Impact of Stigma on Attitudes towards Seeking Professional Psychological Help for Depression

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Impact of Stigma on Attitudes towards Seeking Professional Psychological Help for Depression

by

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Impact of Stigma on Attitudes towards Seeking Professional Psychological Help for Depression

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Impact of Stigma on Attitudes towards Seeking Professional Psychological Help for Depression

By Anna Dierks

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Depression is the most common mental illness, affecting almost seven percent of Americans each year. Although mental illness treatment through professional psychological services has been proven to be effective, underutilization of these services is high. Underutilization of seeking help could lead to serious consequences, such as suicide. Suicide is the second leading cause of death among adolescents and young adults aged 15-34 years old and in 2013 the highest rates of suicide were among adults aged 45-64 years old. Stigma has been viewed as a barrier to seeking professional psychological help.

Two age groups were chosen for this research due to the high rates of suicide (18-34 years old and 45-64 years old). This study collected data from a random sample of students, staff and faculty from a Midwestern college to see if there was a relationship between stigma and help-seeking attitudes in younger (aged 18-34) and older (aged 45-64) participants. Emergent findings were a) 15-24% of participants reported thoughts of self-harm at one point in their life, b) participants with higher personal stigma had more negative attitudes towards seeking help, c) younger participants and participants less educated reported higher levels of public stigma and more negative attitudes towards seeking help, and d) male participants reported higher levels of public stigma.
Findings from this study suggest that there is a need for research to investigate and develop strategies to reduce stigma and improve help-seeking behaviors. Mental health promotion programs that target those younger, less educated, and male could prove to be helpful for health education specialists.
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Chapter 1: Introduction

Mental illness does not discriminate. It can affect any age, race, religion, and/or socioeconomic status and is not the result of weakness, character traits, or poor upbringing (National Alliance on Mental Illness [NAMI], 2006). There were approximately 43.8 million adults aged 18 or older (18.5 percent of all United States [U.S.] adults) in the U.S. diagnosed with a mental illness in 2013 (Substance Abuse Mental Health Services Administration [SAMHSA], 2014). Mental illness refers to the wide range of all mental health conditions that affect a person’s mood, thinking, and behavior (Centers for Disease Control and Prevention [CDC], 2013).

Approximately 90% of individuals who died from suicide had a mental illness at the time of death (American Foundation for Suicide Prevention [AFSP], 2015b; Caruso, n.d.). Depression is the most frequent mental illness associated with suicide in Western countries (Bertolote & Fleischmann, 2002; Caruso, n.d.). Pan, Stewart and Chang (2013) observed a direct correlation between an increase of suicidal thoughts and suicide attempts among individuals with a mental illness. Too often mental illnesses have not been recognized, diagnosed or adequately treated to prevent suicides (AFSP, 2015b).

Although the prevalence rates of mental illness are high, there is a reluctance to seek professional help (Gulliver, Griffiths & Christensen, 2012; Substance Abuse Mental Health Services Administration [SAMHSA], 2014). Barriers, such as stigma, may contribute to the underutilization of professional services to alleviate mental illness (Gulliver, Griffiths, & Christensen, 2012). The National Institutes of Mental Health ([NIMH], 2005) states that long delays between the onset of a mental illness and treatment may lead to more frequent, more severe, and co-occurring mental illnesses. Given the data regarding the prevalence of mental
illness and devastating outcomes associated with untreated cases, the underutilization of treatment is concerning.

**Statement of the Problem**

“Untreated depression is the number one cause for suicide” (Caruso, n.d., para. 3). Suicide is the second leading cause of death among adolescents and young adults aged 15 to 34 years old and in 2013 the highest rates of suicide were among adults aged 45 to 64 years old (CDC, 2015). According to the National Alliance on Mental Illness [NAMI], (2006), treatment is highly effective (70 to 90 percent) for individuals with a mental illness, resulting in reduced symptoms and improved quality of life. The consequences of not receiving treatment for mental illness can lead to unnecessary disability, unemployment, substance abuse, high economic costs, and suicide (NAMI, 2006; Treatment Advocacy Center [TAC], 2015). Early identification and treatment is important to assist individuals with recovery (NAMI, 2006).

Barriers, such as stigma, lead to lower psychological help-seeking behaviors and untreated mental illness (Eisenberg, Downs, Golberstein, & Zivin, 2009). Although there are many barriers related to seeking psychological help, numerous studies have directly linked stigma as one of the main deterrents to receiving treatment (Andersson, Moore, Hensing, Krantz, & Straland-Nyman, 2014; Gulliver, Griffiths, & Christensen, 2012; Phelan, Link, Stueve, & Pescosolido, 2000).

**Need for the Study**

The majority of adults with mental illness in the U.S. do not receive professional treatment despite the availability and effectiveness of different treatment options (Wang et al., 2005). The consequences of untreated mental illness can be deadly, as a delay in treating mental illness is a main risk factor for suicides in all demographics (NIMH, 2015). In efforts to reduce
suicide, health education specialists need to better understand how to improve attitudes towards seeking professional psychological help.

Previous studies have found several barriers to seeking professional help when mental illness symptoms occur. These barriers include poor mental health literacy, lack of awareness, beliefs that treatment will not work, the problem would go away on its own, unsure where to receive help, and stigma (Andersson et al., 2014; Gulliver, Griffiths, & Christensen, 2012). Oliver and colleagues (2005) found that respondents of a survey stated their preferred source of help for mental illness concerns would be family and relatives and nearly 25% of respondents stated they would not seek professional help if suffering from stress or strain in their lives. Gulliver, Griffiths, and Christensen (2012) found participants perceived stigma as a barrier to seeking help and the social perception of appearing weak was a common barrier for young adults. Research is needed to explain how perceived public stigma and individual’s own stigmatizing attitudes towards mental illness affect seeking professional help.

The reason for studying mental health stigma and attitudes towards seeking professional help is to better understand the role stigma plays in help-seeking behaviors. Taking a closer look at stigma and attitudes towards seeking professional help among a sample of adults will assist to identify if these variables differ between age groups. Findings from this study will provide guidance for health education specialists to better understand the role stigma has on attitudes towards seeking professional help in different demographics which can assist health education specialists in developing targeted and tailored intervention strategies to reduce mental health stigma and improve attitudes.
Research Questions

For this study, the following research questions were posed to compare the age groups of 18-34 and 45-64:

1. To what extent are signs and symptoms of depression reported by participants?
2. To what extent is depression treatment reported by participants?
3. What reasons prevented seeking treatment?
4. What is the extent of participants’ perceived public stigma?
5. What is the extent of participants’ personal stigma?
6. What is the extent of participants’ attitudes towards seeking professional help?
7. What is the relationship of personal stigma and attitudes towards seeking professional help?
8. What is the relationship of perceived public stigma and attitudes towards seeking professional help?

Limitations

There are a few limitations that warrant discussion. One limitation of the study was that the sampled population consisted largely of women (n = 116, 68%) with a mean age of 41 years old, this study cannot be generalized to represent a larger population. The sampled participants (1,000 students, 500 faculty, and 500 staff) at the Minnesota State University, Mankato campus do not represent the larger population of the state of Minnesota [MN] or the U.S.

Second, because the data collection was done electronically using University emails, participation rates were low. A total of 272 survey responses were received, which is a 14% participation rate. Of those 272 responses, only 171 qualified for analyses. Participants outside of the age range and incomplete surveys were omitted from analysis.
Third, there was not the same number of participants in each age group, gender, ethnicity, and educational status. Due to the lack of ethnic diversity (almost 90% of participants were white), ethnicity was not included in any analysis.

Fourth, participants were not asked whether they were students, faculty, or staff so that is unknown.

Fifth, included in my research questions is a branching question (“what are barriers that prevented treatment”). This research question was only answered by participants who stated they had depressive symptoms and did not seek professional psychological help.

Lastly, this study utilized self-reporting to identify stigma and professional psychological help seeking attitude.

**Delimitations**

The study was also restricted in the findings due to the following: First, data was collected using an online survey which limited the number of participants due to the possible lack of computer, internet availability, and low interest.

Second, the research only focused on participants in the age groups of 18-34 and 45-64.

Lastly, depression was the only mental illness investigated.

**Assumptions**

I assumed that the participants responded to the survey with honest answers of their personal opinions and not of what they felt they should answer. I also assumed that the method of data collection accurately measured the content and participants understood the directions and questions of the study.
Definitions

Depression – “Serious medical illness that negatively affects how you feel, the way you think and how you act” (APA, 2015, para. 1).

Mental illness – “Disorders generally characterized by dysregulation of mood, thought, and/or behavior” (CDC, 2013, para. 1).

Personal stigma – “An individual’s stereotypes and prejudices” about mental illness (Eisenberg et al., 2009, p. 523).

Public stigma – Corrigan defines public stigma as “negative stereotypes and prejudice about mental illness held collectively by people in a society or community” (as cited in Eisenberg et al., 2009, p. 523).
Chapter 2: Review of Literature

Researching barriers of mental illness treatment and attitudes towards seeking professional help will assist health education specialists in developing tailored strategies and interventions to increase attitudes towards seeking professional help and reduce negative outcomes such as suicide. In this chapter, literature outlining the prevalence of mental illness, negative outcomes associated with untreated mental illness, common barriers to help-seeking behaviors, and health initiatives used to reduce barriers and increase attitudes towards seeking professional help are reviewed.

Prevalence of Mental Illness

A lifetime diagnosis of a mental illness is known to affect one-third of individuals in the U.S. (Kessler et al., 2009). Mental illness is the most common medical condition to onset during adolescence and young adulthood with onset between 14 and 24 years of age (Kessler et al., 2005).

Depression is the most common mental illness, affecting almost seven percent of American adults each year (SAMHSA, 2014). Mild to moderate depressive disorder is classified by the American Psychiatric Association ([APA], 2013) as experiencing one to four depressive signs or symptoms within a two-week period and noticing a significant change in daily functioning prior to symptoms occurring; major depressive disorder is defined as having five or more depressive signs or symptoms. Depressive symptoms may include feeling sad, feeling worthless or guilt, feeling anxious nearly every day, fatigue, insomnia, inability to think or concentrate, lack of interest in activities that were once found pleasurable, significant weight loss or weight gain, and recurring thoughts of death or suicidal ideation (APA, 2013).
The onset for depression may occur during early teen years and gradually become more prevalent throughout late middle age (Kessler et al., 2005). Teenagers and young adults are going through life changes such as leaving parents and/or guardians for the first time, living on their own, and facing the pressures of college and jobs (Potvin-Boucher, Szumilas, Sheikh, & Kutcher, 2010). Environmental stress, such as those life changes, has been identified as a major factor in developing a mental illness (AFSP, 2015b), and it has been proven that treatment for mental health is more successful when treated early to onset (NIMH, 2005).

Negative life experiences, such as death of a loved one, divorce, loss of job or home, disability and illness may cause mental illness in older adults (Caruso, n.d.). Kraaij and colleagues (2002) studied negative life events in older adults and found a significant relationship between negative events and the prevalence of depression in participants.

Better understanding of stigma and attitudes towards seeking professional help among older adults is important due to the suicide rates for adults aged 45 to 64 years old has increased exponentially from 13.5 per 100,000 people in 2000 (3rd highest suicide rate among all U.S. populations) to 19.1 in 2013 (highest suicide rate among all U.S. populations) (AFSP, 2015b). On average, men die by suicide 3.5 times more than females and in 2014 accounted for seven out of ten suicides (AFSP, 2015b).

**Consequences of Untreated Mental Illness**

The importance of early treatment upon onset of a mental illness is crucial to avoid negative consequences later in life. Untreated mental illness can contribute to unnecessary disability, unemployment, high economic costs, substance abuse, and suicide (NAMI, 2006; TAC, 2015).
**Disability.** Self-reported mental illness disability in the adult population has increased from 2% (1997 to 1999) to 2.7% (2007 to 2009) with a corresponding increase of almost 2 million disabled adults (Mojtabai, 2011). Mojtabai (2011) found that individuals with a mental illness who had no contact with a mental health professional within the past year had a higher rate of disability compared to those who had contact with a mental health professional.

**Unemployment.** There has been an abundant amount of cross-sectional research correlating the prevalence of mental illness and an increase in unemployment rates (Butterworth, Leach, Pirkis, & Kelaher, 2012; Dooley, Fielding, & Levi, 1996; Fryers, Melzer, & Jenkins, 2003). Butterworth and colleagues (2012) followed adult men and women ages 20 to 50 for four years and found that poorer mental health was associated with an increased risk of unemployment and in men it was more strongly associated with an increased duration of unemployment.

In an Australian national survey, a strong correlation was found between individual’s employment status and major depressive episodes (Wilhelm, Mitchell, Slade, Brownhill, & Andrews, 2003). Wilhelm and colleagues (2003) found that “those employed had lower risk of MD [major depressive disorder] compared to those not in the labour force,” and “those who were unemployed had at least twice the risk of MD” (p. 160).

**High economic costs.** An estimated loss of $193.2 billion in earnings each year is attributed to mental illness with $44 billion annually attributed to suicides (AFSP, 2015b; Insel, 2008). High economic costs are an indirect result of mental illness which leads to high rates of emergency room visits, high prevalence of chronic illnesses, poor health choices, and early mortality rates (Insel, 2008). While direct costs are medications and clinic visits, indirect costs
are incurred through “reduced labor supply, public income support payments, reduced educational attainment, and costs associated with other consequences such as incarceration or homelessness” (Insel, 2008, p 663).

**Substance abuse.** Alcohol and drug abuse are also linked with mental illness, both as a precursor to mental illness and as a way to self-medicate (Andersson et al., 2014). The high rate of mental illness and substance use disorders co-occurring is alarming, as nearly half of those with a mental illness also meet criteria for a substance abuse disorder (Kessler et al., 1996). In a study investigating individuals who had committed suicide, 60% had reported having depression and around one-third of them reported having an alcohol use problem (Kisely, Campbell, Cartwright, Bowes, & Jackson, 2011). A U.S. national survey found that between 1997 and 1998, 72 percent of those with co-occurring mental illness and substance abuse disorders did not receive any treatment within the past year (Watkins et al., 2001). Individuals with a co-occurring mental illness and substance abuse disorder had a higher likelihood of needing higher levels of care (inpatient, emergency, and/or other hospital-based treatment) than those with just a mental illness (Clark, Samnaliev, & McGovern, 2007).

**Suicide.** An estimated 804,000 suicides occurred worldwide in 2012 (World Health Organization [WHO], 2014), and over the past 12 years the suicide rate has gradually increased to be the tenth leading cause of death for Americans in 2013 (AFSP, 2015a). A study done in Nova Scotia found that sixty percent \((n = 64)\) of individuals who committed suicide in 2006 had reported having depression, and men in their 40’s had the highest number of suicides and were least likely to seek treatment (Kisely et al., 2011).

Luoma, Martin, and Pearson (2002) reviewed 40 studies regarding contact with mental health and medical professionals prior to suicides and found that 75% of suicide victims had
contact with their primary health care professional within one year of suicide and 45% had contact within one month of suicide, with older adults having higher rates of contact. While these rates are high, only about 20% had contact with a mental health care professional within a month of suicide with younger adults having higher rates of contact (Luoma, Martin, & Pearson, 2002).

**Barriers to Seeking Professional Psychological Help**

There are many barriers to the access and utilization of mental health services. The most commonly researched barriers are cost of treatment, low mental health literacy, and stigma which are reviewed in the following sections.

**Cost.** A study drawn from the National Health Interview Survey of 1997-2002 found that individuals did not use mental health services because of high costs (Mojtabai, 2005). The cost of mental illness services in the U.S. include insurance, professional fees, medication costs, and costs related to accessibility and availability (Gulliver, Griffiths, & Christensen, 2012; Reynders, Kerkhof, Molenberghs & Van Audenhove, 2013). In a cross-national comparison study, Wells and colleagues (1994) found that individuals suffering from mental illness in the U.S. were significantly more likely to report financial barriers than individuals in New Zealand. While the reason is not noted in the study, it could be that New Zealand has a public health service which offers New Zealand residents free services to clinical psychologists (The New Zealand College of Clinical Psychologists [NZCCP], n.d.). Baron and colleagues (2013) found that even a modest cost of treatment reduced participation in services.

**Mental health literacy.** Jorm and colleagues (1997) define mental health literacy as “knowledge and beliefs about mental disorders which aid their recognition, management or prevention” (as cited in Jorm, 2012, p. 231). Components of mental health literacy include, but are not limited to, knowledge of how to prevent mental illness, recognition of a mental illness
when developed, knowledge of help-seeking treatment options, knowledge of self-help strategies, and skills to support others who are developing a mental illness (Jorm, 2012).

Correct recognition of mental illness (especially depression) can assist in professional help-seeking, and reduce prolonged suffering, suicidal risk and other negative consequences of untreated mental illness (Loureiro et al., 2013). Mackenzie and colleagues (2010) found that 69% of participants (sample size of 3,017 adults aged 55 and older in a Collaborative Psychiatric Epidemiology Survey) reported thoughts of being able to handle mental issues on their own as the most common barrier to seeking help. Eisenberg and colleagues (2012) found that young adults in college thought their mental illness was a normal part of the college experience and reported not having time to seek mental health services.

Stigma. Mental health stigma is defined as beliefs and attitudes towards mental illness that influence an individual’s response to receiving help; stigma can have several distinctive forms (Eisenberg, Downs, Golberstein, & Zivin, 2009). “Public stigma is defined as negative stereotypes and prejudice about mental illness (such as “people with mental illness are dangerous and unreliable”) held collectively by people in a society or community” (Eisenberg et al., 2009, p. 523). “Personal stigma can be thought of as each individual’s prejudices and stigmatizing attitudes towards those with mental illness, an aggregate of which leads to public stigma” (Lally et al., 2013, p. 253).

Numerous studies reviewed found that stigma was a key barrier to seeking help for mental illness, especially in regards to individuals with symptoms of depression and substance abuse (Parcesepe & Cabassa, 2013; Phelan et al., 2000). Eisenberg and colleagues (2009) conducted an online survey to college students about a variety of mental health topics and found that high personal stigma was associated with one’s perception of public stigma. This supports
later studies which found personal attitudes about mental illness were shaped by the perceived public’s stereotypes and prejudices (Corrigan, 2004; Gulliver, Griffiths, & Christensen, 2012; Lally et al., 2013). Through a qualitative study, Lally and colleagues (2013) found, among young adults, perceived public stigma was influential in not accessing professional mental health help. Gulliver and colleagues (2012) also found, through a qualitative study, that young adults held a high level of perceived public stigma and believed that if they sought help, it would be a sign of weakness and they would be negatively viewed by others. Similarly, Corrigan (2004) found that stigma hindered individuals from seeking mental health services, particularly when there was perceived threat of social disapproval or labeling.

The reasons why individuals do not seek help for mental illness concerns vary depending on the individual and their situation. Addressed in the above sections are the more common barriers identified in recent literature and it should be noted that this list is not exhaustive. The high costs associated with professional assistance, lack of mental health literacy, and stigma have been shown to decrease seeking professional help. In the next section, health education intervention strategies to promote and increase seeking professional help are reviewed.

**Health Education Initiatives**

Ono and associates (2013) developed a community based multimodal intervention program aimed to recognize suicide risks, improve help-seeking, and improve access to mental health services through education and awareness programs and building social support networks. The intervention program was developed in Japan to examine the effectiveness of a suicide prevention trial compared to “prevention-as-usual” control group and found that males and individuals over the age of 65 years old had significantly lower incident rates in the prevention group (Ono et al., 2013, p. 2).
A program implemented in the United Kingdom successfully reduced the number of suicides (to below expected levels) within 3 months in two areas that had experienced a recent trend of suicides. The program relayed real time suicides and suggested common risk factors which included “recent bereavement, relationship difficulties and financial problems” (Burke et al., 2012, p. 100). Mental health campaigns were then developed to raise awareness of suicide prevention and delivered through local media outlets and health centers within the community (Burke et al., 2012).

In addition, a post-secondary student mental health literacy program, Transitions, was developed to increase social support for mental illness while decreasing stigma as a goal (Potvin-Boucher, Szumilas, Sheikh, & Kutcher, 2010). Transitions was distributed to 8,000 students and focused on increasing mental illness knowledge and early identification of mental disorders, encouraged peer to peer discussion about mental illness, and promoted help-seeking behaviors (Potvin-Boucher, Szumilas, Sheikh, & Kutcher, 2010). Potvin-Boucher and colleagues (2010) found that the mental health literacy program was well-received, over 95% of students found it to be beneficial, and achieved its goal of increasing social support and decreasing stigma. Other research has suggested that improving mental health literacy through education can decrease stigmatizing attitudes and improve professional help seeking behaviors if demographic tailored interventions are utilized (Jorm, Griffiths, Christensen, Korten, Parslow, & Rodgers, 2003; Potvin-Boucher et al., 2010; Reavley, McCann, Cvetkovski, & Jorm, 2014).

Conclusion

In spite of many efforts to eliminate mental health stigma in today’s society, it is still a large barrier to seeking professional psychological help (Eisenberg, Downs, Golberstein, & Zivin, 2009; Gulliver, Griffiths, & Christensen, 2012; Lally et al, 2012). Understanding the
factors that are involved in forming mental health prejudices may assist in reducing stigma and
increasing attitudes towards seeking help (Gulliver, Griffiths, & Christensen, 2012).
Chapter 3: Methodology

This chapter provides a description of the research design, selected sample, procedures, survey construction process, data collection procedure, and data analysis plan to investigate answers to the following research questions:

A selected sample of participants in two different age groups were compared, aged 18-34 years and 45-64 years:

1. To what extent are signs and symptoms of depression reported by participants?
2. To what extent is depression treatment reported by participants?
3. What reasons prevent seeking treatment?
4. What is the extent of participants’ perceived public stigma?
5. What is the extent of participants’ personal stigma?
6. What is the extent of participants’ attitudes towards seeking professional help?
7. What is the relationship of personal stigma and attitudes towards seeking professional help?
8. What is the relationship of perceived public stigma and attitudes towards seeking professional help?

Research Design

This research study assessed participants’ perceived public stigma and personal stigma as well participants’ attitudes towards seeking professional help for depressive symptoms. Help-seeking attitudes was the dependent variable; the following independent variables were assessed: gender, age, ethnicity/race, education, depressive symptoms, treatment for depression, reasons that prevented seeking treatment, and perceived public and personal stigma levels.
A cross-sectional research design was used in this study to identify the relationships between stigma and help-seeking attitudes in two different age groups (18-34 years and 45-64 years).

**Data Collection**

Institutional Review Board (IRB) approval was granted from Minnesota State University, Mankato [MNSU] (Appendix A). Prior to data collection, randomly selected MNSU faculty, staff and students received an email inviting them to respond to the research survey on Qualtrics, an electronic survey tool. Participants had from March 3, 2016 to March 16, 2016 to respond, and a follow up reminder email was delivered on March 10, 2016. A sample of an informed consent for online surveys from IRBNet.org was adapted for this study. Participants were asked to review the informed consent statement. Participants were offered the option to sign and return the informed consent form if they wanted documentation of their participation in the study. A copy of the email is located in Appendix B and a copy of the informed consent is located in Appendix C.

**Participants**

Two thousand Minnesota State University, Mankato staff (500), faculty (500), and students (1,000) were randomly selected electronically by Information and Technology Services [ITS] and participants’ emails were sent to me on an Excel document. I emailed all participants selected by ITS, requesting their participation in the survey. The sample of staff, faculty, and students was selected to get a range of different ages for the study. The focus was on younger adults (aged 18-34) and older adults (aged 45-64) because of the trends on suicide identified in the literature review for these age groups. Since the study was only focused on individuals in the two age groups of
18-34 years and 45-64 years, any data collected from participants that fell outside of this age group was discarded and not analyzed.

**Instrumentation**

A copy of the data collection instrument used for this research is found in Appendix D. This research study used the Devaluation-Discrimination (D-D) Scale (adapted from Lally et al., 2013) which identifies participant’s stereotypes towards mental illness treatment. An email was sent to Dr. John Lally requesting permission to use this instrument and his response is located in Appendix E. This scale is an adaption of an earlier scale that measured whether or not people had discriminatory feelings towards someone with a mental illness or with a history of mental illness. The scale uses a five-point Likert scale and is comprised of 12 questions measuring perceived public stigma. Responses are coded as follows: 5 (strongly agree), 4 (agree), 3 (neither), 2 (disagree), and 1 (strongly disagree). The scale’s totals range from 12 to 60 with the higher scores corresponding with a higher perceived public stigma (Lally et al., 2013).

In addition to the 12 statements to measuring perceived public stigma, four statements measured participants’ personal stigma. Four statements used to measure perceived public stigma were adapted to measure personal stigma. The wording of these statements were changed from “most people” to “I.” Two of the four items measure acceptance of mental health treatment and the other two items measures attitudes towards mental health treatment. The responses were coded the same as the perceived public stigma with a total range of four to 20 with the higher scores corresponding with higher personal stigma (Lally et al., 2013).

The D-D scale is a valid form of measurement to investigate stigma based on the multiple research studies that have used it. The scale has been found to be highly reliable with an internal consistency of 0.76 to 0.86 in university and community samples (Catthoor, Schrijvers,
Hutsebaut, Feenstra, & Sabbe, 2015; Lally et al., 2013; Reynders, Kerkhof, Molenberghs & Van Audenhove, 2013; Ueno & Kamibeppu, 2011). Catthoor and colleagues (2015, p. 3) state that the D-D scale consists of “excellent psychometric properties.” The scale was used in its original form to maintain its reliability and Cronbach’s Alpha analysis was done to measure internal consistency (reliability) and this scale in this study was found to be highly reliable (16 items; $\alpha = 0.90$).

This research also utilized the Attitudes towards Seeking Professional Psychological Help Scale (ATSPPHS) (Fischer & Farina, 1995) which is a scale of 10 statements measuring participants’ attitudes towards seeking professional psychological help. This scale is based on a four point Likert scale with responses ranging from disagree to agree with five of the items reversed. The total score ranges from 0 to 30.

The ATSPPHS scale has been used in many studies and reliability had been tested with an internal consistency of 0.81 to 0.87 (Fischer & Farina, 1995; Reynders et al., 2013). Mio, Barker, and Tumambing (2011) recommended using this scale in the classroom to determine if there are differences in seeking help based on gender and race. The scale was not reworded or changed in any way to maintain its reliability and Cronbach’s Alpha analysis was done to measure internal consistency (reliability) and this scale in this research was found to be highly reliable (10 items; $\alpha = 0.83$).

Demographic questions (age, gender, ethnicity, and education) were comprised of four questions in the data collection instrument. Participants were also asked if they had experienced any depressive signs or symptoms within a two-week period at any time in their life. Depressive symptoms were classified as the following: decreased mood; loss of interest and enjoyment in usual activities; reduced energy and decreased activity; reduced self-esteem and confidence;
ideas of guilt and unworthiness; pessimistic (negative) thoughts; disturbed sleep; diminished appetite; and ideas of self-harm (APA, 2013). If participants reported any depressive symptoms, they were asked if they sought professional help. If participants did not seek help, they were then asked what barriers prevented them from seeking treatment. In addition, participants were asked if depression had affected their academic or work performance, to whom would they go to for help. (See Appendix D).

**Data Analysis**

Data was analyzed using the IBM Package for Social Sciences 23 (SPSS). The mean of the findings from the D-D scale and the ATSPPHS scale were used in data analysis. Data analyses procedures included descriptive statistics, frequencies, independent samples t-tests, ANOVA and Pearson product-moment correlation. Independent samples t-tests were used to determine if there were statistically significant differences by age, gender, and education. Included in Appendix F is a Table of Specifications which provides data analysis procedures for each research question. The findings of the study are presented in Chapter Four.
Chapter 4: Findings

This study explored the extent of depressive signs and symptoms, mental illness stigma, attitudes towards seeking professional help and reasons for not seeking help among a sample of Midwestern university students, staff, and faculty. Also, the study explored whether there was a relationship between stigma and attitudes towards seeking professional help and whether there were significant differences among those in groups aged 18-34 and 45-64.

Data Collection

Participants were recruited through a random list of emails that was supplied from Minnesota State University, Mankato’s Information and Technology Services [ITS]. The Institution Review Board [IRB] approval letter (Appendix A) and an application for research approval letter signed by Dr. Barry Ries, Associate Vice President of Research and Dean of Graduate Studies, (Appendix G) was supplied to ITS in order to receive the listing. An invitation to participate in the study was emailed to 1,000 students, 500 faculty members, and 500 staff members of the Midwestern University. Participation was requested within a 12-day period from March 3, 2016 to March 16, 2016. Included in the email was a link that brought participants to the Qualtric survey. A copy of the email sent to potential participants is located in Appendix C.

Participants

A total of 272 survey responses were received (14% participation rate); of those, 72 participants were not between the ages of 18-34 or 45-64, and 28 surveys were incomplete. Therefore, 171 responses were analyzed. Seventy participants (41%) were aged 18 to 34, 91 participants (53%) were aged 45 to 64, and ten participants (6%) did not indicate their age. Those who did not indicate their age were omitted from any age related analysis. Forty-nine (29%) participants were male, 116 (68%) were female, and six (3%) did not select a gender. The
majority of participants identified themselves as White (150 participants, 88%). Forty (23%) participants indicated that they have some college credit, but no degree, and 128 (80%) participants have technical/vocational/or trade training or a higher degree. See Table 4.

**TABLE 4**

*Demographics*

<table>
<thead>
<tr>
<th>Variables</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>70 (41%)</td>
</tr>
<tr>
<td>45-64</td>
<td>91 (53%)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>49 (29%)</td>
</tr>
<tr>
<td>Female</td>
<td>116 (68%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>150 (88%)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>4 (2%)</td>
</tr>
<tr>
<td>Asian</td>
<td>5 (3%)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>5 (3%)</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>High school graduate or equivalent</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Some college credit, but no degree</td>
<td>40 (23%)</td>
</tr>
<tr>
<td>Technical/vocational/or trade training</td>
<td>9 (5%)</td>
</tr>
<tr>
<td>Associate degree</td>
<td>10 (6%)</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>27 (16%)</td>
</tr>
<tr>
<td>Master's degree</td>
<td>35 (21%)</td>
</tr>
<tr>
<td>Professional degree</td>
<td>2 (1%)</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>41 (24%)</td>
</tr>
</tbody>
</table>
Signs and Symptoms of Depression

Participants were presented with a list of nine depressive signs or symptoms, and asked if they had ever experienced any of these for a period of two-weeks or longer. Seventeen percent \((n = 41)\) of participants reported no signs or symptoms, 35\% \((n = 57)\) reported one to four signs or symptoms, and 39\% \((n = 63)\) reported having five or more signs or symptoms of depression.

A one-way ANOVA analysis found that a difference of depressive signs and symptoms categories (0 symptoms, 1-4 symptoms, 5 and more symptoms) was found for age, \(F(2, 161) = 3.12, p = 0.05\). Participants who reported no \((M = 46.28, SD = 13.47)\) depressive signs and symptoms reported to be higher in age than those who reported one to four \((M = 38.75, SD = 16.17)\) and five or more \((M = 39.94, SD = 16.83)\) signs and symptoms.

The most commonly reported signs or symptoms were: reduced energy and decreased activity \((n = 97, 57\%)\), reduced self-esteem and confidence \((n = 91, 53\%)\), and decreased mood \((n = 83, 49\%)\). See Table 4.1.

An independent \(t\)-test was conducted to compare participants by age and depressive signs and symptoms and only one statistically significant finding was found. Participants aged 18 to 34 \((M = 0.66, SD = 0.48)\) were significantly more likely to report symptoms of reduced self-esteem and confidence than those aged 45 to 64 \((M = 0.46, SD = 0.50)\), \(t(159) = 2.50, p = 0.01\). See Table 4.1.

TABLE 4.1

<table>
<thead>
<tr>
<th>Signs and Symptoms of Depression: Age</th>
<th>Participants aged 18-34</th>
<th>Participants aged 45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(total (N = 70))</td>
<td>(total (N = 91))</td>
</tr>
<tr>
<td>Decreased Mood</td>
<td>35 (50%)</td>
<td>45 (49%)</td>
</tr>
</tbody>
</table>
Loss of Interest and Enjoyment in Usual Activities 33 (47%) 38 (42%)

Reduced Energy and Decreased Activity 45 (64%) 50 (55%)

Reduced Self-Esteem and Confidence 46 (66%) 42 (46%)

Ideas of Guilt and Unworthiness 34 (49%) 32 (35%)

Pessimistic (Negative) Thoughts 33 (47%) 30 (32%)

Disturbed Sleep 34 (49%) 42 (46%)

Diminished Appetite 17 (24%) 16 (18%)

Ideas of Self-Harm 17 (24%) 14 (15%)

$p < .01^{**}, p < .05^{*}$

When comparing participants by gender in an independent samples $t$-test, female participants ($n = 74, M = 0.64, SD = 0.48$) were statistically significantly more likely to report symptoms of reduced energy and decreased activity than male participants ($n = 22, M = 0.45, SD = 0.50$), $t(163) = 0.10, p = 0.03$.

An independent samples $t$-test analyzed participants by education and depressive signs and symptoms. Participants with less education were more likely to report signs and symptoms of depression and statistically significantly more likely to report the following: reduced self-esteem and confidence ($t(165) = 2.68, p = 0.01$), pessimistic (negative) thoughts ($t(165) = 1.27, p = 0.21$), and ideas of self-harm ($t(165) = 2.28, p = 0.02$) compared to participants with higher education level (technical/vocational/trade training and beyond). Significant findings are reported in Table 4.2.
TABLE 4.2

Signs and Symptoms of Depression: Education

<table>
<thead>
<tr>
<th></th>
<th>Participants with no degree/trade training</th>
<th>Participants with a degree/trade training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(total N = 55)</td>
<td>(total N = 112)</td>
</tr>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Reduced Self-Esteem and Confidence**</td>
<td>40 (73%)</td>
<td>51 (46%)</td>
</tr>
<tr>
<td>Pessimistic (Negative) Thoughts*</td>
<td>27 (49%)</td>
<td>38 (34%)</td>
</tr>
<tr>
<td>Ideas of Self-Harm**</td>
<td>16 (29%)</td>
<td>15 (13%)</td>
</tr>
</tbody>
</table>

*p<.01**, *p<.05*

Reasons for Participants Not Seeking Professional Help

Forty-three percent (n = 73) of participants who reported having depressive signs and symptoms received professional help, and 28% (n = 48) of participants who reported having depressive signs and symptoms did not receive professional help. Of those, 35 participants were aged 18 to 34, and 13 participants were 45 to 64. Participants who did not receive professional help indicated the reason(s) that prevented them and these findings are presented in Table 4.3.

Participants reporting depressive signs and symptoms and no help-seeking were asked to review a list of 10 possible reasons for not seeking professional help and indicate reason(s) they did not seek treatment. The mean number of reasons for not seeking psychological help reported by participants aged 18 to 34 was 2.69 (SD = 1.75) and for participants aged 45-64 it was 2.00 (SD = 2.12). An independent samples t-test found no statistically significant difference between means.
The most common reasons for not seeking professional help was: thought I could resolve the issue on my own (40%), perceived cost (22%), difficult to ask for help (20%), and unsure where to seek help (17%).

In addition to the 10 possible reasons for not seeking help, there was an optional write in response. Fourteen participants choose to respond with a write in reason for not seeking help. Six participants responded that seeking professional help was not necessary and/or a temporary situation, and one participant stated “I didn’t want to be diagnosed with a problem that I knew would be semi-temporary.” Participants also stated time, symptoms were “not severe enough,” nervous to discuss with others, stress, and that they found professional help unsuccessful in the past as reasons they did not seek professional help for depressive signs and symptoms. See Table 4.3.

Men ($M = 2.00, SD = 1.68$) and women ($M = 2.68, SD = 1.93$) did not differ significantly on the mean of reasons for not seeking professional help, $t(45) = -1.11, p = 0.27$. Participants with no degree or training ($M = 43, SD = 0.29$) reported significantly higher levels of “fear of being negatively viewed by others” as a reason for not receiving professional help than those with a degree or trade training ($M = 124, SD = 0.15$), $t(165) = 1.95, p = 0.05$.

TABLE 4.3

<table>
<thead>
<tr>
<th>Reasons for Not Seeking Professional Help</th>
<th>Participants aged 18-34 (total $N = 35$)</th>
<th>Participants aged 45-64 (total $N = 13$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did Not Want to Appear Weak</td>
<td>6 (17%)</td>
<td>2 (15%)</td>
</tr>
<tr>
<td>Social Disapproval</td>
<td>2 (6%)</td>
<td>1 (8%)</td>
</tr>
</tbody>
</table>
Thought I Could Resolve the Issue on My Own

30 (86%)                  9 (69%)

"I've had help before. It didn't work. I know the coping mechanisms"

"Life comes with times of stress sometimes you can look back and identify if you want to change what's going on in your life that's causing you to feel a certain way"

"It is working itself out"

Difficult to Ask for Help

14 (40%)                  1 (8%)

"Nervous to discuss it with my mom"

Fear of Being Labeled

2 (6%)                  2 (15%)

Fear of Being Negatively Viewed by Others

5 (14%)                  2 (15%)

Perceived Cost

14 (40%)                  2 (15%)

Lack of Insurance

6 (17%)                  0

Lack of Transportation

1 (3%)                  0

Unsure Where to Seek Help

12 (34%)                  2 (15%)

"Lack of available resources"

"It was early in my life and I was unaware of help"

Lack of Time

1 (3%)                  2 (15%)

"Time"

"Work overnights-homework"
“Lack of time”
Not Necessary and/or a Temporary Situation  4 (11%)  2 (15%)
“Knew this was a temporary situation for me personally”
“Symptoms passed - did not think it warranted professional help”
“It was not needed”
“I didn’t want to be diagnosed with a problem that I knew would be semi-temporary”
“Result of hormonal changes after baby”
“Not severe enough”

**Extent of Participants’ Perceived Public Stigma**

The mean level of perceived public stigma of participants aged 18-34 was 2.88 (SD = 0.75, n =70) and for participants aged 45-64 it was 2.75 (SD = 0.73, n = 91). These levels were not statistically significant findings based on an independent samples t-test analysis.

Participants aged 18-34 (M = 2.88, SD = 0.75) and participants aged 45-64 (M = 2.75, SD = 0.73) did not differ statistically significant on levels of public stigma, t(159) = 1.17, p = 0.24. However, participants 18-34 (M = 3.06, SD = 1.26) reported statistically significant higher levels of public stigma in regards to the statement “most would think less of a person who received mental health treatment” than participants 45-64 years old, t(158) = 2.79, p = 0.01.

Forty-four percent (n = 31) of participants aged 18-34 either agreed or strongly agreed that most people feel that receiving mental health treatment is a sign of personal failure, compared to 23% (n = 21) of participants aged 45-64. Thirty-eight percent (n = 27) of younger
participants (aged 18-34) also agreed or strongly agreed that most people would think less of someone who had received mental health treatment. Also, 22% \((n = 20)\) of older participants (aged 45-64) and 28% \((n = 20)\) of younger participants (aged 18-34) stated they disagree that most people believe someone who has received mental health treatment is just as intelligent as the average person. See Table 4.4.

An independent samples \(t\)-test found male participants \((M = 3.00, SD = 0.66)\) reported statistically significant higher levels of perceived public stigma than female participants \((M = 2.71, SD = 0.76)\), \(t(163) = 2.34, p = 0.02\). There was no statistical significance between participants without a degree \((M = 2.83, SD = 0.69)\) and those with a degree \((M = 2.80, SD = 0.78)\), \(t(165) = 0.25, p = 0.80\).

TABLE 4.4

*Extent of Perceived Public Stigma by Participants*

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n (%))</td>
<td>(n (%))</td>
<td>(n (%))</td>
<td>(n (%))</td>
<td>(n (%))</td>
</tr>
<tr>
<td>18-34</td>
<td>1 (1%)</td>
<td>11 (16%)</td>
<td>6 (9%)</td>
<td>42 (60%)</td>
</tr>
<tr>
<td>45-64</td>
<td>1 (1%)</td>
<td>19 (21%)</td>
<td>17 (19%)</td>
<td>46 (51%)</td>
</tr>
</tbody>
</table>

Most would accept a person who has received mental health \([MH]\) treatment as close friend

Most believe a person who has received MH treatment is just as intelligent as the average person
Most believe a person who has received MH treatment is just as trustworthy as the average person

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Yes (1%)</th>
<th>Yes (27%)</th>
<th>Yes (14%)</th>
<th>Yes (47%)</th>
<th>Yes (10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>1</td>
<td>19</td>
<td>10</td>
<td>33</td>
<td>7</td>
</tr>
<tr>
<td>45-64</td>
<td>1</td>
<td>19</td>
<td>14</td>
<td>44</td>
<td>13</td>
</tr>
</tbody>
</table>

Most would accept a fully recovered person who has received MH treatment as a teacher of young children

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Yes (1%)</th>
<th>Yes (41%)</th>
<th>Yes (17%)</th>
<th>Yes (31%)</th>
<th>Yes (9%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>1</td>
<td>29</td>
<td>12</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>45-64</td>
<td>1</td>
<td>22</td>
<td>22</td>
<td>40</td>
<td>6</td>
</tr>
</tbody>
</table>

Most feel that receiving MH treatment is a sign of personal failure**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Yes (1%)</th>
<th>Yes (33%)</th>
<th>Yes (14%)</th>
<th>Yes (31%)</th>
<th>Yes (13%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>9</td>
<td>23</td>
<td>10</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>45-64</td>
<td>5</td>
<td>27</td>
<td>23</td>
<td>31</td>
<td>5</td>
</tr>
</tbody>
</table>

Most would not hire a person who has received MH treatment to take care of their children, even if he/she had been well for some time

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Yes (1%)</th>
<th>Yes (29%)</th>
<th>Yes (11%)</th>
<th>Yes (46%)</th>
<th>Yes (7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>5</td>
<td>20</td>
<td>8</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td>45-64</td>
<td>3</td>
<td>33</td>
<td>23</td>
<td>30</td>
<td>2</td>
</tr>
</tbody>
</table>
Most would think less of a person who received MH treatment**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>18-34</th>
<th>45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 (14%)</td>
<td>23 (33%)</td>
</tr>
<tr>
<td></td>
<td>11 (12%)</td>
<td>35 (39%)</td>
</tr>
</tbody>
</table>

Most employers will hire a person who has received MH treatment if he/she is qualified

<table>
<thead>
<tr>
<th>Age Group</th>
<th>18-34</th>
<th>45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 (1%)</td>
<td>12 (17%)</td>
</tr>
<tr>
<td></td>
<td>2 (2%)</td>
<td>18 (20%)</td>
</tr>
</tbody>
</table>

Most employers will pass over the application of a person who has received MH treatment in favor of another application

<table>
<thead>
<tr>
<th>Age Group</th>
<th>18-34</th>
<th>45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 (7%)</td>
<td>16 (23%)</td>
</tr>
<tr>
<td></td>
<td>3 (3%)</td>
<td>32 (35%)</td>
</tr>
</tbody>
</table>

Most in my community would treat a person who has received MH treatment just as they would treat anyone else

<table>
<thead>
<tr>
<th>Age Group</th>
<th>18-34</th>
<th>45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 (4%)</td>
<td>17 (2%)</td>
</tr>
<tr>
<td></td>
<td>2 (2%)</td>
<td>23 (25%)</td>
</tr>
</tbody>
</table>
Most would be reluctant to date a man/woman who has received MH treatment:

<table>
<thead>
<tr>
<th>Age</th>
<th>18-34</th>
<th>45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 (4%)</td>
<td>64 (11%)</td>
</tr>
<tr>
<td>18-34</td>
<td>28 (26%)</td>
<td>34 (33%)</td>
</tr>
<tr>
<td>45-64</td>
<td>30 (31%)</td>
<td>26 (37%)</td>
</tr>
<tr>
<td></td>
<td>8 (11%)</td>
<td>3 (2%)</td>
</tr>
</tbody>
</table>

Once they know a person who was in a MH hospital, most will take his/her opinions less seriously:

<table>
<thead>
<tr>
<th>Age</th>
<th>18-34</th>
<th>45-64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 (4%)</td>
<td>31 (17%)</td>
</tr>
<tr>
<td>18-34</td>
<td>22 (31%)</td>
<td>32 (35%)</td>
</tr>
<tr>
<td>45-64</td>
<td>12 (17%)</td>
<td>25 (27%)</td>
</tr>
<tr>
<td></td>
<td>5 (7%)</td>
<td>3 (3%)</td>
</tr>
</tbody>
</table>

\[p < .01^{**}, p < .05^*\]

**Extent of Participants’ Personal Stigma**

The mean level of personal stigma for participants aged 18-34 was 1.67 (SD = 0.70, \(n = 70\)). The mean level of personal stigma for participants aged 45-64 was 1.81 (SD = 0.63, \(n = 91\)). An independent samples t-test found no statistical significance between participants aged 18-34 (\(M = 1.69, SD = 0.70\)) and participants aged 45-64 (\(M = 1.81, SD = 0.63\)) and personal stigma, \(t(159) = -1.21, p = 0.23\).

Regarding personal stigma, there were also no statistically significant findings between males (\(M = 1.82, SD = 0.64\)) and females (\(M = 1.72, SD = 0.67\)), \(t(163) = 0.94, p = 0.35\). There were also no significant differences in personal stigma between participants without a college degree or trade training (\(M = 1.67, SD = 0.64\)) and those with a college degree or trade training (\(M = 1.80, SD = 0.68\)), \(t(165) = -1.23, p = 0.22\).

Over 90 percent (\(n = 150\)) of participants strongly agreed or agreed that they would accept someone who has received mental health treatment as a close friend, but about 40%
(n = 67) of participants would think less of someone who has received mental health treatment. Also, almost half (n = 33) of participants aged 18-34 would be reluctant to date someone who had received mental health treatment. See Table 4.5.

TABLE 4.5
Extent of Personal Stigma by Participants

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Neither n (%)</th>
<th>Agree n (%)</th>
<th>Strongly Agree n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would willingly accept a person who has received mental health [MH] treatment as a close friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>3 (4%)</td>
<td>0</td>
<td>0</td>
<td>21 (30%)</td>
<td>46 (66%)</td>
</tr>
<tr>
<td>45-64</td>
<td>1 (1%)</td>
<td>1 (1%)</td>
<td>6 (7%)</td>
<td>39 (43%)</td>
<td>44 (48%)</td>
</tr>
<tr>
<td>I believe that a person who has received MH treatment is just as trustworthy as the average person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>3 (4%)</td>
<td>17 (24%)</td>
<td>6 (9%)</td>
<td>38 (54%)</td>
<td>6 (9%)</td>
</tr>
<tr>
<td>45-64</td>
<td>2 (2%)</td>
<td>23 (25%)</td>
<td>14 (15%)</td>
<td>41 (45%)</td>
<td>10 (11%)</td>
</tr>
<tr>
<td>I would think less of a person who has received MH treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>3 (4%)</td>
<td>18 (26%)</td>
<td>18 (26%)</td>
<td>23 (33%)</td>
<td>8 (11%)</td>
</tr>
<tr>
<td>45-64</td>
<td>3 (3%)</td>
<td>28 (31%)</td>
<td>24 (26%)</td>
<td>34 (37%)</td>
<td>2 (2%)</td>
</tr>
</tbody>
</table>
I would be reluctant to date a man/woman who has received MH treatment

<table>
<thead>
<tr>
<th></th>
<th>18-34</th>
<th>22 (31%)</th>
<th>12 (17%)</th>
<th>28 (40%)</th>
<th>5 (7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>45-64</td>
<td>3 (3%)</td>
<td>32 (35%)</td>
<td>25 (27%)</td>
<td>28 (31%)</td>
<td>3 (3%)</td>
</tr>
</tbody>
</table>

\(p<.01^{**}, p<.05^{*}\)

**Extent of Participants’ Attitudes towards Seeking Professional Help**

An independent samples t-test found participants aged 45-64 (\(M = 3.21, SD = 0.54\)) reported statistically significant higher scores of attitudes towards seeking professional psychological help compared to those aged 18-34 (\(M = 2.83, SD = 0.57\), \(t(159) = -4.25, p = 0.00\)). Those aged 45-64 years old were statistically more likely to endorse help seeking for seven of the 10 statements posed, than those aged 18-34 years. See Table 4.6.

Participants with a college degree or trade training (\(M = 3.13, SD = 0.56\)) also reported statistically significant higher scores of attitudes towards seeking professional psychological help compared to those without a degree (\(M = 2.83, SD = 0.56\), \(t(165) = -3.21, p = 0.00\). There were no statistically significant findings between men (\(M = 2.91, SD = 0.58\)) and women (\(M = 3.09, SD = 0.58\)) participants, \(t(163) = -1.78, p = 0.08\).

A bivariate correlation analysis found a significant weak positive correlation between education and attitudes towards seeking professional help (\(r = 0.24, p = 0.00\)). Those participants with a college degree or trade training had more positive attitudes towards seeking professional help compared to those without a degree.

The majority of participants either strongly disagreed or disagreed with the statement that “personal and emotional troubles tend to work out by themselves out” (75% of those aged 45-64;
64% of those aged 18-34) even though almost 20% \((n = 30)\) of participants would not want to get psychological help if they were worried or upset for a long period of time. Nineteen percent \((n = 13)\) of participants aged 18-34 either strongly agreed or agreed that the idea of talking about problems with a psychologist strikes them as a poor way to get rid of emotional conflicts. See Table 4.6.

**TABLE 4.6**

*Extent of Attitudes towards Seeking Professional Help by Participants*

<table>
<thead>
<tr>
<th>If I believed I was having a mental breakdown, my first inclination would be to get professional attention**</th>
<th>Disagree</th>
<th>Partly Disagree</th>
<th>Partly Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>17 (24%)</td>
<td>18 (26%)</td>
<td>21 (30%)</td>
<td>14 (20%)</td>
</tr>
<tr>
<td>45-64</td>
<td>3 (3%)</td>
<td>9 (10%)</td>
<td>31 (34%)</td>
<td>47 (52%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts**</th>
<th>Disagree</th>
<th>Partly Disagree</th>
<th>Partly Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>39 (56%)</td>
<td>18 (26%)</td>
<td>9 (13%)</td>
<td>4 (6%)</td>
</tr>
<tr>
<td>45-64</td>
<td>71 (78%)</td>
<td>13 (14%)</td>
<td>6 (7%)</td>
<td>1 (1%)</td>
</tr>
</tbody>
</table>
If I were experiencing a serious emotional crisis, I would be confident I could find relief in psychotherapy.*

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>10 (14%)</td>
<td>7 (10%)</td>
<td>37 (53%)</td>
<td>16 (23%)</td>
</tr>
<tr>
<td>45-64</td>
<td>7 (8%)</td>
<td>8 (9%)</td>
<td>38 (42%)</td>
<td>38 (42%)</td>
</tr>
</tbody>
</table>

There is something admirable in the attitude of a person who is willing to cope with conflicts and fears without resorting to professional help**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>13 (19%)</td>
<td>25 (36%)</td>
<td>20 (29%)</td>
<td>12 (17%)</td>
</tr>
<tr>
<td>45-64</td>
<td>43 (47%)</td>
<td>25 (27%)</td>
<td>15 (16%)</td>
<td>7 (8%)</td>
</tr>
</tbody>
</table>

I would want to get psychological help if I were worried or upset for a long period of time

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>1 (1%)</td>
<td>11 (16%)</td>
<td>25 (36%)</td>
<td>32 (46%)</td>
</tr>
<tr>
<td>45-64</td>
<td>3 (3%)</td>
<td>15 (16%)</td>
<td>27 (30%)</td>
<td>46 (51%)</td>
</tr>
</tbody>
</table>

I might want to have psychological counseling in the future

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>8 (11%)</td>
<td>19 (27%)</td>
<td>20 (29%)</td>
<td>22 (31%)</td>
</tr>
<tr>
<td>45-64</td>
<td>12 (13%)</td>
<td>16 (18%)</td>
<td>31 (34%)</td>
<td>32 (35%)</td>
</tr>
</tbody>
</table>

A person with an emotional problem is not likely to solve it alone; likely to solve it with professional help**
Considering the time and expense involved in psychotherapy, it would not be valuable for a person like me**

A person would work out his/her own problems; getting psychological counseling would be a last resort**

Personal and emotional troubles tend to work out by themselves

**Relationship of Personal Stigma and Attitudes towards Seeking Professional Help**

A weak statistically significant negative correlational relationship was found between personal stigma and attitudes towards seeking professional help ($r = -0.32, p = 0.00$). Participants with higher personal stigma demonstrated more negative attitudes towards professional psychological help seeking.

A bivariate Pearson Correlation analysis found a weak statistically significant positive correlational relationship between personal stigma and public stigma ($r = 0.31, p = 0.00$).
Participants who had higher levels of perceived public stigma, had higher levels of personal stigma. See Table 4.7.

**Relationship of Perceived Public Stigma and Attitudes towards Seeking Professional Help**

A bivariate Pearson Correlation analysis found no statistically significant relationship between public stigma and attitudes towards seeking professional help, $r(159) = -0.14, p = 0.08$.

See Table 4.7.

**TABLE 4.7**

*Relationship of Perceived Public Stigma, Personal Stigma and Attitudes towards Seeking Help*

<table>
<thead>
<tr>
<th></th>
<th>Perceived Public Stigma</th>
<th>Personal Stigma</th>
<th>Attitudes towards Seeking Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Public Stigma</td>
<td>0.31**</td>
<td></td>
<td>-0.14</td>
</tr>
<tr>
<td>Personal Stigma</td>
<td>0.31**</td>
<td></td>
<td>-0.32**</td>
</tr>
<tr>
<td>Attitudes towards Seeking Help</td>
<td>-0.14</td>
<td></td>
<td>-0.32**</td>
</tr>
</tbody>
</table>

$p<.01^{**}, p<.05^{*}$

In Chapter 5 these findings are interpreted and discussed in relation to existing research. Recommendations for further research and recommendations for health specialists are also presented.
Chapter 5: Discussion, Conclusions, and Recommendations

Although the prevalence rates of mental illness are high and treatment has been proven to be successful in reducing symptoms of mental illness, the underutilization of services is high (Gulliver, Griffiths & Christensen, 2012; National Alliance on Mental Illness [NAMI]; Substance Abuse Mental Health Services Administration [SAMHSA], 2014). Existing research has shown that mental illness, specifically for depression, stigma is a common barrier to seeking professional help (Andersson, Moore, Hensing, Krantz, & Straland-Nyman, 2014; Eisenberg, Downs, Golberstein, & Zivin, 2009; Gulliver, Griffiths, & Christensen, 2012; Phelan, Link, Stueve, & Pescosolido, 2000). Understanding why individuals in the United States do not receive professional psychological treatment when signs and symptoms occur could assist in reducing negative consequences and improve quality of life for many.

Suicide is the main reason why the age groups (18-34 and 45-64) were chosen to assess in this study. Suicide is the second leading cause of death among adolescents and young adults aged 15-34 years old and in 2013 the highest rates of suicide were among adults aged 45-64 years old (CDC, 2015). Approximately 90% of those who die from suicide had a diagnosed mental illness at the time of death (American Foundation for Suicide Prevention [AFSP], 2015b; Carso, n.d.). Understanding if there were any connections between age, stigma and attitudes towards seeking professional help would be helpful for further research and tailored health communication strategies to prevent suicides.

In this chapter, findings from this study are presented, and recommendations for further research and for health education specialists are offered.
Discussion

The extent of depressive signs and symptoms reported by sampled participants was staggering. Seventy-two percent \((n = 123)\) of participants reported having one or more signs or symptoms of depression for a two-week period in their lifetime. According to the APA (2013), having only one sign or symptom for a two-week period could be categorized as mild depression. Younger participants and those less educated were more likely to report more signs or symptoms of depression. Twenty-four percent of 18-34 year olds and 15% of 45-64 year olds reported thoughts of self-harm.

Although 72% of participants reported having at least one sign or symptom of depression, 28% of them did not receive professional psychological help. Overall, younger participants (aged 18-34), were more likely to report more reasons for not seeking help, which includes: “they thought they could resolve the issue on their own, found it difficult to ask for help, perceived costs, lack of insurance, and were unsure where to seek help.” Those less educated reported statistically significant higher levels of “fear of being negatively viewed by others” as a reason for not receiving professional help when depressive signs or symptoms occurred. These reasons for not seeking help confirmed findings from previous studies on barriers to seeking professional help (Andersson et al., 2014; Gullier, Griffiths, & Christensen, 2012).

Similar to findings from previous studies, perceived public stigma was not as frequently cited as a barrier as personal stigma was towards seeking professional psychological help (Eisenberg, Downs, & Zivin, 2009; Lally et al., 2013; Gulliver, Griffiths, & Christensen, 2012). Participants with higher levels of personal stigma, had more negative feelings towards seeking professional psychological help. Participants in both age groups had higher mean levels of perceived public stigma compared to personal stigma. This could be due to participants’
unwilling to admit or acknowledge their stigma. Also, men had higher mean levels of perceived public stigma than women.

This study found that almost 96% of younger participants would accept someone with a history of mental illness treatment as a close friend, but approximately 40% (both younger and older participants) would still think less of someone who has received mental health treatment. Participants with lower levels of personal stigma had more positive attitudes towards seeking professional psychological help. In addition, older participants (aged 45-64) and participants with higher education were significantly more likely to endorse seeking professional help.

**Conclusion**

In finding that younger participants and those less educated reported more symptoms of depression and the high rates of participants who reported thoughts of self-harm, this research provides data that depression is prevalent among our community. Education on depression will raise awareness about when and how to seek help.

Although perceived public stigma did not demonstrate a significant finding with seeking profession help, a positive correlation was found between perceived public stigma and personal stigma. This means that in this research, those participants with higher perceived public stigma levels have higher personal stigma levels (which is associated with lower levels of seeking professional help).

Although there were not many statistically significant findings regarding stigma and age, findings of this study indicate stigma is still a pressing issue. Thirty-eight percent ($n = 27$) of younger participants stated they believe most people would think less of someone who received mental health treatment indicates that they believe the public thinks negatively towards those who seek help. Considering that males accounted for seven out of ten suicides in 2014 (AFSP,
2015b) and this study found males reported significantly higher levels of public stigma, intervention strategies are necessary.

In addition, this research found an intriguing contradictory finding regarding personal stigma. Over 90 percent of participants strongly agreed or agreed that they would willingly accept someone as a close friend who had received mental health treatment, but 40 percent of participants would think less of someone who had received mental health treatment. Also, half of the younger participants would be reluctant to date someone who had mental health treatment. That is a large percentage of participants who personally either think negatively towards people who had mental health treatment or foster some reservation when creating relationships with those who have or had a mental illness.

Participants who had higher levels of personal stigma had more negative views of seeking professional help, which indicates personal stigma as a potential barrier towards mental health treatment. Further participants who were younger and less educated had more negative feelings towards seeking professional psychological help.

**Recommendations for Future Research**

If this study were to be replicated, I would recommend interviews or focus groups as data collection as these methods could be beneficial in collecting specific reasons for not seeking help and reducing perceived public stigma levels. However, in-person interviewing may impede accurate personal stigma levels in participants.

In this research, younger adult participants and less educated participants reported higher levels of low self-esteem and confidence which indicates those demographics have a role in an individual’s self-worth and should be researched further to understand their possible association with low self-esteem. In addition, younger adults and those less educated were found to be less
inclined to seek professional psychological help. Identifying common reasons why this is among this population could be helpful in designing educational strategies to assist in reducing those barriers.

Since personal stigma levels were higher among older participants and perceived public stigma levels were higher among the younger participants, further research should be done to understand why these stigma levels differ by age. Also, since there were significant findings for educational levels and gender, I would recommend future studies focus on education with a greater proportion of male participants.

**Recommendations for Health Education Specialists**

I believe that the need for better mental health education and communication campaigns is necessary to reduce barriers to mental health treatment and increase professional help-seeking attitudes. I recommend reducing stigma as a focus area for health education specialists. Due to the findings of personal and public stigma in both age groups, research on the impacts of normative communication campaigns could be helpful in reducing negative public image of mental illness. For example, a health communication social normative campaign strategy demonstrating acceptance of individuals with mental illness as a friend, coworker, or teacher could be helpful in reducing the public stigma rates. Sharing these attitudes with the public in a communication strategy may influence attitudes towards mental illness and impact help-seeking.

Younger participants and those less educated reported higher levels of low self-esteem and confidence and more fears of being negatively viewed by others, which illustrates belief of public stigma and low self-worth. Education on mental illness could be vital in reducing stigma as well as promoting mental health and advertising where to seek help. Mental illness education campaign strategies could prove to be successful in increasing self-esteem and reducing
perceived public stigma levels. Also, making tailored campaigns could be useful in targeting specific demographics to reduce perceived public stigma levels and personal stigma and promote where to seek professional psychological help.

Lastly, advocating for mental health is something that all health education specialists should do. Creating partnerships within the communities to raise awareness of mental illness, specifically depression and suicide, could be life changing. Working with law makers to create or implement policies would be very helpful in reducing stigma and advertise where to seek help. Building relationships and promoting mental health could have a domino effect on the community, so it should be of health education specialist’s concern. I am hopeful that with further research and better implementation, public and personal stigma levels will decrease and attitudes towards seeking professional psychological help will increase.
References

https://www.afsp.org/understanding-suicide/key-research-findings

https://www.afsp.org/understanding-suicide/facts-and-figures


Appendices
February 18, 2016

Dear Amy Hedman:

Re: IRB Proposal entitled "[870887-2] Impact of Mental Illness Stigma on Help Seeking Attitudes"
Review Level: Level [II]

Your IRB Proposal has been approved as of February 18, 2016. On behalf of the Minnesota State University, Mankato IRB, we wish you success with your study. Remember that you must seek approval for any changes in your study, its design, funding source, consent process, or any part of the study that may affect participants in the study. Should any of the participants in your study suffer a research related injury or other harmful outcome, you are required to report them to the Associate Vice-President of Research and Dean of Graduate Studies immediately.

When you complete your data collection or should you discontinue your study, you must submit a Closure request (see http://grad.mnsu.edu/irb/continuation.html). All documents related to this research must be stored for a minimum of three years following the date on your Closure request. Please include your IRBNet ID number with any correspondence with the IRB.

The Principal Investigator (PI) is responsible for maintaining signed consent forms in a secure location at MSU for 3 years following the submission of a Closure request. If the PI leaves MSU before the end of the 3-year timeline, he/she is responsible for following "Consent Form Maintenance" procedures posted online (see http://grad.mnsu.edu/irb/storingconsentforms.pdf).

Sincerely,

Mary Hadley, Ph.D.
IRB Coordinator
This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Minnesota State University, Mankato IRB's records.
Appendix B: Email to Participants

My name is Anna Dierks and I am a Graduate student at Minnesota State University, Mankato in the department of Health Science. I am currently conducting a study to assess students’, staff, and faculty’s attitudes of mental illness and seeking professional help.

The purpose of this study is to:
1. Assess the attitudes towards mental illness and the attitudes towards seeking professional help
2. Determine any barriers that may prevent seeking professional help for depression

Your participation in this study is completely voluntary. You may refuse to participate with no penalty. In addition, you may discontinue participation at any time or decline to answer any question(s) at any time. The surveys are completely confidential and should take only about 5-10 minutes to complete.

Your participation is greatly appreciated. Upon your request, I will send a summary of the research findings and conclusions of this study.

Please note: details regarding Informed Consent are below and attached.

Click here to take the survey:

Thank you for your consideration and time.

Sincerely,

Anna Dierks
anna.dierks@mnsu.edu

Principal Investigator (PI)
Amy Hedman, PhD
Minnesota State University, Mankato, MN
213 Highland Center North
Mankato, MN 56001
Phone: (507) 389-5382
Email: amy.hedman@mnsu.edu

Institutional Review Board
Phone: (507) 389-2321
IRBNet ID#870887
Appendix C: Informed Consent Form

You are requested to participate in research supervised by Dr. Amy Hedman on students’, faculty’s, and staff’s attitudes towards mental illness and attitudes towards seeking help.

This survey should take about 5 to 10 minutes to complete. The goal of this survey is to understand what students’, faculty’s, and staff’s attitudes are towards mental illness and seeking help, and you will be asked to answer questions about that topic. If you have any questions about the research, please contact Dr. Hedman at amy.hedman@mnsu.edu

Participation is voluntary. You have the option not to respond to any of the questions. You may stop taking the survey at any time by closing your web browser. Participation or nonparticipation will not impact your relationship with Minnesota State University, Mankato. If you have questions about the treatment of human participants and Minnesota State University, Mankato, contact the IRB Administrator, Dr. Barry Ries, at 507-389-1242 or barry.ries@mnsu.edu.

Responses will be anonymous. However, whenever one works with online technology there is always the risk of compromising privacy, confidentiality, and/or anonymity. If you would like more information about the specific privacy and anonymity risks posed by online surveys, please contact the Minnesota State University, Mankato Information and Technology Services Help Desk (507-389-6654) and ask to speak to the Information Security Manager.

The risks of participating are no more than are experienced in daily life.

There are no direct benefits for participating. Society might benefit by the increased understanding of attitudes towards mental illness and attitudes towards seeking help.

Submitting the completed survey will indicate your informed consent to participate and indicate your assurance that you are at least 18 years of age.

Please print a copy of this page for your future reference.

If you, as a participant, would like documentation linking yourself to the research, please sign the Informed Consent and return via email to the researcher at amy.hedman@mnsu.edu

Name (optional): ________________________________________________________

Signature (optional): ___________________________________________________

MSU IRBNet ID#870887

Date of MSU IRB approval: 02/18/2016
Appendix D: Survey
1. I have read and understood the above consent form and desire of my own free will to participate in this study.
   a. Yes (Move onto Question 2)
   b. No (Skip to the end of the survey)

2. Are you between the ages of 18 – 34 OR 45 – 64?
   a. Yes (Move onto question 3)
   b. No (Skip to the end of the survey)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

3. Most people would willingly accept a person who has received mental health treatment as a close friend.
4. Most people believe that a person who has received mental health treatment is just as intelligent as the average person.
5. Most people believe that a person who has received mental health treatment is just as trustworthy as the average person.
6. Most people would accept a fully recovered person who has received mental health treatment as a teacher of young children in a public school.
7. Most people feel that receiving mental health treatment is a sign of personal failure.
8. Most people would not hire a person who has received mental health treatment to take care of their children, even if he/she had been well for some time.
9. Most people would think less of a person who received mental health treatment.
10. Most employers will hire a person who has received mental health treatment if he/she is qualified for the job.
11. Most employers will pass over the application of a person who has received mental health treatment in favor of another application.
12. Most people in my community would treat a person who has received mental health treatment just as they would treat anyone else.

13. Most people would be reluctant to date a man/woman who has received mental health treatment.

14. Once they know a person who was in a mental hospital, most people will take his/her opinions less seriously.

15. I would willingly accept a person who has received mental health treatment as a close friend.

16. I believe that a person who has received mental health treatment is just as trustworthy as the average person.

17. I would think less of a person who has received mental health treatment.

18. I would be reluctant to date a man/woman who has received mental health treatment.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Partly Disagree</th>
<th>Partly Agree</th>
<th>Agree</th>
</tr>
</thead>
</table>

19. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

20. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

21. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.

22. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.

23. I would want to get psychological help if I were worried or upset for a long period of time.
24. I might want to have psychological counseling in the future.

25. A person with an emotional problem is not likely to solve it alone; he or she is likely to
solve it with professional help.

26. Considering the time and expense involved in psychotherapy, it would not be valuable for
a person like me.

27. A person would work out his or her own problems; getting psychological counseling
would be a last resort.

28. Personal and emotional troubles, like many things, tend to work out by themselves.

29. Age: ______

30. Are you:
   a. Male
   b. Female
   c. Other. Please write in your response: ___________

31. Ethnic origin (or Race):
   o White
   o Black or African American
   o American Indian or Alaska Native
   o Asian
   o Native Hawaiian or Pacific Islander
   o Hispanic or Latino
   o Other. Please write in your response: __________

32. Highest level of education.
   a. Never attended school
   b. Grades 1 through 8 (Elementary)
   c. Some high school, no diploma
   d. High school graduate, diploma or equivalent
   e. Some college credit, no degree
   f. Technical/vocational/trade training
   g. Associate degree
   h. Bachelor’s degree
   i. Master’s degree
   j. Professional degree
   k. Doctorate degree
33. Please take a moment to examine the signs and symptoms of depression noted below. Have you ever experienced any of these signs or symptoms for a period of two weeks or longer that impaired your daily functioning? *If so, please place a check in the box next to all those that apply*
   - Decreased Mood
   - Loss of interest and enjoyment in usual activities
   - Reduced energy and decreased activity
   - Reduced self-esteem and confidence
   - Ideas of guilt and unworthiness
   - Pessimistic (negative) thoughts
   - Disturbed sleep
   - Diminished appetite
   - Ideas of self-harm

34. When you had these signs or symptoms, did you seek professional help?
   a. Yes (Skip to 36)
   b. No (Move on to 35)
   c. Not applicable (Skip to 36)

35. What was the reason you did not receive treatment? *Please select all that apply.*
   - Did not want to appear weak
   - Social disapproval
   - Thought I could resolve the issue on my own
   - Difficult to ask for help
   - Fear of being labeled
   - Fear of being negatively viewed by others
   - Perceived cost
   - Lack of insurance
   - Lack of transportation
   - Unsure where to seek help
   - Other. Please write in your response: _________

36. If depression was affecting your academic or work performance who would you go to for help? *Please select all that apply.*
   - Medical doctor
   - Mental health counselor or therapist
   - Spouse or significant other
   - Family member
   - Friend
   - Coworker
   - Teacher
   - Employee Assistance Program (EAP)
   - Religious leader
   - No one
   - Other. Please write in your response: _______________
Appendix E: Email Permission to Use Scale

Dear Anna,

Thank you for your email and request to use the adapted D-D scale. I would be very happy for you to use it in your research, and I grant permission for its use.

I would just ask that you reference my paper if you publish any material relating to your MSc research project in which the adapted scale is used.

Thanks for the request, and best of luck with the Masters program and this important research.

John

Dr John Lally
MB MSc MRCPsych
Clinical Research Fellow,

PO63, Department of Psychosis Studies
Institute of Psychiatry,
King’s College London and National Psychosis Service,
South London and Maudsley NHS Foundation Trust,
King’s Health Partners
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London SE5 8AF

Email: john.lally@kcl.ac.uk
Tel: (0044) (0)20 7848 0216
Fax: (0044) 020 7848 0287
Appendix F: Table of Specification Matrix

<table>
<thead>
<tr>
<th>Research Question (RQ)</th>
<th>Survey items or methods used to assess RQ’S</th>
<th>Level of Data (Nominal, Ordinal, Interval/Ratio)*</th>
<th>Analysis needed to assess RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent are signs and symptoms of depression reported by participants?</td>
<td>33. Have you ever experienced any of these signs or symptoms for a period of two weeks or longer that impaired your daily functioning?</td>
<td>Nominal Interval/Ratio</td>
<td>Frequencies, Independent samples t-tests, ANOVA</td>
</tr>
<tr>
<td>2. To what extent is depression treatment reported by participants?</td>
<td>34. When you had these signs or symptoms, did you seek professional help?</td>
<td>Nominal Interval/Ratio</td>
<td>Frequencies</td>
</tr>
<tr>
<td>3. What reasons prevented seeking treatment?</td>
<td>35. What was the reason you did not receive treatment?</td>
<td>Nominal Interval/Ratio</td>
<td>Frequencies, Independent samples t-tests</td>
</tr>
<tr>
<td>4. What is the extent of participants’ perceived public stigma?</td>
<td>Survey questions 3-14</td>
<td>Interval/Ratio</td>
<td>Independent samples t-tests</td>
</tr>
<tr>
<td>5. What is the extent of participants’ personal stigma?</td>
<td>Survey questions 15-18</td>
<td>Interval/Ratio</td>
<td>Independent samples t-tests</td>
</tr>
<tr>
<td>6. What is the extent of participants’ help-seeking attitudes?</td>
<td>Survey questions 19-28</td>
<td>Interval/Ratio</td>
<td>Independent samples t-tests</td>
</tr>
<tr>
<td>7. What is the relationship of personal stigma and attitudes towards seeking professional help?</td>
<td>Survey questions 15-18 and 19-28</td>
<td>Interval/Ratio</td>
<td>Correlation</td>
</tr>
<tr>
<td>8. What is the relationship of perceived public stigma and attitudes towards seeking professional help?</td>
<td>Survey questions 3-14 and 19-28</td>
<td>Interval/Ratio</td>
<td>Correlation</td>
</tr>
</tbody>
</table>
Appendix G: Application for Research
Minnesota State University, Mankato

Application for Use of Students, Staff or Faculty in Research or Scholarly Activity

ADD YOUR INPUT AND LEAVE EVERYTHING ELSE ON THIS FORM AS IT IS

University procedure requires research that will utilizes University resources (e.g., IT) to
obtain access to participants or data be reviewed by the Associate Vice-President of
Research for approval. In completing the application, be aware that the persons reviewing
it may be unfamiliar with the field of study involved. Present the request in non-technical
terms. Data collection may not begin until approval is received from the Associate Vice-
President.

1. Project Title: Impact of Mental Illness Stigma on Help Seeking Attitudes

2. Key Personnel:
   a. MSU Faculty/Staff (NOT ADJUNCT) Principal Investigator (PI) Name: Amy
      Hedman PhD
      Department: Health
      Science Campus Mail
      Code: 213 HN
      Phone Number: 389-5382
      Email: amy.hedman@mnsu.edu
      PI is a salaried MSU Employee (not adjunct): [X] Yes [ ] No

3. Procedures
   a. Where will the research be conducted?
      Research will be conducted at Minnesota State University Mankato using an online
      survey tool
      Qualtrics.

   b. Describe how participants will be recruited, including how researchers will
      first contact potential participants (including how their contact information
      will be obtained, if applicable), script and/or recruitment materials.
      MSU Mankato ITS will be asked to provide a random sample of students’, staff, and
      faculty’s email addresses. The CO-PI (Graduate Student Anna Dierks) will be using
      Qualtrics to collect data. All email addresses listed will be sent an email with an
      invitation to participate in the study, informed consent statement, and a link to
      participate in the survey.
c. What exactly will participants be asked to do? Include participants in any control condition, a description of research procedures, data collection tools, time commitment, and anything else that might be pertinent.

Participants will be asked to read an informed consent form regarding the research. The informed consent form explains the research, its purpose, as well as confidentiality and anonymity. Participants will not be asked to sign the informed consent because the researcher has requested a waiver for documented consent for this study. After reading the informed consent form, participants will be asked to voluntarily participate in the research by completing the questionnaire. Participants will be able to keep the informed consent form. Participants will be asked to complete the questionnaire.

This study will employ a non-experimental design. A close-ended survey has been developed for this study, it includes 34 items. Using a listing of random sample email addresses representing MSU Mankato students, faculty, and staff, an email with invitation to participate, informed consent, and survey link (Quatrrics) will be sent to participants.

d. Please provide a detailed rationale why this study requires access to the specific population.

To receive a random sampling of students, staff and faculty and also be able to collect data electronically using MNSU email addresses, this study will require the assistance of MNSU IT department (to provide a random sampling of potential participants which we then can invite to participate in the study).

e. What are the potential benefits of this research for Minnesota State University?

Support graduate student in Health Science completing her thesis and graduate degree in Health Science. Knowledge of this study will help to assess current attitudes on mental illness and any impacts it may have on seeking help to inform health educators of opportunities for education and outreach.

Approved by AVP of Research

Not Approved by AVP of Research AVP's Reason for Withholding Approval