Public Health Issue: Depression

Specific Health Behavior: Use of On-Campus Counseling Services

Target Population: Undergraduate Students at the University of Maryland

Theory Utilized: The Health Belief Model

Background

2.a. Various definitions of help-seeking behaviors have been established through a magnitude of research. It has been defined as the behavior of actively seeking help from other people (Rickwood, Deane, Wilson, & Ciarrochi, 2005). More recently, Cornally and McCarthy (2011) defined it as a problem focused, planned behavior, involving interpersonal interaction with a healthcare professional. Help-seeking resources are either informal, meaning assistance through a personal relationship, or formal, meaning assistance through a professional counseling service. On-campus counseling services, a formal resource, are offered at universities and colleges for students to access. The 2014 National Survey of College Counseling Centers found that 30% of the centers limit the number of counseling sessions they offer (Gallagher, 2015). Similarly, the University of Maryland Counseling Center offers short-term individual, group, and couple counseling to all registered students. Students are eligible for eight sessions, at no cost, in a twelve-month period.

While counseling center utilization has increased, the utilization rate in comparison to the prevalence of poor mental health has remained disproportionately low. Despite the extent of research showing the positive effects of counseling services on mental health status (Xu et al., 2018), reluctance to seek mental health care is still apparent. Continued stigma behind mental health disorders and service use is partially to blame for this (DiGioacchino-DeBate, Gatto, & Rafal, 2018). Both public and personal stigma has shown to be a key factor that impedes the use of mental health services (Hogan, 2003). Normalization of school stress and lack of perceived need for such assistance also explain the underutilization of on-campus counseling services (Eisenberg, Golberstein, & Gollust, 2007). Continued effort toward normalizing the mental health spectrum and eliminating stigma is necessary to ensure that professional services are utilized to their maximum potential.

2.b. Various mental health disorders, like anxiety and depression, disproportionately impact the undergraduate student population (Wyatt & Oswalt, 2013). Depression, in particular, is one

very common mental health problem that negatively impacts this population. Eisenburg et al., found that the prevalence of depression among this population is roughly 17% (2013). More recently, the 2018 American College Health Association's undergraduate report indicated that within the last twelve months roughly 18% of undergraduate students were diagnosed with depression, while 22% were diagnosed with anxiety (*Undergraduate Student Reference Group Data Report*, 2018).

The undergraduate student population is vulnerable to a variety of unique stressors. Stressors typical of beginning and attending college include the academic pressure, absence of family and family support, and additional adult-like responsibilities (Pedrelli et al., 2015). Such adjustments can lead to anxiety and depressive symptoms, especially in the first year students (Mihăilescu et al., 2016). If not treated, these mental health conditions can impede academic standing (Keogh, Bond, & Flaxman, 2006), and lead to more severe outcomes such as substance use (Teter, et al., 2010) and suicidal ideation (Wilcox et al., 2010). Contrary to expectation, Wilson & Deane found that depressive symptoms are associated with lower levels on intention to seek help from mental health care professionals (2010).

2.c. The Health Belief Model (HBM) is a descriptive behavior theory model intended to predict why people engage in certain health behaviors. The HBM is composed of six constructs, four of which are original tenets (perceived susceptibility, perceived severity, perceived barriers, perceived benefits), and two later evolving naturally to address confidence (self-efficacy) and decision-making stimuli (cues to action). The HBM assumes that people will engage in a health behavior if they believe that the outcome of their current behavior poses severe enough consequences. As a value-expectancy theory, the HBM predicts that behavior is a function of the value one places on wellness and/or a particular health outcome, and the belief that a particular action will result in a specific health outcome (Gipson & King, 2012).

Despite the availability of on-campus counseling services, utilization of such services remains low. This theory was selected as a means to understand the values placed on mental

health and the perceptions of counseling service outcomes in the undergraduate student population. The HBM has been utilized to explore use of professional counseling services in the student population (Rosenthal & Wilson, 2008); however, few exist that pertain specifically to on-campus counseling services.

Theory Use

3. Initially developed as a means to understand the lack of uptake of a readily available tuberculosis vaccination, the HBM has since been adopted to assess a vast range of health behaviors. With regards to the college student population specifically, the HBM has been utilized to understand health behaviors such as HPV vaccine uptake (Mehta, Sharma, & Lee, 2013), condom use (Montanaro & Bryan, 2014), breast cancer screening (Torbaghan et al. 2014), HIV counseling and testing (Nöthling & Kagee, 2013), and eating habits (Kim, Ahn, & No, 2012). The HBM has also been utilized to understand the uptake of help-seeking behavior in college students as well. HBM utilization to explore the use of on-campus counseling services specifically is lacking; however, there is an abundance that addresses use of professional counseling services. Additionally, literature applying the HBM to explore the use of professional counseling services for a single mental health condition among this population is also lacking; however, there is a modest amount utilizing it to explore use of such services among students with an array of mental health conditions.

Nobiling and Maykrantz utilized the HBM to explore the perceptions of mental health as they relate to mental health service use among the college student population (2017). Significant findings included that the primary barriers to seeking professional services were sociocultural concerns (i.e. stigma) and system navigation challenges (i.e. finding a provider), while primary care providers were a fundamental cue to action (Nobiling & Maykrantz, 2017). Ultimately, it was suggested that implementing interventions that normalize mental health

diagnoses could reduce stigma, and that increasing education and opportunities to learn system navigation will reduce perceived barriers (2017).

Czyz applied the HBM to better understand the barriers that college students with elevated suicide risk face when seeking professional help (2013). One criterion for participation was a depression diagnoses because of its influence on suicide risk. Results found multiple self-reported barriers for not seeking professional mental health services. The most frequently reported reasons included perception that such services were not necessary due to transience, lack of time, and use of self-management (Czyz, Horwitz, Eisenberg, Kramer, & King, 2013). Contrary to Nobiling and Maykrantz and the majority of previous research on this topic, stigma was not a significant determinant of seeking professional counseling. It was ultimately suggested that more innovative intervention strategies, such as text-based interventions, might decreased perceived barriers and increase the use of mental health services, but that interventions around stigma may not be effective since it was not seen as a significant barrier.

O'Conner et al. also incorporated the HBM to explore mental health help-seeking behavior in college students (2014). The original four tenants were utilized in addition to a fifth construct, General Health Motivation. The Health Beliefs about Mental Illness (HBMI) instrument was utilized to measure the HBM constructs. Results found that, while perceived benefits are more impactful than barriers, they both predicted intention to seek help for mental health disorders; however, perceived severity and susceptibility did not (null relationship) (O'Connor, Martin, Weeks, & Ong, 2014). However, follow up analyses revealed that the relationship between susceptibility and help seeking intention became strong and positive when benefits were perceived as high, but it became strong and negative when benefits were perceived as low (2014). Ultimately, it is suggested that interventions that target perceived barriers would better promote the benefits of utilizing mental health services.

Findings remain inconsistent when exploring HBM constructs and mental health service intention among college students; however, perceived barriers seem to be the most consistent

construct that interferes mental health service utilization. Continued efforts to understand the values that students place on mental health and mental health services are necessary to understand underutilization. More specifically, understanding the underutilization of on-campus counseling services, a readily available and inexpensive resource, will ultimately lead to interventions that will better assist this population, and ensure overall health and academic success.

Theoretical Constructs

4.a. Strategies for intervention content and delivery will be based off of conclusions drawn from previous interventions as well as gaps in current literature. Intervention materials will address all six HBM constructs, but they will not be mutually exclusive. The proposed intervention will take place in the form of a school-wide mental health campaign. An array of tangible informative materials (flyers) as well as a text-based intervention will be developed to address HBM constructs.

Perceived susceptibility refers to one's subjective perception of vulnerability or risk of obtaining an illness. Perceived severity refers to one's subjective perception of the seriousness of an illness. The extent of knowledge one possesses about a health problems and outcome greatly influences both of these constructs. The proposed campaign will address these constructs with a one of two flyers. One will state the national prevalence of depression among undergraduate college students in the form of a "Did you know?" statement. Preceding that will be the statement, "Feeling down? Overwhelmed? You are not alone!" The second flyer will include some of the unique stressors that undergraduate students face (i.e. academic pressure, absence of supportive networks, increase of responsibilities) in the same "Did you know?" statement form. These materials are intended to address perceived susceptibility and perceived severity (perceived threat). The intent behind stating the prevalence and common stressors is to provide relatable information, with the ultimate goal of normalizing the condition and the

circumstances that cause it.

Perceived barriers stem from one's perceptions of obstacles to performing a health behavior. The perception of potential negative outcomes from performing a health behavior influences this construct. Depression prevalence statistics will also be utilized as a means to address perceived barriers, with the intent of normalizing the mental health condition and minimizing the stigma behind it. Another flyer will be created to address perceived barriers as well. This will include information on the mental health services offered through the counseling center (i.e. individual, group, and couples counseling), as well as student eligibility (i.e. eight free sessions in a 12-month period). Lack of awareness that mental health services exist on campuses as well as treatment costs are two commonly reported barriers. Therefore, incorporating this information is intended to bring about service availability and affordability, and ultimately minimize perceived barriers. A text-based counseling intervention through the counseling center will also be established as a means to address the perceived barriers. This intervention method will make counseling services accessible via text, in turn, making it more easily accessible, less time-consuming, and would ultimately eliminate the possibility of being seen by peers in the context of a counseling center.

Perceived benefits refer to one's perception of the effectiveness of performing a health behavior. In other words, it's the perception that performing a specific health behavior will in fact reduce the chance of a negative health outcome. A final flyer will be created as a means to address perceived benefits. In addition to affordability, the flyer will include some of the benefits of utilizing on-campus counseling services. More specifically, it will include benefits that speak to the student population, such as increased academic performance, problem-solving skills, and stress management skills.

Self-efficacy refers to one's confidence in being able to perform a health improving behavior. This construct emphasizes the role of learning and the affective factors that influence learning. The proposed text-based intervention will also address this construct. After students

opt-in to the text-based service, a counseling professional from the center will initiate an exchange to the student. This way, any self-doubt regarding one's ability to obtain assistance will be eliminated. In addition to being more easily accessible, it is also intended to minimize the fear and anxiety that comes with discussing potentially personal information with a stranger.

Cues to action are the stimuli needed to initiate the decision-making process, both internal (i.e. a physical symptom) and external (i.e. media publicity). Cues to action were added to the model as a means to understand motivating behavior. The campus-wide campaign in and of itself will act as a cue to action, and all tangible materials and resources will act as external cues to action, specifically. It is anticipated that internal cues to action, like peer encouragement, will resort from the campaign as well.

4.b. The school-wide mental health campaign will take place in the form of a mental health awareness month. The informative materials previously discussed will be in the form of flyers. All flyers will include contact information for the counseling center as well as the text-based intervention phone number. Flyers will be disseminated by the university's counseling center to all buildings on the University of Maryland campus. When deciding the exact context of the materials, it is important to consider the vulnerability of the target population as well as the material's content. Therefore, it was decided that the flyers will be placed in restroom stalls to allow utilization without fear of judgment. Flyer briefness and variety is intended to capture and maintain interest, as opposed to utilizing one flyer with a mass of information.

As previously mentioned, all flyers will include the text-based intervention phone number. Students will have the choice to opt-in to the service. Those who choose to opt-in will be contacted by a mental health professional from the counseling center within twelve hours. Communication preferences (i.e. check-in frequency (if applicable)) and emergency contact information will be established in the first exchange. From that exchange, an anonymous profile will be created, and the student will be given an identification number to ensure anonymity.

Ultimately, this intervention is intended to be an ongoing source of communication

between a counseling center professional and student, as a means to alleviate distress, provide further resources, and provide support. Because of its informal nature, the eight-session maximum will not apply. Although the text-based intervention will be introduced during the campaign month, it will remain a readily available resource for future use.

4.c. Proposed survey items will address each of the HBM theory constructs. The Health Beliefs About Mental Illness (HBMI) instrument, developed by Saleeby (2000), influenced some of the survey items. Others were influenced by conclusions from previous research pertaining to this topic.

All items will be presented on a seven-point Likert Scale, ranging from (1) strongly agree to (7) strongly disagree.

Perceived susceptibility

- 1. Undergraduate college students are particularly vulnerable to poor mental health.
- 2. My chances of developing a mental health condition are great.

Perceived severity

- If I were diagnosed with a mental health condition, it would threaten the relationship I
 have with my family or friends.
- 2. The thought of having a mental health condition scares me.

Perceived barriers

- 1. Utilizing on-campus counseling services would cost too much money.
- 2. Utilizing on-campus counseling services would take too much time.

Perceived benefits

- 1. Utilizing on-campus counseling services would improve my academic performance.
- 2. Utilizing on-campus counseling services would increase my ability to function in school.

Self-efficacy

- 1. A text-based counseling option would make it easily to receive help.
- 2. I'm confident that I would be able to find a counselor who would be able to help me.

Cues to action

- 1. Counseling center services are advertised on my school's campus. (external cue)
- 2. My peers have mentioned a counseling service accessed through texts. (internal cue)
- 5. The proposed intervention has several limitations. First, although the HBM has been utilized in a magnitude of research on the values and expectations of mental health services among college students, it does not address personal beliefs, which would influence the level of acceptance of the health behavior. Additionally, the HBM assumes that cues to action are widely prevalent, which would not be the case for this particular campaign since flyers would only be present in restroom stalls and not in more public contexts. Another limitation may be the complexity of a text-based intervention. Although, proven to be effective in other contexts, there may not be enough staff to suit the needs of students, should it become a popular intervention. Moreover, survey items were solely based on conclusions drawn from previous literature, not on

elicitation interviews. Therefore, it is possible that survey items may not be as applicable or reflective of the UMD undergraduate student population. A final limitation may be limited generalizability/external validity since the intervention is limited to the undergraduate student population.

The proposed intervention also has many strengths. First, the HBM had been proven to be a useful theory in explaining the uptake of counseling services in the student population. Another strength may be that, while limited to restrooms, flyer location will potentially allow for substantial exposure. Additionally, it will be one of the only interventions to utilize the HBM in the context of undergraduate college students and uptake of on-campus counseling services for depression, specifically. It is also one of few that will specifically address the use of on-campus counseling services. Most literature utilizing the HBM on the student population addresses a broader health behavior, for instance, professional counseling, which could imply on-campus or off-campus counseling services. A final strength of this proposed intervention would be the chosen target population. Undergraduate college students are an easily accessible population on campus as well as a population that experiences higher than normal rates of depression.

References

- Cornally, N., & McCarthy, G. (2011). Help-seeking behaviour: a concept analysis. *International Journal of Nursing Practice*, 17(3), 280–288. https://doi.org/10.1111/j.1440-72X.2011.01936.x
- Czyz, E. K., Horwitz, A. G., Eisenberg, D., Kramer, A., & King, C. A. (2013). Self-reported Barriers to Professional Help Seeking Among College Students at Elevated Risk for Suicide. *Journal of American College Health*, 61(7), 398–406. https://doi.org/10.1080/07448481.2013.820731
- DiGioacchino DeBate, R., Gatto, A., & Rafal, G. (2018). The Effects of Stigma on Determinants of Mental Health Help-Seeking Behaviors Among Male College Students: An Application of the Information-Motivation-Behavioral Skills Model. Retrieved from https://journals-sagepub-com.proxy-um.researchport.umd.edu/doi/full/10.1177/1557988318773656
- 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. https://doi.org/10.1097/MLR.0b013e31803bb4c1
- 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. https://doi.org/10.1097/NMD.0b013e31827ab077
- Gallagher, R. P. (2015). National Survey of College Counseling Centers 2014. 55.
- Gipson, P., & King, C. (2012). Health Behavior Theories and Research: Implications for Suicidal Individuals' Treatment Linkage and Adherence. *Cognitive and Behavioral Practice*, 19(2), 209–217. https://doi.org/10.1016/j.cbpra.2010.11.005
- Hogan, M. F. (2003). The President's New Freedom Commission: recommendations to transform mental health care in America. *Psychiatric Services (Washington, D.C.)*, 54(11), 1467–1474. https://doi.org/10.1176/appi.ps.54.11.1467
- Keogh, E., Bond, F. W., & Flaxman, P. E. (2006). *Improving academic performance and mental health through a stress management intervention: Outcomes and mediators of change.* 44(3), 339–357.
- Kim, H.-S., Ahn, J., & No, J.-K. (2012). Applying the Health Belief Model to college students' health behavior. *Nutrition Research and Practice*, *6*(6), 551–558. https://doi.org/10.4162/nrp.2012.6.6.551
- Mehta, P., Sharma, M., & Lee, R. C. (2013). Using the Health Belief Model in Qualitative Focus Groups to Identify HPV Vaccine Acceptability in College Men. *International Quarterly of Community Health Education*, 33(2), 175–187. https://doi.org/10.2190/IQ.33.2.f
- Mihăilescu, A. I., Diaconescu, L. V., Ciobanu, A. M., Donisan, T., & Mihailescu, C. (2016). The impact of anxiety and depression on academic performance in undergraduate medical students. *European Psychiatry*, 33, S284. https://doi.org/10.1016/j.eurpsy.2016.01.761
- Montanaro, E. A., & Bryan, A. D. (2014). Comparing theory-based condom interventions: Health belief model versus theory of planned behavior. *Health Psychology*, *33*(10), 1251–1260. https://doi.org/10.1037/a0033969
- Nöthling, J., & Kagee, A. (2013). Acceptability of routine HIV counselling and testing among a sample of South African students: Testing the Health Belief Model. *African Journal of AIDS Research*, *12*(3), 141–150. https://doi.org/10.2989/16085906.2013.863214
- Nobiling, B. D., & Maykrantz, S. A. (2017). Exploring Perceptions about and Behaviors Related to Mental Illness and Mental Health Service Utilization among College Students Using the Health Belief Model (HBM). *American Journal of Health Education*, 48(5), 306–319. https://doi.org/10.1080/19325037.2017.1335628
- O'Connor, P. J., Martin, B., Weeks, C. S., & Ong, L. (2014). Factors that influence young people's mental health help-seeking behaviour: a study based on the Health Belief

- Model. *Journal of Advanced Nursing*, 70(11), 2577–2587. https://doi.org/10.1111/jan.12423
- Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., & Wilens, T. (2015). College Students: Mental Health Problems and Treatment Considerations. *Academic Psychiatry*, 39(5), 503–511. https://doi.org/10.1007/s40596-014-0205-9
- Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). *Young people's help-seeking for mental health problems. 4*(3). Retrieved from https://www.tandfonline.com/doi/abs/10.5172/jamh.4.3.218
- Rosenthal, B., & Wilson, C. (2008). *Mental Health Services: Use and Disparity Among Diverse College Students*. *57*(1), 61–68.
- Saleeby, J. (2000). Health Beliefs About Mental Illness: An Instrument Development Study. 24(2), 83–95.
- Teter, C. J., Falone, A. E., Cranford, J. A., Boyd, C. J., & McCabe, S. E. (2010). Nonmedical use of prescription stimulants and depressed mood among college students: Frequency and routes of administration. *Journal of Substance Abuse Treatment*, 38(3), 292–298. https://doi.org/10.1016/j.jsat.2010.01.005
- Torbaghan, A. E.-, Farmanfarma, K. K.-, Moghhaddam, A. A.-, & Zarei, Z. (2014). Improving Breast Cancer Preventive Behavior among Female Medical Staff: The Use of Educational Intervention based on Health Belief Model. *The Malaysian Journal of Medical Sciences: MJMS*, 21(5), 44–50.
- Undergraduate Student Reference Group Data Report. (2018). American College Health Association National College Health Assessment.
- Wilcox, H. C., Arria, A. M., Caldeira, K. M., Vincent, K. B., Pinchevsky, G. M., & O'Grady, K. E. (2010). Prevalence and predictors of persistent suicide ideation, plans, and attempts during college. *Journal of Affective Disorders*, 127(1), 287–294. https://doi.org/10.1016/j.jad.2010 .04.017
- Wilson, C. J., & Deane, F. P. (2010). Help-Negation and Suicidal Ideation: The Role of Depression, Anxiety and Hopelessness. *Journal of Youth and Adolescence*, *39*(3), 291–305. https://doi.org/10.1007/s10964-009-9487-8
- Wyatt, T., & Oswalt, S. B. (2013). Comparing Mental Health Issues Among Undergraduate and Graduate Students. *American Journal of Health Education*, 44(2), 96–107. https://doi.org/10.1080/19325037.2013.764248
- Xiao, H., Carney, D. M., Youn, S. J., Janis, R. A., Castonguay, L. G., Hayes, J. A., & Locke, B. D. (2017). Are we in crisis? National mental health and treatment trends in college counseling centers. *Psychological Services*, *14*(4), 407–415. https://doi.org/10.1037/ser0000130
- Xu, Z., Huang, F., Kösters, M., Staiger, T., Becker, T., Thornicroft, G., & Rüsch, N. (2018). Effectiveness of interventions to promote help-seeking for mental health problems: systematic review and meta-analysis. *Psychological Medicine*, *48*(16), 2658–2667. https://doi.org/10.1017/S0033291718001265