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Attitudes Toward Mental Health, Attitudes Toward Mental Healthcare, and Access to Mental Healthcare: Variations Based on Key Demographic Factors

Mariya Gaither*

Objective: The objective of this study was to discern what factors may cause variations in a person's attitudes toward mental health and mental healthcare, as well as their access to mental healthcare. The factors that were the focus of this study included: race/ethnicity, age, religiosity, gender identity, location, and socioeconomic status. **Method:** A total of 132 participants participated in the online study. Participants were asked to answer questions that assessed their attitudes about mental health and mental healthcare as well as the access to mental healthcare in their community. The survey also consisted of several demographic questions which asked participants about their age, race/ethnicity, gender identity, socioeconomic status, their location, and their level of religiosity. **Results:** There are several statistically significant differences in attitudes toward mental health, mental healthcare, and access to mental healthcare based on demographic factors. There is also a significant correlation between an individual's religiosity and their attitudes toward mental healthcare. These differences are caused by a variety of social and cultural differences. **Conclusion:** While this research study is a step in the right direction to begin remedying problems within the mental healthcare system, there is still a significant amount of work to be done. More research should be conducted to see if there are other differences in attitudes toward mental health and mental healthcare, as well as access to mental healthcare based on other demographics such as sexual orientation.

Recently, there has been an overwhelming amount of media attention on the disparities that occur in the United States healthcare system and how these disparities often impact people who identify as women and people of color. While there has been immense coverage on this topic in the healthcare system, there has been little to no coverage on how these disparities impact our mental healthcare system or why these disparities exist. However, there has been a plethora of negative media coverage about individuals who are suffering from mental illnesses, which creates a stigma around mental health. This media coverage is compounded with the lack and removal of resources in many communities across the country. Due to the lack of access to resources there are people who need mental healthcare and do not have access to care. Many

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people who have access to care but are avoiding care because of the negative attitudes that surround mental illnesses or because they believe that seeking this care goes against their religious, personal, or political values. My research aimed at examining how these attitudes about mental health and mental healthcare, as well as access to mental healthcare varies across a variety of demographics. The results of my research could be used to remedy some of these issues by identifying groups that need education on mental health and mental healthcare as well as redistributing resources to communities who have been identified as poor or as having inadequate resources based on the demographic questions in my study.

The previous research on this subject has covered several cultural and social barriers that deter some groups of people from receiving mental healthcare, especially when the therapist has not had any training on the cultural background of the client (Singh et al., 1998). Previous research by Meyer et al. (2014) has also looked at how socioeconomic status has an influence on a person's access to mental healthcare based on the access they have to commodities and social and emotional resources. The research has also explored the notion that there may be a relationship between an individual's socioeconomic status and their overall mental health, including higher mortality and morbidity rates, as well as higher rates of serious mental illnesses, like clinical depression (Meyer et al., 2014). Research by Wu et al. (2017) and Tobler et al. (2013) has also explored some of the racial and ethnic differences in mental health treatment that may impact whether individuals who identify as ethnic or racial or sexual minorities seek mental healthcare, including stigma from their respective communities and lack of healthcare coverage. While there has been a large amount of research done on this topic, it has largely been done using meta-analysis data; I hope for my research to show how self-report data portray the same issues.

Cultural Barriers to Mental Healthcare

One of the main issues discussed in the literature is that many mental healthcare providers are unaware of how communication differs across cultures. American culture tends to use high context communication, which is described as almost entirely verbal, whereas other cultures tend to use low context communication, which is described as almost entirely non-verbal communication with some subtle verbal cues that are passed from generation to generation through culture (Singh et al., 1998). These differences in communication often deter individuals from seeking or continuing the care that they may truly need because there are miscommunications that disrupt the therapeutic experience and may offend the client (Singh et al., 1998). Therefore, the mental healthcare system must reevaluate the training that they provide to psychologist and other practicing mental healthcare providers (Singh et al., 1998). If the training is not changed then it is possible that many individuals will stay away from the mental healthcare system due to these subtle macroaggressions.

Research on the topic has also found that a cultural barrier that prevents many individuals who represent ethnic and cultural minorities from seeking out mental healthcare is that they have a lack of trust for the mental healthcare system (Ojeda & Bergstresser, 2008). One explanation for the distrust between minority communities and mental healthcare providers is that many individuals feel like the mental healthcare system has the tendency to overlook the systemic factors that are associated with being a member of a minority group in our society when they are providing care to people in these groups (Wu et al., 2017). Individuals feel that many societal and cultural issues such as poverty and racism, which have a significant impact on their mental health are not being addressed in the care that they are receiving (Eack & Newhill, 2012). Since individuals are not able to talk about these issues in a therapeutic environment, they tend to

stay away from the mental healthcare system all together (Eack & Newhill, 2012). Many minority individuals also report that they have heard stories of mental health professionals conducting unethical research with participants from their community (Ojeda & Bergstresser, 2008). They report that this is one of the reasons they will not seek out care because they are afraid that they will fall victim to the same practices without their knowledge (Ojeda & Bergstresser, 2008). Studies have also found that minority individuals are more selective in what they are willing to share with their mental healthcare provider because they believe that they will be judged based on what they say in conjunction with their racial or ethnic background (Wolkon et al., 1973).

Much of the past research has identified the tendency for mental health professionals to be inadvertently biased towards the impact of culture within the therapeutic relationship (Singh et al., 1998). The lack of education about cultural differences has created a large breach in the relationship between individuals who belong to these cultural minorities and the mental healthcare system. This disjuncture between the two groups has left a significant portion of the population with mental illnesses that are going un- or undertreated.

Social Barriers to Mental Healthcare

Researchers have found that people have begun to hold more negative attitudes toward mental health in the last few decades (Wu et al., 2017). This shift in attitudes has made many people feel like they will be discriminated against if others find out that they have a mental illness or are seeking treatment for mental illnesses (Ojeda & Bergstresser, 2008; Wu et al., 2017). So many individuals avoid the mental healthcare system as much as possible, and if they have already had contact with the mental healthcare system, they may discontinue their care (Ojeda & Bergstresser, 2008; Wu et al., 2017). Whether someone chooses to seek care varies

based on how much the individual believes that the stigma associated with mental healthcare will tarnish their reputation or social standing, which depends on the racial/ethnic identity, gender identity, and socioeconomic status of the individual (Ojeda & Bergstresser, 2008).

A key part in understanding the stigma that inhibits many individuals from receiving care is the difference between three types of stigma. Public stigma is a stigma that arises from societal pressures to avoid those who are mentally ill and for individuals to avoid interaction with the mental healthcare system all together (Wu et al., 2017). Self or personal stigma occurs when a person holds negative attitudes about those who are mentally ill based on what they have learned from society, and then applies those negative ideas about those who are mentally ill to themselves, even if the ideas are not true (Wu et al., 2017). Structural stigma are societal barriers that prevent individuals from accessing mental healthcare even if they do not experience public or self-stigma (Wu et al., 2017). Research has found that long term avoidance of the mental healthcare system due to any form of stigma can lead to the experience of more severe mental illness than when there is consistent contact with the mental healthcare system (Ojeda & Bergstresser, 2008; Wu et al., 2017).

There has been a large amount of research that has suggested that the impact of stigma is different based on the demographics of an individual. Some research has found that people who identify as male, individuals who are racial/ethnic minorities, who are older, who identify as TGNC, and who have fewer years of education are less likely to engage with the mental healthcare system or to seek mental healthcare (Hack et al., 2019; Kim & Fredrickson, 2017). However, some studies have found that demographics alone are not predictors of whether an individual will seek mental healthcare. While it was found that demographics were a key part in assessing whether someone will interact with the mental healthcare system, research has also

stated that the lack of interaction was enhanced by the lack of education on mental health and mental illnesses, so if an individual had some understanding of mental illnesses, they would be more likely to engage with the mental healthcare system (Wu et al., 2017). One study suggests that the reason minority individuals avoid mental healthcare is because of how they believe others within their minority group will view their need for mental healthcare (Kim & Fredrickson, 2017). Another study has found that demographics are not as important as many studies make them seem, but rather it is how an individual interprets all of the stigma that exists that makes a difference in an individual's decision to pursue care (McLeod & Shanahan, 1993; Roman et al., 2008).

Stigma is a significant barrier for many individuals when they are deciding whether they want to interact with the mental healthcare system. While the research is not clear on how stigma interacts with a larger variety of demographics or education on the topic, it dissuades many individuals from seeking mental healthcare. Therefore, addressing how to minimize the stigma that individuals associate with mental illness should be a large concern of the psychological community.

Socioeconomic Status and Mental Health/Healthcare

Socioeconomic status (SES) has been identified as a significant reason why many individuals do not receive mental healthcare. However, many individuals do not see the link between systemic poverty and its overall impact on an individual's mental health for the duration of their life. Several studies have been dedicated to understanding not only how SES relates to access to mental healthcare, but also how it may have an adverse impact on individuals' mental health throughout their lifespan.

SES has been regarded as the most important factor in determining whether an individual decides to pursue mental healthcare, regardless of any other demographic group that an individual belongs to (Wolkon et al., 1973). Some research findings have shown that higher SES is related with higher subjective mental health and objective mental health due to their access to social buffers (Gaymana et al., 2014; Meyer et al., 2004; Roxburgh & Bosich, 2015). Social buffers are anything that would help an individual cope with psychological distress, including family, friends, and positive coping mechanisms (Gaymana et al., 2014; Meyer et al., 2004; Roxburgh & Bosich, 2015). These differences have been associated with more access to positive coping mechanisms, like sports, and higher SES individuals may be more effective in understanding their emotions and using positive coping mechanisms (Gaymana et al., 2014). Having a lower SES has been related to higher rates of morbidity and mortality due to mental health issues compared to those with a higher SES (Meyer et al., 2004). This is thought to be influenced by factors like unsafe neighborhoods, lack of access to resources, and low self-esteem due to poverty (Meyer et al., 2004). The research also suggests that wealth has a significant relationship with mental health; meaning that as a person moves up in SES, they are more likely to see improvement in their mental health, though the reasoning behind this improvement is unclear (Mossakowski, 2008). While the research has looked at social buffers that may differ based on SES, there has been no evidence to suggest that individuals of a higher SES have more access to buffers or social support than those who are of a lower SES (Gaymana et al., 2014).

There is evidence to suggest that poverty has long lasting effects on an individual's mental health, regardless of whether an individual moves out of poverty. Studies have found that childhood poverty is related to psychopathology and poor self-concept throughout the life span, as well as episodes of extreme psychological distress and symptoms of depression (McLeod &

Shanahan, 1993; Mossakowski, 2008). McLeod and Shanahan (1993) found that the length of time an individual spent in poverty as a minor was related to their long-term mental health, regardless of their current socioeconomic status. There is also evidence to support the notion that childhood SES is related to the access and the quantity of psychosocial resources that an individual had access to throughout their life, regardless of whether they experienced a change in SES during their life (Beatty et al., 2011). Research has also suggested that the impacts of poverty on an individual's mental health is not buffered by any other factors (McLeod & Shanahan, 1993).

Low SES has a profound effect on an individual's mental health throughout their life. The mental healthcare system needs to be rearranged so that it can serve a population that is at a greater risk of having poor mental health throughout their lifetime.

Racial/Ethnic Differences in Mental Healthcare

Eack and Newhill (2012) found that many minorities receive and seek mental healthcare much less often than their majority counterparts, and if they do receive care, it is usually of a poorer quality. It has been found that individuals that belong to a racial or ethnic minority group will be more likely to receive inadequate care even when they are suffering from the same symptoms and have the same diagnosis as their majority counterparts (De Haan et al., 2012). Research evidence has revealed that many racial and ethnic minority individuals receive emergency mental healthcare more often, are given more injectable medications, are less likely to receive adequate follow ups on their mental health, and are less likely to return to work after a severe mental health crisis (Eack & Newhill, 2012). Several researchers have uncovered that even with proper care, individuals who belong to minority groups often do not report that their symptoms improve after care, and they tend to have higher rates of suicidal ideation after care

than they did beforehand (Eack & Newhill, 2012; Tobler et al., 2013). It has been hypothesized that this phenomenon can be explained using social stress theory, which states that societal stress and pressures can be detrimental to an individual and thus cause an individual to exhibit more mental health issues throughout their lifetime, when compared to if they had not experienced any of these stressors at all (Mossakowski, 2008). Some examples of stressors that may plague minorities include poverty and racism (Mossakowski, 2008).

While the differences in mental healthcare based on race can be alarming, there has been a large amount of research that has been dedicated to looking at why minority individuals with mental health issues receive care less often and why that care is not comparable to the care that their majority counterparts receive. Some of the research has shown that minority individuals receive poorer quality care because there are not adequate mental healthcare resources within their community (Eack & Newhill, 2012). This disparity in access discourages most individuals from seeking care because it is out of their reach and they feel like it would not be beneficial to them to seek help when it is possible that they may not be able to talk about issues that are specific to their minority status (Eack & Newhill, 2012). Other studies have found that the reason why many minorities may not be actively seeking care is because their culture may emphasize social support, and thus it may be unacceptable for them to receive care without talking about their issues with members of their own community first (Beatty et al., 2011). Some examples of social support that have been observed in minority communities include fictive kin, church leaders, community activists, and family members (Roxburgh & Bosich, 2015).

There are plenty of disparities that occur in the mental healthcare system based on race; however, there is no clear indication that race alone is the reason for these differences. While research has been done on how race interacts with other factors in affecting the efficiency of the

mental healthcare system, there have been no conclusive data on the relationship between these factors. To completely understand where improvement is needed in the mental healthcare system, there still needs to be research that looks at how a variety of variables intersect to identify where disparities occur and how they can be fixed.

While my current study is closely aligned with much of the previous research in terms of the demographics that are being examined, I investigated the intersectionality of some of the variables, as well as adding a component of religiosity and location and how these factors may also impact mental health and mental healthcare. Whereas much of the previous research has been conducted using a meta-analysis design, my research relied on self-report data that were collected using an online survey. I also collected data about attitudes toward mental health and mental healthcare to assess how individuals' attitudes may vary based on their demographics. I also collected data on an individual's access to mental healthcare and how this varies based on demographics as well.

One of the aims of my research was to determine which variables are associated with an individual's attitudes toward mental health. The variables included race/ethnicity, gender identity, and SES. Furthermore, I examined a similar relationship when it came to an individual's attitudes about mental healthcare and access to mental healthcare and how these relationships differ based on age, religiosity, and location.

My study was conducted using an online survey that was created with Qualtrics. The survey was shared on a variety of social media platforms and the Lindenwood Participant Pool's Sona Systems website. My data was analyzed using SPSS.

Participants

The intended size of the sample for this study was 300 or more participants. The only restriction to participation was age. Only the data of participants who were 18 years of age or older were included in the analysis; any data from a participant under 18 years of age was not included in the final analysis. Other than age, there were no specific inclusion criteria, as I was looking to reach people from a variety of demographics. A total of 132 participants took the online survey; however, X participants' data were thrown out because they were either under the age of 18 or the participant gave partial data that could not be used. There were 112 participants who were recruited using Sona Systems, which is the software used by the Lindenwood Participant Pool (LPP). The LPP is a resource on Lindenwood's campus which allows researchers, regardless of their affiliation with Lindenwood, to recruit participants who are enrolled in eligible classes in exchange for extra credit in those classes. The participants who were recruited through the LPP earned one extra credit point toward an eligible class of their choosing for participating. Due to the pandemic caused by COVID-19, after March 16th, 2020 participants who were members of the LPP were granted two extra credit points for their participation in my study. The other 20 participants were recruited through online social media platforms. These platforms included Instagram, Twitter, Facebook, Snapchat, and Reddit.

The makeup of the sample, in terms of gender identity, included 20 men, 93 women, and 2 TGNC individuals. The racial/ethnic configuration of the study was 77.4% White, 6% Black, .008% Asian, 8.7% Latinx, 0% Native American, 0% Middle Eastern, .008% Native Hawaiian or Pacific Islander, 6% Multiracial and .003% identified as "Other." The self-reported religiosity was moderately religious ($M = 45.29$, $SD = 32.75$) with 0 being not very religious and 100 being very religious. The age range of the participants was 18 - 41 years old. The average participant in

the study was in the middle class and lived in a suburban community. The study was approved by both the Psychology Program Scientific Review Committee and the Lindenwood Institutional Review Board (IRB) before it was distributed on to Sona Systems for the LPP or on Reddit, Instagram, Twitter, Snapchat, and Facebook where participants could access it.

Materials

The survey was created on Qualtrics, an online survey creation website the survey was compiled of a total of 17 questions with items taken from four different measures. The measures used included the Attitudes to and Stereotypes of Mental Health Measure (Aromma et al., 2011), the Knowledge, Attitudes, and Beliefs about Mental Illness Questionnaire (Bener & Ghuloum, 2010), the Mental Health Literacy Measure (Jung et al., 2006), and the Mental Illness Beliefs Measure (Norman et al., 2012), as well as items I created for this study. The items on the survey assessed attitudes about mental health and mental healthcare, an individual's access to mental healthcare, and demographics that included: annual household income, race/ethnicity, gender identity, age, religiosity, and self-reported description of the area in which the participant lives (see Appendix A). The study also included an informed consent statement that was the first question on the survey; I created the document from a template provided to all Lindenwood researchers by the Lindenwood IRB. The consent form consisted of the name and contact information of the principal investigator, the faculty advisor, and the Lindenwood IRB director, the purpose of the study, and long it would take to complete the study. The consent form also notified participants that if they were members of the LPP they were notified that they would receive two LPP credits for their participation, regardless of whether they completed the study, and the participants' right to end the survey at any time. At the end of the survey, there was a debriefing statement that included the purpose of the study, contact information for the principal

investigator and the faculty advisor, and information about where participants could find mental healthcare if they or someone they know needed it. I posted an anonymous link to my study on Qualtrics to the LPP's Sona System software with, and a description and brief abstract was posted and made available to potential participants by the office (see Appendix B). The survey was also posted on to Reddit, Snapchat, Twitter, Instagram, and Facebook using an anonymous link, which was accompanied by a prewritten prompt which told participants about the study, my university affiliation and the class the study was designed for (see Appendix C). The study was close on April 15th, 2020. The data were then analyzed using SPSS.

Attitudes to and Stereotypes of Mental Health Measure

The items that I used from the Attitudes to and Stereotypes of Mental Health (Aromma et al., 2011; see Appendix D) were items 5, 9, 13, and 14, which address an individual's attitudes about mental health and mental healthcare. I decided to include item 5 because it asked about an individual's attitudes towards a person suffering from mental illness and their behaviors (Aromma et al., 2011). When I included this item in the current survey, I changed the word patient to individuals because I thought that the use of the word patient may bias the participant's responses because it might have implied that the person was committed to a psychiatric facility. I elected to include item 9 because it asked about an individual's attitudes about the mental healthcare system. I edited this question because it asked about healthcare professionals in general, so in my study it says healthcare providers. This was done so that people do not get them confused with mental healthcare professionals who fit underneath the more general term, given that the study is about mental health and the mental healthcare system. I picked item 13 to be a question in my study because it assessed a participant's attitudes about mental healthcare and specifically about their attitudes toward psychotropic drugs as treatment (Aromma et al.,

2011). I changed this question because in the original survey it asked about antidepressants, which was much too specific for the scope of this study, so it was changed to mental health medications to be more general and easier for the average person to understand. I also included item 14 in my study because it addressed an individual's attitude toward mental healthcare (Aromma et al., 2011). I slightly edited this item because it only asked about community mental healthcare. I wanted participants to compare community healthcare to the alternative which is institutionalized mental healthcare.

All items used were also changed so that they could be assessed using a 5-point Likert scale. The rest of the items in this measure were excluded because the items were repeated in another measure or they did not fit the scope of the study.

Knowledge, Attitudes, and Beliefs about Mental Illness Questionnaire

The items that were included from the Knowledge, Attitudes, and Beliefs about Mental Illness Questionnaire (Bener & Ghuloum, 2010; see Appendix E) were items 4, 5, 6, 12, 20, 21, 22, and 24. Items 4, 5, and 6 addressed an individual's attitudes about mental health, particularly the causes of mental health and were included in the present study (Bener & Ghuloum, 2010). I combined these three items into one because they were similar, and it helped shorten the length of the survey overall, which may have impacted the completion rate of the study. Item 12 was included because it addressed an individual's attitudes about mental healthcare, specifically mental healthcare provided by mental health professionals (Bener & Ghuloum, 2010). When it was included in the current study, I edited it to say community healer instead of traditional healer, because I did not think that this was something that was applicable to American culture, thus the term community healer was a better fit. I included items 21 and 22 because they assessed a person's attitudes toward mental illness by asking if an individual would have an

interpersonal relationship with someone who suffered from a mental illness (Bener & Ghuloum, 2010). I bundled these items into one question because it seemed redundant to ask about the same concept in two separate ways. Therefore, in the current study the question asks if the participant would be in a relationship of any kind with someone who is mentally ill. I decided to include item 24 because it asked about an individual's attitudes towards mental illness and people who suffer from mental illnesses (Bener & Ghuloum, 2010). I changed this item in the current study because it asked if an individual were afraid of living next to someone who has a mental illness. Instead the item in my study asked if an individual would feel comfortable living next to someone with mental illness. I felt as though it may have been possible for someone to be uncomfortable with living next to someone with a mental illness, and that discomfort does not necessarily cause fear, so by reframing the question, I may have received a greater variety of unbiased responses than I would have if I had used the original question.

Every item that I included from this measure was changed so that it could be answered on a 5-point Likert scale. The rest of the items in this measure were not included because they were repeats of a question taken from another measure or because they did not fit in well with the focus of this study.

Mental Health Literacy Measure

The items from the Mental Health Literacy Measure (Jung et al., 2016; see Appendix F) that were included in the present study were items 8, 13, 18, 19, 23, 25 and 26. I decided to select item 8 for the study because it asked about attitudes about mental healthcare, specifically psychotropic medications. I edited this question because I found it very vague and that it could have been confusing, so in the present study it is worded in a way that is less complex and confusing to the average person. I selected item 13 to be in the study because it assessed an

individual's attitudes about mental healthcare and their religious beliefs. I modified this question because it only asked about highly religious individuals and not everyone who participated in the study would consider themselves as highly religious, so the term highly religious was removed from the question. I decided to include item 18 in the study because it addressed an individual's attitudes toward mental illnesses and their causes (Jung et al., 2016). I altered this question to fit my study by making the question more general instead of being very specific like it was presented in the original study. I elected for item 19 to be included in the study because it asked about an individual's attitudes toward mental healthcare and treatment. I modified this item in my study because the wording was confusing and would not have been compatible with all forms of technology that could have been used to take this survey on the Qualtrics site.

I decided to include item 23 because it asked about mental healthcare access in an individual's community (Jung et al., 2016). I rephrased the item in the current study because many people would have responded to this item in a socially desirable way because there were only two options; by adding more options and editing the item slightly the question was less likely to contain socially desirable answers instead of honest answers. I included item 24 because it assessed access to mental healthcare, as well as if the participant had any idea about other resources outside of their community where they could receive mental healthcare (Jung et al., 2016). I revised this item in the current study because it was very likely that participants may have answered 'yes' because it was the socially acceptable answer and not because they knew the information. The question now asks whether the participant's community has a list of these resources that are available to the public, and there were more ways for the participant to respond to that question. I chose item 25 to be included in the study because it asked about an individual's access to mental healthcare in their community and whether they knew how to get

those resources (Jung et al., 2016). I edited this question in the current study because it was very vague and did not really relate back to the participant's own community, so it was changed to be clearer and address the participant's community. I picked item 26 to be included in the present study as well; I modified this item because the question was somewhat redundant and rephrased what was said in item 23 (Jung et al., 2016). The item now asks about crisis teams in a person's community.

I changed all items, apart from items 23-26, so that I was able to assess them on a 5-point Likert scale. I changed items 23-26 so that they were multiple choice items with 3 responses for the participant to choose from. I excluded all other items in this measure because they did not fit the scope of my study.

Mental Illness Beliefs Measure

The current study used several items from the Mental Illness Beliefs Measure (Norman et al., 2012; see Appendix G), these include item 6, 8, 14, 16, and 17 of the 23 items on the measure. The reason that I decided to include item 6 was because it asked about an individual's attitudes about mental health (Norman et al., 2012). I changed the item in the present study because there was a blank left for a specific mental illness, but instead that blank was filled with mental illnesses in general. I opted to include item 8 in the study because it assessed an individual's attitude about mental health and people who suffer from mental illnesses. I edited this item in the present study because in the original study the wording was insensitive to those who suffer from mental illnesses, and it was also meant to ask about a specific mental illness: so now it is more sensitive and appropriate, as well as more general than it was in the previous measure. I chose to include item 14 from this measure in the study because it addressed an individual's attitudes about mental illness (Norman et al., 2012). I adapted the question to fit the

scope of the present study, because like several other items from this measure, it was too general and had to be broadened to be able to address attitudes about mental illness in general and because it also compared those who are mentally ill to ‘normal people’, thus the question was changed to say ‘people without mental illnesses’ to be more bias-free. I selected items 16 and 17 for this study because they addressed an individual’s attitudes about mental illnesses (Norman et al., 2012). I decided to alter this question in my study because it made more sense to combine the two questions because they asked similar things.

All items selected from this measure were altered so that I was able to analyze the data using a 5-point Likert scale. The other items in this measure were not included because they were not a good fit for the scope of this study.

Measures

The variables that were measured in this study include attitudes toward mental health, attitudes toward mental healthcare, access to mental healthcare, race/ethnicity, gender identity, socioeconomic status, age, location, and religiosity. All variables were measured using different scales that are described below.

Attitudes Toward Mental Health

Attitudes toward mental healthcare was assessed using two questions. The questions were numbers 2 and 3 on the survey, consisting of a total of 18 items. These items were rated on a Likert scale (5 = *extremely positive attitude*, 2 = *extremely negative attitude*, and 1 = *a lack of attitude*). Participants were then given a total score out of 90 possible points.

Attitudes Toward Mental Healthcare

Attitudes toward mental healthcare was measured using two questions. These were questions 4 and 5, consisting of a total of 19 items. These items were scored on a Likert scale (5

= *extremely positive attitude*, 2 = *extremely negative attitude*, and 1 = *a lack of attitude*).

Participants were then given a total out of 95 possible points.

Access to Mental Healthcare

Access to mental healthcare was measured using five questions. These were questions 6 through 10. All five questions were multiple choice and had three possible answers for participants to choose from. The possible answers were “yes,” “no,” and “I am not sure.” A “yes” answer got a score of 2, meaning strong access. A “no” received a score of 1, meaning weak access. An answer of “I am not sure” received a score of 0 because there was a lack of knowledge. Participants received an overall score out of 10.

Demographics

Race/Ethnicity. Race/Ethnicity was analyzed using one question, which was question 15 on the survey. The participant was able to select their race or ethnicity from this list, which would either put them in the category “minority” if they choose anything other than European American or “majority” if they choose European American.

Religiosity. Religiosity was analyzed using a sliding scale where individuals could slide a bar to show how religious they were. The scale started with 0, which is not very religious, and ended with a 100, which is very religious. Based on their numerical value, participants were put into three different categories. Answers from 0 to 49 were grouped into the not very religious group. Answers from 50-75 were members of the moderately religious group. Answers from 76-100 were grouped into the very religious category.

Age. Age was measured using an open-ended question. Participants inserted their age in years into a textbox.

Gender Identity. Gender identity was measured using a multiple-choice question. The options were “Male,” “Female,” and “Other.” If an individual chose “Other,” they were invited to write their gender identity in a textbox.

Location. Location was measured using a multiple-choice question. The answers that a participant could choose from were “Urban,” “Suburban,” and “Rural.”

Socioeconomic status. Socioeconomic status was measured using a multiple-choice question. Participants were able to select a range that their annual household income fell in between; the options were under \$20,000, \$20,000-\$44,999, \$45,000-\$139,999, \$140,000-\$199,999, and \$200,000+. Those who answered under \$20,000 and \$20,000-44,999 were considered low income. Anyone who answered \$45,000-\$139,999 were considered middle class. Those who answered \$140,000-\$199,999 and \$200,000+ were considered upper class.

Analyses

The main analyses that were conducted for this study were analysis of variance (ANOVA) and *t*-tests. I used *t*-tests to see the differences between attitudes for about mental health, attitudes about mental healthcare, and access to mental health based on an individual’s gender identity and race/ethnicity. Gender identity was broken into two groups, with one group being men and the other being women. I broke race/ethnicity into two groups as well, with White and European Americans being in the majority group and anyone who identified as something other than White or European American in the minority group. I conducted ANOVAs to see whether there was a difference in attitudes toward mental health, attitudes about mental healthcare, and access to mental healthcare vary based on socioeconomic status and location. Several Pearson’s *r* correlations were also conducted to analyze the relationship between attitudes about mental health and age and religiosity, the relationship between attitudes about

mental healthcare and age and religiosity, and the relationship between access to mental healthcare and age.

Results

I hypothesized that attitudes toward mental health and mental healthcare would vary based on an individuals' gender identity, race/ethnicity, location, and socioeconomic status. I also hypothesized that an individuals' attitudes toward mental health and mental healthcare would have a relationship with their age and religiosity. My final hypotheses were that there would be a relationship between an individual's age and their access to mental healthcare and that mental healthcare would vary based on an individual's location and socioeconomic status.

Attitudes Toward Mental Health

I hypothesized that there would be a relationship between attitudes toward mental health, age and religiosity. I also hypothesized that there would be difference in attitudes about mental health based on their gender identity, race/ethnicity, location, and socioeconomic status. I conducted an independent samples *t*-test to see if attitudes towards mental health varies based on gender identity. There was not a significant difference between men ($M = 48.05$, $SD = 4.11$) and women ($M = 48.67$, $SD = 4.70$); $t(111) = -.522$, $p = .582$. There was no evidence to support the notion that attitudes toward mental health vary based on gender identity. I also ran an independent samples *t*-test to explore possible differences in attitudes toward mental health based on race/ethnicity. There was/was not a significant difference between the majority group ($M = 48.85$, $SD = 4.23$) and the minority group ($M = 47.65$, $SD = 5.53$); $t(113) = 1.183$, $p = .239$. I did not find evidence to support the notion that attitudes toward mental health vary based on race/ethnicity.

I used a one-way ANOVA to identify if there was a difference in attitudes toward mental health based on location. There was/was not a significant difference between attitudes based on location. $F(2, 112) = 2.134, p = .123$. Post hoc comparisons revealed that there was a statistically significant difference in attitudes toward mental health between those who lived in rural and those who lived in suburban communities.

I conducted a one-way ANOVA to see if there was a difference in attitudes about mental health based on an individual's socioeconomic status. $F(5, 108) = 1.283, p = .277$. Post hoc comparisons revealed that there was a near significant difference between individuals who said that their annual family household income was \$45,000-139,999 and \$150,000-199,999 where $p = .052$. I also found that there was a difference that was approaching statistical significance between individuals who had an annual family income of less than \$20,000 and \$45,000-139,999 with a p-value of $p = .075$.

I used a Pearson's r correlation to explore the relationship between age and an individual's attitudes toward mental health. Among the participants in this study, attitudes toward mental health and age had a weak, positive, not statistically significant correlation, $r(113) = .034, p = .718$. I conducted another Pearson's r correlation to evaluate the relationship between an individual's level of religiosity and their attitudes toward mental health. The analysis showed that there was a weak positive, but not statistically significant relationship between attitudes about mental healthcare and their level of religiosity $r(97) = .011, p = .912$.

Attitudes Toward Mental Healthcare

My hypotheses were that there would be differences in attitudes toward mental healthcare based on gender identity, race/ethnicity, location, and socioeconomic status. I also hypothesized that there would be a relationship between an individual's age and level of religiosity and their

attitudes toward mental healthcare. I ran an independent samples *t*-test to find out if there were any variations in attitudes toward mental healthcare based on gender identity. There were not any significant variations in attitudes toward mental healthcare between men ($M = 63.6, SD = 7.82$) and women ($M = 64.96, SD = 9.7$); $t(111) = -.590, p = .556$. There was not any evidence to support the claim that there were differences in attitudes about mental healthcare based on gender identity. I used an independent samples *t*-test to explore possible differences in attitudes about mental healthcare based on race/ethnicity. There were significant variations in attitudes toward mental health for the majority group ($M = 66.21, SD = 8.92$) and the minority group ($M = 60.00, SD = 9.2$); $t(113) = 3.101, p = .002$.

I conducted a one-way ANOVA to investigate the possibility of there being differences in attitudes toward mental healthcare based on location. $F(2,112) = 1.669, p = .193$. A post hoc comparison revealed that there were no individual significant differences between rural, urban, or suburban communities and their attitudes toward mental healthcare.

I ran a one-way ANOVA to find out if there were any differences in attitudes about mental healthcare based on an individual's socioeconomic status, $F(5, 108) = 1.920, p = .097$. I conducted a post hoc comparison and it revealed that there was a statistically significant difference in mental healthcare attitudes for individuals whose families made less than \$20,000 and those who made \$45,000-139,999 a year with a p-value of $p = .011$. There was also a statistically significant difference between those whose annual family income was below \$20,000 a year and those who made \$200,000+ a year, where $p = .007$. I also found a difference that is close to being statistically significant between those whose annual family income is less than \$20,000 a year and those who make between \$20,000-44,999 with a p-value of $p = .064$.

Another emerging significance difference was found between those whose annual family income was less than \$20,000 and those who made \$140,000-149,999, where the p-value was $p = .094$.

I used a Pearson's r correlation to explore the relationship between an individual's age and their attitudes about mental healthcare. The correlational analysis showed that there is a weak, negative, statistically insignificant relationship between age and an individual's attitudes about mental healthcare, $r(113) = -.060$, $p = .528$. I conducted a Pearson's r correlation to determine if there was a relationship between an individual's attitudes toward mental healthcare and their level of religiosity. Among participants in this study there was a weak, negative, statistically significant relationship between attitudes toward mental healthcare and their level of religiosity, $r(97) = -.211$, $p = .038$.

Access to Mental Healthcare

I hypothesized that there would be differences in access to mental healthcare based on race/ethnicity, socioeconomic status, and location. I also hypothesized that an individual's access to mental healthcare would be related to their age. I used an independent samples t -test to see if there were any differences between an individual's access to mental healthcare based on their race/ethnicity. There was not a significant variation of access to mental healthcare between the majority group ($M = 8.49$, $SD = 2.04$) and the minority group ($M = 9.11$, $SD = 2.1$); $t(113) = -1.353$, $p = .179$.

I ran a one-way ANOVA to assess possible differences in access to mental healthcare based on an individual's location, $F(2, 112) = 2.03$, $p = .626$. Post hoc comparisons revealed that there were no statistically significant differences in access to mental healthcare based on an individual's location.

I ran a one-way ANOVA to analyze the possible differences in access to mental healthcare due to variations in socioeconomic status, $F(5, 108) = 1.394, p = .232$. A post hoc comparison revealed that there was a statistically significant difference between those whose family household income was \$20,000-44,999 and those who made \$200,000+ where the p-value was $p = .033$. I also found that there was a statistically significant difference between those who had an annual family household income of \$45,000-139,999 and those with an annual family household income of \$200,000+ with a p-value, $p = .022$.

I used a Pearson's r correlation to explore the relationship between an individual's age and their access to mental healthcare. There was a positive, weak, not statistically significant relationship between age and an individual's access to mental healthcare, $r(113) = .119, p = .208$.

Discussion

There was some support for my hypotheses, I found that there was a difference in attitudes about mental health based on an individual's location, specifically between rural and urban communities. This difference may be caused by the rise in suicide rates starting in the 1970's and suburban communities have disproportionately affected by this increase (Ford, et al., 1979). Therefore, individuals in suburban communities may have more positive attitudes about mental health because it is present in their everyday lives, even though the suicide rates in their community are declining (Stein et al, 2015). I discovered that there is a relationship between religiosity and an individual's attitudes toward mental healthcare. I believe that this finding may be caused by the notion that people who are religious may have more social support than individuals who are not as religious. Individuals who are very religious may also be encouraged to turn to their church leaders and God when they are in crisis instead of going to see out mental healthcare, which could possibly explain the relationship between attitudes and religiosity. I

found some difference in attitudes about mental health based on socioeconomic status, particularly between those who are middle class and upper middle class, as well as those who are below the poverty line and those who are middle class. These differences may be because as individuals move up the socioeconomic ladder, they may receive more education about mental health which may have an impact on their attitudes.

During my research I uncovered that there was a statistically significant difference in attitudes in mental healthcare based on an individual's race/ethnicity. This difference may be caused by the predatory treatment that some minority communities have faced in the past (Ojeda & Bergstresser, 2008). Another potential cause of this difference may be that mental health professionals in minority communities are overworked, therefore individuals in these communities are not getting the best care possible and that is what is influencing their attitudes. Through my research, I also discovered that there were some differences in attitudes toward mental healthcare based on socioeconomic status, with the main differences being between individuals who are of a lower social class, those who are middle class, and those who are upper class. I believe that these differences may be caused by overworked mental healthcare professionals in impoverished communities. Therefore, the attitudes of individuals in these communities may be more negative because the care they are receiving is not as client focused or efficient as it is in more affluent communities.

The last thing that my research uncovered was that there was a difference between access to mental healthcare based on socioeconomic status. The differences are the most significant are those between individuals who are lower class, those who are middle class, and those who are affluent. These differences may be caused by differences in health insurance coverage. Individuals who are of a lower or middle class may not be able to access mental healthcare as

much or as often as their affluent counterparts because their health insurance will not cover it and they cannot pay for it out of pocket.

One of the strengths of my research study was that I was able to collect self-report data, which allowed me to better assess an individual's access to mental healthcare and attitudes about mental health and healthcare than I would have been able to gather if I used the meta-analysis method that was used in previous research. I believe that another strength of using self-report data, in an online format, was that I was able to reach more people and collect more data than I would have than if I would have handed out physical surveys or conducted interviews in a lab. The largest weakness in my study was that I did not diversify where I posted my research study, so I may have gotten different results if I would have posted on a wider variety of social media platforms. If I was going to do this study again or if it were to be repeated, I would recommend that there either be an interview or short answer component added to the study. I think that adding this to the study will provide more depth and provide a greater understanding of what the thinking is behind some of these attitudes. I would also recommend that future research looks at more demographics such as sexual orientation and political affiliation.

I think that my research provides valuable information to professionals across the social sciences. Applied sociologists can use this data to go into a variety of communities and assess the mental healthcare resources that are available. They can report how individuals in these communities feel about these resources and provide valuable feedback to psychologists and other mental healthcare professionals on how to provide better care in these communities.

Psychologists can use this information to seek out additional training on cultural sensitivity, which could help bridge the gap between mental healthcare professionals and their clients. I also believe that psychologists can attempt to work in some of these low-income communities to

ensure there are enough professionals to provide care in each area without having professionals experiencing burn out. Psychologists also have a duty to educate the public on mental health and mental healthcare, so perhaps professionals can work on doing community outreach in the communities that need it the most.

While this research is a step in the right direction, there is still a significant amount of work that needs to be done to ensure that the mental healthcare system in the United States is equitable and serves the entire population. Continuing research in this field would provide more insight on where the mental healthcare system is not meeting the needs or standards set by those it is supposed to serve. With more research in this field, psychologists and other mental healthcare professionals will be able to better serve and educate their clients and the public.

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Appendix A

Attitudes about Mental Health, Mental Healthcare, and Mental Healthcare Access Survey

Attitudes about Mental Health, Mental Healthcare, and Mental Healthcare Access

Start of Block: Informed Consent

Q1 Survey Research Information Sheet

You are being asked to participate in a survey conducted by Mariya Gaither, under the supervision of Dr. Michiko Nohara-LeClair at Lindenwood University. We are doing this study to gain information on attitudes about mental health and mental healthcare. The survey also includes questions that asks about access to mental healthcare and other resources in your community. There will also be several demographic questions at the end of the survey. It will take about 15 minutes to complete this survey.

Your participation is voluntary. You may choose not to participate or withdraw at any time by simply not completing the survey or closing the browser window.

There are no risks from participating in this project. We will not collect any information that may identify you. There are no direct benefits for you participating in this study.

If you are in the LPP, you will receive two extra credit points in the course for which you signed up for the LPP. You will receive extra credit simply for completing this information sheet. You are free to withdraw your participation at any time without penalty. Participants who are not part of the LPP will receive no compensation beyond the possible benefits listed above. However, your participation is an opportunity to contribute to psychological science.

WHO CAN I CONTACT WITH QUESTIONS? If you have concerns or complaints about this project, please use the following contact information:

Mariya Gaither: MUG221@Lindenwood.edu

Dr. Michiko Nohara-LeClair; Mnohara-leclair@Lindenwood.edu

If you have questions about your rights as a participant or concerns about the project and wish to

talk to someone outside the research team, you can contact Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu.

By clicking the link below, you confirm that you have read this form and decided that you will participate in the project described above. You understand the purpose of the study, what you will be required to do, and the risks involved. You understand that you can discontinue participation at any time by simply not completing the survey. Your consent also indicates that you are at least 18 years of age, or that you have parental consent on file with the Lindenwood Participant Pool.

You can withdraw from this study at any time by simply closing the browser window. Please feel free to print a copy of this information sheet.

- I consent (1)
- I do not consent (2)

End of Block: Informed Consent

Start of Block: Mental Health Attitudes

Q2 Please respond by indicating how much you agree or disagree with each statement.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
Individuals suffering from mental illnesses are unpredictable. (1)	•	•	•	•	•
It is impossible for someone to recover from a serious mental health crisis. (2)	•	•	•	•	•
I do not feel comfortable around people who have mental illnesses. (3)	•	•	•	•	•

There are many similarities between people without mental illnesses and those who have mental illnesses. (4)	•	•	•	•	•
Most people with mental health issues use their mental health as an excuse. (5)	•	•	•	•	•
People with mental health issues can function well in our society. (6)	•	•	•	•	•
If more people with mental health issues were institutionalized, there would be less violent crime. (7)	•	•	•	•	•
It is easy to tell if someone has a mental illness. (8)	•	•	•	•	•
If someone has a mental illness, they should not tell anyone because they will be shunned. (9)	•	•	•	•	•

Taking care of your mental health is an important part of your overall well-being. (10)	•	•	•	•	•
Mental illnesses are a result of bad parenting. (11)	•	•	•	•	•
Very few people in our society are actually mentally ill. (12)	•	•	•	•	•
Everyone with a mental illness is rash. (13)	•	•	•	•	•
Everyone should take steps to take care of their mental health no matter how small. (14)	•	•	•	•	•
Mental health issues can arise due to a variety of reasons such as stress from daily life, traumatic events, or brain injuries. (15)	•	•	•	•	•

Q3 Please respond by indicating how much you agree or disagree with each statement.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I believe my family would support me if I had a mental illness. (1)	•	•	•	•	•
I would be comfortable living next to someone who has a mental illness. (2)	•	•	•	•	•
I would be comfortable being in a relationship, of any kind, with someone who has a mental illness (3)	•	•	•	•	•

End of Block: Mental Health Attitudes

Start of Block: Mental Healthcare Attitudes

Q4 Please respond by indicating how much you agree or disagree with each statement.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
A religious leader through prayer and other religious activities can effectively treat mental health. (1)	•	•	•	•	•

Mental healthcare providers do not care about their patients. (2)	•	•	•	•	•
Mental healthcare providers do not have their patients' best interests in mind. (3)	•	•	•	•	•
Therapy is not effective in helping people cope with their mental health issues. (4)	•	•	•	•	•
People who seek mental healthcare are forced to undergo treatment that they do not want. (5)	•	•	•	•	•
Mental health medications are often ineffective. (6)	•	•	•	•	•
Mental health medications have adverse side effects. (7)	•	•	•	•	•
Many mental health medications make mental health conditions worse. (8)	•	•	•	•	•

Many mental health issues will go away without any kind of mental health treatment. (9)	•	•	•	•	•
Society should invest more in community mental healthcare instead of institutional mental healthcare. (10)	•	•	•	•	•
Mental healthcare providers pass inaccurate judgements about their clients based on the client's group membership (race, gender, etc). (11)	•	•	•	•	•
Healthcare professionals (such as primary care physicians and nurses) are not capable of effectively treating mental illness. (12)	•	•	•	•	•
A community healer would be more	•	•	•	•	•

effective at treating mental illness than a mental healthcare professional. (13)					
Many people with mental illnesses would see improvement in their overall mental health without the help of mental healthcare professionals. (14)	•	•	•	•	•

Q5 Please respond by indicating how much you agree or disagree with each statement.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
If I were suffering from a mental illness, I would go to a mental healthcare professional for help. (1)	•	•	•	•	•
I believe that I could get rid of a mental illness through prayer and	•	•	•	•	•

spirituality. (2)					
I believe that mental healthcare does not work for most people with mental illness. (3)	•	•	•	•	•
I feel like there are very few mental healthcare providers who reflect my cultural background (age, race/ethnicity, religion, gender, etc.). (4)	•	•	•	•	•
I feel like many medications for mental illnesses cause more problems, instead of solving them. (5)	•	•	•	•	•

End of Block: Mental Healthcare Attitudes

Start of Block: Mental Healthcare Access

Q6 Is there a mental healthcare facility in your community?

- Yes (1)
- No (2)
- I do not know (3)

Skip To: Q7 If Is there a mental healthcare facility in your community? = Yes

Skip To: Q8 If Is there a mental healthcare facility in your community? = No

Skip To: Q8 If Is there a mental healthcare facility in your community? = I do not know

Q7 Are there enough mental healthcare facilities in your community given the size of your community?

- Yes (1)
- No (2)
- I am not sure (3)

Q8 Does your community have resources about where you could go to receive mental healthcare?

- Yes (1)
- No (2)
- I am not sure (3)

Q9 Does your community provide information about some anonymous resources that individuals could use to receive mental healthcare?

- Yes (1)
- No (2)
- I am not sure (3)

Q10 Is there a mental health crisis team in your community?

- Yes (1)
- No (2)
- I am not sure (3)

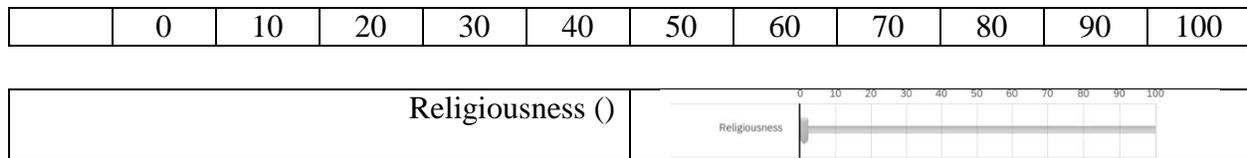
End of Block: Mental Healthcare Access

Start of Block: Demographic Questions

Q11 How would you define the area in which you live?

- Rural (1)
- Suburban (2)
- Urban (3)

Q12 Please rate how religious you are, with 0 being not religious and 100 being very religious.



Q13 What is your gender identity?

- Male (1)
- Female (2)
- Other (3) _____

Q14 What is your age in years?

Q15 What is your race/ ethnicity? Please select all that apply.

1. American Indian or Alaska Native- (1)
2. Asian (2)
3. Black or African American (3)
4. Hispanic, Latino, or Spanish Origin (4)
5. Middle Eastern (5)
6. Native Hawaiian or Other Pacific Islander (6)
7. White or European American (7)
8. Other (8) _____

Q16 What is your annual family household income?

- Less than \$20,000 (1)
- \$20,000-44,999 (2)
- \$45,000-139,999 (3)
- \$140,000-149,999 (4)
- \$150,000-199,999 (5)
- \$200,000+ (6)

End of Block: Demographic Questions

Start of Block: Thank you statement

Q17 Thank you for participating in my study. The purpose of this study was to see if there were any factors that affect an individual's attitudes about mental health, mental healthcare, and access to mental healthcare. This research is important because it will highlight differences, if any, in the way people feel about these topics and identifying where changes can be made to make the mental healthcare system equitable for everyone. If you have any questions about the study or you would like to know the outcome of the study, feel free to contact the principle investigator or the faculty advisor with questions.

If you or someone you know is suffering from mental health issues and is unaware of where they can go to get help, please utilize the following resources:

Substance Abuse and Mental Health Services Administration:

To find the nearest substance abuse or mental health treatment center near you, please click this link: <https://findtreatment.samhsa.gov/locator>

To find a referral for a mental health facility in your area, please call: 1-800-662-4357

National Suicide Prevention Lifeline:

If you are experiencing suicidal thoughts or are in extreme crisis, please call or text:

Phone number: 1-800-273-8255

Text line: Text MHA to 741-741

Child-Help USA for both child and adult abuse survivors:

If you are a survivor of any kind of abuse, please call: 1-800-273-8255

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End of Block: Thank you statement

Appendix B

LPP Abstract and Description

Abstract: This is a brief 15-minute survey, which asks you about your attitudes about mental health, mental healthcare, your access to mental healthcare, and some demographic questions.

Description: The study asks about how individuals view mental health and how they feel about mental healthcare. It will ask participants about their knowledge about how to receive mental healthcare in their own communities and demographic questions, such as race/ethnicity, gender, and socioeconomic status.

Appendix C

Social Media Recruitment Paragraph

Hello, I am Mariya Gaither and I am currently a student at Lindenwood University. I am conducting a survey for my Advanced Research Methods class; the survey asks individuals about their attitudes about mental health and mental healthcare, their access to mental healthcare, as well as several demographic questions. The survey should only take about 15 minutes to complete. If you enjoy my survey, please feel free to share it so that other people may have the opportunity to participate. Thank you for your contribution to psychological science!

Appendix D

Attitudes to and Stereotypes of Mental Health Measure (Aromma et al., 2011)

1. People with depression have caused their problems themselves.2
2. Depression is a sign of failure.2
3. Depressed people should pull themselves together.2
4. Mental health problems are a sign of weakness and sensitivity.2
5. Depression is not a real disorder.2
6. Patients suffering from mental illnesses are unpredictable.2
7. If one tells about his/her mental problems, all friends will leave him/her.1
8. If the employer finds out that the employee is suffering from mental illness, the employment will be in jeopardy.1
9. The professionals in healthcare do not take mental problems seriously.1
10. Depression can be considered as a shameful and stigmatizing disease.2
11. It is difficult to talk with a person who suffers from mental illness.
12. Antidepressants are not addictive.2 Antidepressants have plenty of side effects.2
13. Society should invest more in community care instead of hospital care.2
14. Depression can't be treated.2
15. You don't recover from mental problems.2

Note: 1 Statements refer to perceived public stigma/stereotype awareness. 2 Statements refer to personal stigma/stereotype agreement. A four-point rating scale was used with the response alternatives: “strongly disagree”, “disagree”, “agree” and “strongly agree”.

Appendix E

Knowledge, Attitudes, and Beliefs About Mental Illness Questionnaire (Bener & Ghuloum, 2010)

Knowledge and Beliefs

1. Do you think substance misuse like alcohol or drugs could result in mental illness?
2. Do you think mental illness is due to possession by evil spirits?
3. Do you think poverty can be the cause of mental illness?
4. Do you think brain disease can be the cause of mental illness?
5. Do you think mental illness can be punishment from God?
6. Do you think traumatic event or shock can be a cause of mental illness?
7. Do you think stress in daily life leads to mental illness?
8. Do you think genetic inheritance may be the cause of mental illness?
9. Do you think people with mental illness are mentally retarded?
10. Do you think people with mental illness can live in the community?
11. Do you think people with mental illness can work in regular jobs?
12. Do you think traditional healers can treat mental illness?
13. Do you think people with mental illness can be successfully treated with medication?
14. Do you think people with mental illness can be successfully treated using psychotherapy?
15. Do you think psychiatric medication will cause addiction?
16. Do you think people with mental illness are dangerous?

Attitudes

17. Would you visit a psychiatrist if you had emotional problems?
18. Would you visit a healer if you have emotional problems?

19. Are you afraid to have a conversation with someone with mental illness?
20. Are you willing to maintain a friendship with someone with mental illness?
21. Do you think that marriage can treat mental illness?
22. Are you willing to share a room with someone who has mental illness?
23. Are you ashamed to mention someone in your family who has mental illness?
24. Are you disturbed to work in your workplace with someone who has mental illness?
25. Are you afraid of someone with mental illness who is staying next door?

Appendix F

Mental Health Literacy Measure (Jung et al., 2006).

Knowledge-oriented Mental Health Literacy

1. Counseling is a helpful treatment for depression.
2. A person with schizophrenia may see things that are not really there.
3. Early diagnosis of a mental illness can improve chances of getting better.
4. Attending peer support groups helps recovery from mental illness.
5. Unexplained physical pain or fatigue can be a sign of depression.
6. Cognitive behavioral therapy can change the way a person thinks and reacts to stress.
7. A person with bipolar disorder may show a dramatic change in mood.
8. Taking prescribed medications for mental illness is effective.
9. When a person stops taking care of his or her appearance, it may be a sign of depression.
10. Drinking alcohol makes symptoms of mental illness worse.
11. A person with mental illness can receive treatment in a community setting.
12. A person with anxiety disorders has excessive anxiousness or fear.

Beliefs-oriented Mental Health Literacy

13. A highly religious/spiritual person does not develop mental illnesses.
14. Depression is a sign of personal weakness.
15. Mental illness is a short-term disorder.
16. Recovery from mental illness is mostly dependent on chance or fate.
17. A person with depression should not be asked if he or she has thoughts of suicide.
18. Poor parenting causes schizophrenia.
19. Mental illness will improve with time, even without treatment.

20. Recovering from a mental illness is the same as being cured.
21. A person can stop hoarding whenever he/she wants to.

Resource-oriented Mental Health Literacy

22. A person with depression will get better on his or her own without treatment.
23. I know where to go to receive mental health services.
24. I know how to get the number of a suicide prevention hotline.
25. I know where to get useful information about mental illness.
26. I know how to contact a mental health clinic in my area.

Note: Most items are rated using a five-point Likert scale (i.e., strongly disagree, disagree, neutral, agree, and strongly agree) with the option of “I don’t know.” The response format for the last four items measuring specific knowledge about mental health resources is “yes” or “no.”

Appendix G

Mental Illness Beliefs Measure (Norman et al., 2012)

Personal responsibility for illnesses

- xxx results from a failure of self-control.
- Developing xxx has nothing to do with willpower and self-discipline.
- xxx does not result from a failure of self-control.
- xxx comes about when someone stops making the effort to deal with the challenges of life.
- People with xxx are personally responsible for becoming ill.

Danger

- People with xxx are dangerous.
- In recent years the number of crimes committed by people with xxx has been increasing.
- If all patients with xxx were admitted to locked wards, the number of violent crimes would be markedly reduced.
- People with schizophrenia do not commit brutal crimes.
- The symptoms of schizophrenia do not lead to violence.

Continuity with normal experience

- Given extreme circumstances many of us could show signs of xxx.
- Most of us from time to time show signs of xxx.
- Normal people do not have any of the signs of xxx.
- There is a lot of similarity between xxx and the experience of normal people.

Social inappropriateness

- It would be easy to interact with someone with xxx.

- People with xxx are appropriate in their behaviour when interacting with others.
- People with xxx often say rude and upsetting things.
- Someone with xxx is always able to engage in polite conversation.
- You can often be embarrassed by what someone with xxx says or does.

Prognosis

- Most people with xxx will completely recover.
- It is rare for someone with xxx to be completely cured.
- With modern treatment methods these days, many patients with xxx can be cured.
- Even with treatment, most people with xxx will long continue to show signs of their illness.

Note: Where there is an xxx the researcher has entered the name of a specific mental illness.