavior help explain men's psychological help-seeking? Evidence for a mediation effect and clinical implications. *Psychology of Men and Masculinity*, 9(3), 179-192.
- So, D. W., Gilbert, S., & Romero, S. (2005). Help-seeking attitudes among African American college students. *College Student Journal*, 39(4) 1-9.
- Soet, J. E. & Sevig, T.D. (2006). Mental health issues facing a diverse sample of college students: Results from the College Student Mental Health Survey (CSMHS). *NASPA Journal*, 43(3), 410 - 431.
- Tedstone Doherty, D. & Kartalova-O'Doherty, Y. (2010) Gender and self-reported mental health problems: Predictors of help seeking from a general practitioner. *British Journal of Health Psychology*, 15, 213-228.
- Yamaguchie, S., Mino, T., & Uddin, S. (2011). Strategies and future attempts to reduce stigmatization and increase awareness of mental health problems among young people: A narrative review of educational interventions. *Psychiatry and Clinical Neuroscience*, 65, 405-415.
- Yorgason, J., Linville, D., & Zitzman, B. (2008). Mental health among college students: Do those who need services know about and use them? *Journal of American College Health*, 57(2), 173-182.