Can Education about Depression Affect Attitudes towards People with Depression?

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Abstract

Mental health should be viewed the same as physical health; however, our society has attached a negative stigma on to those who suffer from psychological disorders, such as depression. Previous research concluded that educational interventions are needed for decreasing stigma, but the effectiveness of different types of interventions was not established. The purpose of the current study was to determine what type of educational intervention would be most effective in decreasing depression stigma. Eighty-two participants were assigned to one of three conditions: stigma condition, depression condition, or control condition. Each condition watched a video that targeted either mental health stigma, cognitive aspects of depression, or animals that elicited a neutral response. Afterwards, participants read a vignette about a depressed individual and rated them using the People of Evaluation Scale. It was predicted that those who watched a short video on depression stigma would have the most positive attitude towards people with depression, and those who watch a video on depression's cognitive aspects would have a significantly lower attitude towards a depressed person in comparison to the stigma condition, but a significantly higher attitude in the same categories than the control group. Results revealed a significant difference between the stigma condition and control condition; however, there were no significant differences found between the stigma condition and depression condition or the depression condition and the control condition. These results suggested that a brief educational video on stigma related to depression had an immediate effect of improving attitudes.

Keywords: mental health, stigma, depression, educational intervention

Can Education about Depression Effect Attitudes towards People with Depression?

A recent national survey found that depression was prevalent in 48.3% of college students (Shah & Pol, 2020), which is nearly half the population of undergraduates! Depression is a psychological disorder that can have a mild, moderate, or severe impact on individuals' daily lives. It is defined as causing feelings of sadness and/or a loss of interest in activities you used to enjoy, and it negatively affects how you feel, the way you think, and how you act (What is Depression?, 2021). Symptoms of depression must last at least two weeks, and depression is diagnosed by the following: depressed mood; loss of interest or pleasure; significant weight loss or gain; insomnia or hypersomnia; agitation, slowed movements, or restlessness; fatigue or loss of energy; feelings of worthlessness or excessive guilt; difficulty thinking, concentrating, or making decisions; recurrent thoughts of death or suicide (American Psychiatric Association, 2013). Thus, it is a concern that colleges and universities need to address.

Psychological disorders should be viewed the same as physical illnesses; however, our society places a stigma on those who suffer with illnesses that do not have physical symptoms, such as depression. Stigma is defined as attributions of stereotypes or negative views to an individual or group of people who are viewed as being different from societal norms (Ahmedani, 2011). The consequences of stigma can negatively impact people's recovery from their illness. For instance, individuals with psychological disorders are viewed as dangerous, and therefore there is a mechanism of keeping social distance from them by others (Parcesepe & Cabassa, 2013). In addition, people tend to associate psychological disorders with unpredictability (Reavley & Jorm, 2011). These perceptions often lead to increased symptoms in the individuals with diagnosable psychological issues, for a lack of strong social support has been proven to be detrimental to recovery.

Barney et al. (2009) were interested in exploring the impact of attitudes and stigma around depression; their research used focus groups to determine what type of intervention would be most beneficial to reduce depression stigma by investigating a community's perception about it. The results reported substantial perceptions that people who are depressed are responsible for their own condition, they are undesirable to be around, and that they may be a threat. The researchers recommended that interventions should focus on attributions of blame, reducing avoidance of depressed people, labeling depression as a health condition rather than mental illness, and improving responses of self-help sources (Barney et al., 2009). Thus, this study listed specific stigma beliefs people tend to have towards those with depression and provided tips on what type of interventions should decrease the stigma.

Another important issue related to depression is the advantages and disadvantages there are for seeking support. As previously mentioned, having a strong support system is crucial for recovery, and this often consists of family and friends. Griffiths et al. (2011) sought to explore the effects of reaching out to these supports. Out of 7000 surveys that were sent out to an Australian community, 417 people responded. These participants were asked to fill out a survey and indicate advantages and disadvantages to seeking help from their family or friends. The results found that those who sought help from family or friends for depression were more likely to report advantages than disadvantages (Griffiths et al., 2011). These findings emphasize the importance of decreasing stigma, so that people who suffer from depression feel more able to open up about their struggles and seek the help they deserve.

A common theme across many previous studies is how education can be an effective measure to combat stigma around depression (Angermeyer et al., 2009; Griffiths et al., 2014; Quinn et al., 2014; Von Dem Knesebeck et al., 2014; Yokoya et al., 2018). Researchers have

examined public beliefs about depression, specifically how to recognize it, treat it, and the stigma associated around it. Yokoya et al. (2018) conducted a survey on 1,085 participants and found that over 70% knew depression could occur in those who may not outwardly show symptoms and understood that rest is crucial in recovery. Roughly 30% believed depression was due to a weak personality. The researchers suggested that an educational intervention to reduce stigma about depression and increase knowledge about its treatment is needed (Yokoya et al., 2018).

There have been studies that found education to be effective, but not as strong as they had predicted. Researchers analyzed data collected from two population surveys conducted in Germany during the years of 1993 and 2001 (Angermeyer et al., 2009). They found that mental health literacy did improve; however, the desire for social distance and stigmatizing attitudes towards people with psychological disorders did not always result in a negative correlation. The results found that although mental health literacy increased, the desire for social distance either did not change or actually increased (Angermeyer et al., 2009). In a similar study about literacy and depression (Quinn et al., 2014), the focus on the nature and impact of depression programs in European countries was researched. Results found that reducing stigma attitudes, discriminatory behavior, and promoting help-seeking were common, but the most common program found was about improving literacy. In addition, some programs were discovered to have a positive influence on improving literacy (Quinn et al., 2014).

According to the National Academics of Sciences, Engineering, and Medicine, there is mixed evidence about how effective educational interventions are in changing stigma in the long term, but it has been shown to reduce stigma nonetheless (National Academies of Sciences, Engineering, and Medicine, 2016). A meta-analysis (Griffiths et al., 2014) examined the

effectiveness of existing programs for combating stigma associated with psychological disorders and found that educational interventions were shown to be effective in reducing personal stigma; however, Internet programs were the least effective. Another study aimed at determining whether or not there is a correlation between education and the desire for social distance from people with depression or schizophrenia (Von Dem Knesebeck et al., 2014). The results found that lower education was significantly associated with a stronger tendency for social distance in the case of schizophrenia and depression. This was done through telephone surveys in two large German towns, and respondents were asked questions about their beliefs of what causes psychological disorders, their emotional reactions, and desire for social distance after being presented with a vignette describing symptoms of depression or schizophrenia. The research concluded that campaigns for reducing stigma should focus on emotional reactions and information needs of people who do not have much knowledge about mental disorders (Von Dem Knesebeck et al., 2014).

It is also important to note that the emotional reactions people have towards individuals with mental health problems depend on the specific disorder (Angermeyer et al., 2010). This suggests that interventions focused more on emotions may have a significant effect on decreasing stigma. In addition, the media has a significant influence on attitudes people have about others with mental health issues. Reavley et al. (2016) studied the beliefs about the dangerousness of people with psychological disorders. They found that knowing someone with a mental health issue and having a higher level of education about mental health results in a lesser belief in dangerousness (Reavley et al., 2016). This suggests that an educational intervention is likely to decrease the belief in dangerousness others have of an individual with depression.

The previous studies regarding education and depression are relevant to the current research because the purpose is to determine which type of education is most effective in decreasing negative attitudes towards depression. This is important because those who suffer with depression need a safe and solid support system and environment to recover, and stigmas minimize that safety and support. The barrier around stigma is associated with a lack of service requests, limited mental health resources, systematic process of impoverishing people with a psychological disorder, increased risk of crime, and the invisibility and vulnerability of people who suffer (Campo-Arias et al., 2014). Educational programs are a must-need in order to improve knowledge and awareness around mental health issues, and one way to study mental illness stigma is through research on stereotypes and prejudices (Corrigan & Watson, 2002).

Past research discusses perceptions and attitudes about depression, as well as different interventions and educational programs geared towards decreasing the stigma. The purpose of the current study is to continue the research about which types of interventions are most effective in decreasing negative attitudes around depression. Based on previous research, the hypothesis is that participants who watch a short video on the stigma of depression will have the most positive attitude towards a person with depression, as measured by the Evaluation of People Scale (Marks & Fraley, 2005). Those who watch a video on the symptoms of depression will have a significantly lower attitude towards a depressed person than the group who watch the stigma video, but a significantly higher attitude in the same categories than the control group who watches a neutral video.

Methods

Participants

Eighty-two undergraduate and graduate students aged between 16 and 25 years old took part in the experiment. There were 126 responses collected; however, 44 participants did not complete the study. The participants were recruited from Mount St. Mary's University in Emmitsburg, Maryland and through social media. They all chose to volunteer in the study that was either sent to their school email or through a link posted on social media. This research study used a convenience sample. There were 19 males, 60 females, and 3 non-binaries/third gender who participated. Out of all the participants who completed the study, 67% categorized themselves as Caucasian, 15% as Hispanic, 9% as African American, 4% as Asian American, and 6% as other. The stigma condition was randomly assigned 25 participants, the depression condition 29 participants, and the control condition 28 participants.

Materials

The materials used in this study included an electronic device that connects to the internet, a depression vignette (Nolen-Hoeksema, 2017), the Evaluation of People Scale (Marks & Fraley, 2005), an educational video about mental health stigma (TEDxGainesville, 2019), two educational videos about the cognitive aspects of depression (Farrell, 2015; Therapist Aid, 2014), and a video about animals (Ultimate Animals Video for Children, 2014). The depression vignette reads as the following: "Jordan's friends were shocked to find her passed out in her dorm room with an empty bottle of sleeping pills on the floor next to her. Jordan had experienced months of unhappiness, a sense of low self-worth, pessimism, and chronic fatigue. She often told her friends she couldn't remember a time when she was happy for more than a few days at a time. Since the beginning of the winter term, however, Jordan's sadness had deepened, and she had spent days on end locked in her bedroom, apparently sleeping. She had been skipping meals and had lost 12 pounds" (Nolen-Hoeksema, 2017).

The Evaluation of People Scale (Marks & Fraley, 2005) has four subscales: values, popularity with peers, power/success, and intelligence (see Appendix). The scale is composed of 36 Likert scale items that ask basic opinions about the hypothetical person, such as if the person is deemed trustworthy. The participant rates the hypothetical person from strongly disagree (1) to strongly agree (5), with somewhat disagree (2), neither agree or disagree (3), and somewhat agree (4) in the middle. The higher the scores in the direction of strongly agree, the more positive the attitudes are. Scores that are lower indicate negative attitudes. The Evaluation of People Scale has been used in previous research, such as the Sexual Double Standard Study (Marks & Fraley, 2005).

Three videos around 8 minutes each were used in accordance to each condition. The experimental group of the stigma condition watched an educational video about the stigma around mental health (TEDxGainesville, 2019). The other experimental group, the depression condition, watched two educational videos about depression (Farrell, 2015; Therapist Aid, 2014). The neutral/control group watched a video that showed different animals; this video served to initiate a neutral response (Ultimate Animals Video for Children, 2014). The data was collected and analyzed using a one-way ANOVA.

Procedure

Participants were recruited through a campus wide email. Those who chose to partake in the experiment were sent to a website on Qualtrics.com and were asked to read background information about the study before giving their consent to become a participant. After giving their consent, the participants were asked to fill out questions regarding their name, birthday, gender, age, race, and ethnicity. Once they submitted their answers, they were randomly assigned to one of the three groups based on their birth month. All three groups were given different

videos in accordance with their assigned group. After the videos were watched, the participants read a vignette about a person with depression, but they were not outwardly told the person had depression. Then they completed the Evaluation of People Scale (Marks & Fraley, 2005). At the end of the survey participants were debriefed. The total scores for each participant were measured by adding all the scores from each subscale together and categorized by the condition they were assigned, then divided by the total amount of Likert scale questions on the Evaluation of People Scale in order to determine the average ranking for each participant. A one-way ANOVA was conducted to analyze the results.

Results

The primary hypothesis predicted that participants who watched a short video on the stigma of depression would have the most positive attitude towards a person with depression, and those who watched a video on the symptoms of depression would have a significantly lower attitude towards a depressed person, but a significantly higher attitude in the same categories than the control group who watched a neutral video. The hypothesis was tested using a one-way ANOVA. The results showed a significant main effect and a large effect size F (2, 79) = 4.55, p = 0.013, η^2 = 0.103. As seen in *Figure 1*, the stigma condition's average ranking (M = 3.32, SD = 0.325) was slightly larger than the depression condition's average ranking (M = 3.16, SD = 0.469), but significantly larger than the control condition's average ranking (M = 2.95, SD = 0.518). A Tukey's post-hoc test revealed that there was a significant difference between the stigma condition and control condition (p = 0.010); however, there were no significant differences found between the stigma condition and depression condition (p = 0.432) or the depression condition and the control condition (p = 0.169). Thus, the hypothesis was partially supported.

Discussion

The purpose of the current study was to conduct more research about which types of interventions are most effective in decreasing negative attitudes around depression. It was predicted that participants who viewed a short video on the stigma of depression would have the most positive attitude towards a person with depression, as measured by the Evaluation of People Scale (Marks & Fraley, 2005), while those who watched a video on the symptoms of depression would have a significantly lower attitude towards a depressed person, but a significantly higher attitude in the same categories than the control group who viewed a neutral video. The results partially supported the hypothesis. There was a significant main effect and a large effect size; however, a significant difference was found between the stigma condition and control condition, not the stigma condition and the depression condition or the depression condition and the control condition. This suggests that a brief educational video on stigma related to depression had an immediate effect of improving attitudes.

The efficacy of the educational interventions used were targeted at the emotions of the potential stigma carrier and prior knowledge about mental health. Therefore, one condition of the study aimed at the emotions of the participants by making them watch a video about a person describing the stigma around depression. The other condition focused on the knowledge about depression by making the participants watch a short video about the cognitive aspects of depression. The results indicate that targeting emotions was more impactful than targeting cognitive aspects.

Educational programs are key for improving general public knowledge and awareness. Research that examined public beliefs about depression found that 70% of the participants knew depression could occur in those who may not outwardly show symptoms, and educational

interventions were recommended to reduce stigma about depression and increase knowledge about its treatment (Yokoya et al., 2018). In addition, research on stereotypes and prejudices regarding mental health have also supported educational intervention by helping elucidate how stigmas impact people with depression (Corrigan and Watson, 2002). Together, the results from these previous studies may help improve the lives of many people living with psychological disorders, such as depression. The findings from the present study begins to fill this hole by showing what types of educational interventions are most effective in decreasing negative attitudes towards people with depression.

Not all interventions are equally effective in decreasing stigma. For example, emotional reactions people have towards individuals with mental health problems depends on the specific disorder (Angermeyer et al., 2010). Moreover, a correlation between prior knowledge about mental health and the desire for social distancing from people with depression or schizophrenia varies with a tendency for social distance in the case of depression (Von Dem Knesebeck et al., 2014). Both studies concluded that interventions for reducing stigma need focus on emotional reactions and increasing knowledge about mental health. The current study used the results from the previous research by targeting the emotions of the potential stigma carrier and cognitive aspects of depression.

Angermeyer et al. (2009) found that the desire for social distance and stigmatizing attitudes towards people with psychological disorders did not always result in a negative correlation. This research corresponds with the current study because the hypothesis was partially supported, indicating that although education is effective, the types of education may not be significantly different in comparison. There was no statistical significance found between

the stigma condition and the depression condition; therefore, the type of educational video was not as effective as predicted.

A meta-analysis that examined the effectiveness of existing programs for combating stigma associated with psychological disorders found that although educational interventions were shown to be effective in reducing personal stigma, Internet programs were the least effective (Griffiths et al., 2014). This is important information because it may explain why there was no statistical significance found between the stigma condition and the depression condition or the depression condition and the control condition. The present study had participants fill out a survey online and watch a video, thus making use of the Internet.

A community's perception also influences the effectiveness of interventions (Barney et al., 2009). Research that investigated a community's perception about depression reported substantial stigma, and it was recommended that interventions should be focused on attributions of blame, reducing avoidance of depressed people, labeling depression as a health condition rather than mental illness, and improving responses of self-help sources (Barney et al., 2009). The video about depression stigma used in the present study highlighted these key concepts pointed out in Barney et al.'s research (2009), supporting the notion that educational videos geared towards more positive conceptualizations of people with depression significantly decrease depression stigma.

Perceptions of dangerousness is an additional factor for effectiveness of intervention. Reavley et al. (2016) studied the beliefs about the dangerousness of people with psychological disorders. It was found that knowing someone with a mental health issue and having a higher level of education about mental health results in a lesser belief in dangerousness. The researchers suggested that an educational intervention is likely to decrease the belief in dangerousness others

have of an individual with depression (Reavley et al., 2016). Besides the indication that an educational intervention decreases mental health stigma, this research correlates with the present study because they both support the assumption that a higher level of education about mental health decreases its misperceptions and stigma.

There are a number of limitations to the current study. As previously mentioned, Internet programs have been found to be least effective for decreasing mental health stigma (Griffiths et al., 2014). Secondly, out of all the responses collected, 35% did not complete the survey. Survey fatigue could indicate an issue with the procedure of the study, such as the length of the videos. Another limitation is that the study used the survey method of a questionnaire. This increases the risk of response bias and sampling bias. Response bias can show up in extreme responses on the five-point scale or in responses influenced by self-preservation, otherwise known as answering based on what appears to be desirable behavior. Sampling bias is present due to the fact that the survey was conducted online; those who are more active online were more likely to fill out the survey, and other factors such as gender and age contribute to this bias as well. Questionnaires are not as reliable or valid compared to other methods of collecting data. For example, a participant may misinterpret the directions or questions, and their misunderstanding may influence their responses.

There are a several directions future studies could explore. One study should perform the same procedure as the current study but conduct in-person educational programs about depression and stigma instead of using the Internet. Research could also examine the long-term effects of educational intervention for depression stigma. The current research examines the short-term effect, but the purpose of educational interventions is to increase knowledge and

awareness of mental health over a long period of time. It is important to explore whether there are long term effects or for long term effect significance.

Another potential study could investigate the subscales of the Evaluation of People Scale (Marks & Fraley, 2005), examining what aspects of the evaluation of the person might be explaining the changes in attitude, such as values for example. Another future study could examine how language may influence one's perspective around mental health stigma. For example, when one has depression, it often feels like he or she cannot get out of bed. However, to an outsider not experiencing the symptoms, they may argue that they *can*, but they *won't* get out of bed. Phrases such as *unable to* indicate a better understanding from another's perspective and may influence their beliefs about people with psychological disorders to be more positive. Future studies could also examine gender and age differences in response to the videos.

Stigma around mental health still exists in the world today, and it is a recurrent problem. It creates negative perceptions and behaviors towards those who suffer in silence, which ultimately decreases their rate of recovery, contributes to a worsening of symptoms, creates a lack of social support, and leads to discrimination. Just because one cannot *see* a psychological illness does not make it any less harmful or impactful as a physical illness. However, a lack of awareness and education around mental health gives rise to the stigma. This study's purpose was to help decrease the mental health stigma by increasing awareness and education around mental health. Specifically, this research focused on depression, a common psychological disorder, especially among college students. Although the results demonstrated no significant difference between the two types of educational videos, the findings showed that an educational intervention on stigma is effective in decreasing the stigma. This is important to note because it suggests that a brief educational intervention can decrease negative perspectives around

depression and mental health. These implications should be applied to schools across the world; it should be made mandatory that students must take at least one class on mental health and attitudes towards people with psychological disorders. The more education on mental health and stigma will have positive mental health benefits for us all.

References

Ahmedani B. K. (2011). Mental Health Stigma: Society, Individuals, and the Profession. *Journal of social work values and ethics*, *8*(2), 41–416.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Angermeyer, M. C., Holzinger, A., & Matschinger, H. (2010). Emotional reactions to people with mental illness. *Epidemiologia e psichiatria sociale*, *19*(1), 26–32.

Angermeyer, M., Holzinger, A., & Matschinger, H. (2009). Mental health literacy and attitude towards people with mental illness: A trend analysis based on population surveys in the eastern part of Germany. *European Psychiatry*, *24*(4), 225-232.

Barney, L.J., Griffiths, K.M., Christensen, H. *et al.* (2009). Exploring the nature of stigmatizing beliefs about depression and help-seeking: Implications for reducing stigma. *BMC Public Health* 9, 61. https://doi.org/10.1186/1471-2458-9-61

Campo-Arias, A., Oviedo, H. C., & Herazo, E. (2014). Estigma: barrera de acceso a servicios en salud mental [Stigma: Barrier to Access to Mental Health Services]. *Revista colombiana de psiquiatria*, *43*(3), 162–167. https://doi.org/10.1016/j.rcp.2014.07.001

Corrigan, P. W., & Watson, A. C. (2002). Understanding the impact of stigma on people with mental illness. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, *1*(1), 16–20.

Farrell, H.M. (2015). *What is depression? - Helen M. Farrell*. TED-Ed. Retrieved 6 April 2021, from https://ed.ted.com/lessons/what-is-depression-helen-m-farrell.

Griffiths, K. M., Carron-Arthur, B., Parsons, A., & Reid, R. (2014). Effectiveness of programs

for reducing the stigma associated with mental disorders. A meta-analysis of randomized controlled trials. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, *13*(2), 161–175. https://doi.org/10.1002/wps.20129

Griffiths, K. M., Crisp, D. A., Barney, L., & Reid, R. (2011). Seeking help for depression from family and friends: a qualitative analysis of perceived advantages and disadvantages. *BMC psychiatry*, *11*, 196. https://doi.org/10.1186/1471-244X-11-196

Marks, M. J., & Fraley, C. R. (2005) The sexual double standard: fact or fiction? *Sex Roles, 52*(3/4), 175-186. doi: 10.1007/s11199-005-1293-5

National Academies of Sciences, Engineering, and Medicine. (2016). *Ending Discrimination Against People with Mental and Substance Use Disorders: The Evidence for Stigma Change: Approaches to Reducing Stigma*. Washington, DC: The National Academies Press. doi: 10.17226/23442.

Nolen-Hoeksema, S. (2017). *Abnormal Psychology* (7th ed., p. 178). McGraw-Hill Higher Education.

Parcesepe, A. M., & Cabassa, L. J. (2013). Public stigma of mental illness in the United States: a systematic literature review. *Administration and policy in mental health*, *40*(5), 384–399. https://doi.org/10.1007/s10488-012-0430-z

Quinn, N., Knifton, L., Goldie, I., van Bortel, T., Dowds, J., Lasalvia, A., Scheerder, G., Boumans, J., Svab, V., Lanfredi, M., Wahlbeck, K., & Thornicroft, G. (2014). Nature and impact of European anti-stigma depression programmes. *Health promotion international*, *29*(3), 403–413. https://doi.org/10.1093/heapro/das076

Reavley, N. J., & Jorm, A. F. (2011). Young people's stigmatizing attitudes towards people with

mental disorders: findings from an Australian national survey. *The Australian and New Zealand journal of psychiatry*, *45*(12), 1033–1039. https://doi.org/10.3109/00048674.2011.614216

Reavley, N. J., Jorm, A. F., & Morgan, A. J. (2016). Beliefs about dangerousness of people with mental health problems: the role of media reports and personal exposure to threat or harm. *Social psychiatry and psychiatric epidemiology*, *51*(9), 1257–1264. https://doi.org/10.1007/s00127-016-1215-6

Shah T.D., Pol T. (2020). Prevalence of depression and anxiety in college students. *Journal of Mental Health and Human Behavior, 25*(1), 10-13. https://www.jmhhb.org/text.asp?2020/25/1/10/297411

TEDxGainesville. (2019, June 24). *Stop the Stigma: Why it's important to talk about Mental Health* [Video]. TED Talks. https://www.ted.com/talks/heather_sarkis_stop_the_stigma_why_it_s_important_to_talk_about_mental_health/up-next

Therapist Aid. (2014). What is depression? Retrieved 6 April 2021, from https://www.youtube.com/watch?v=fWFuQR_Wt4M

Ultimate Animals Video for Children. (2014, October 6). [Video]. YouTube. https://www.youtube.com/watch?v=bLJw9yPusak

What Is Depression? (2021). Retrieved 31 March 2021, from https://www.psychiatry.org/patients-families/depression/what-is-depression

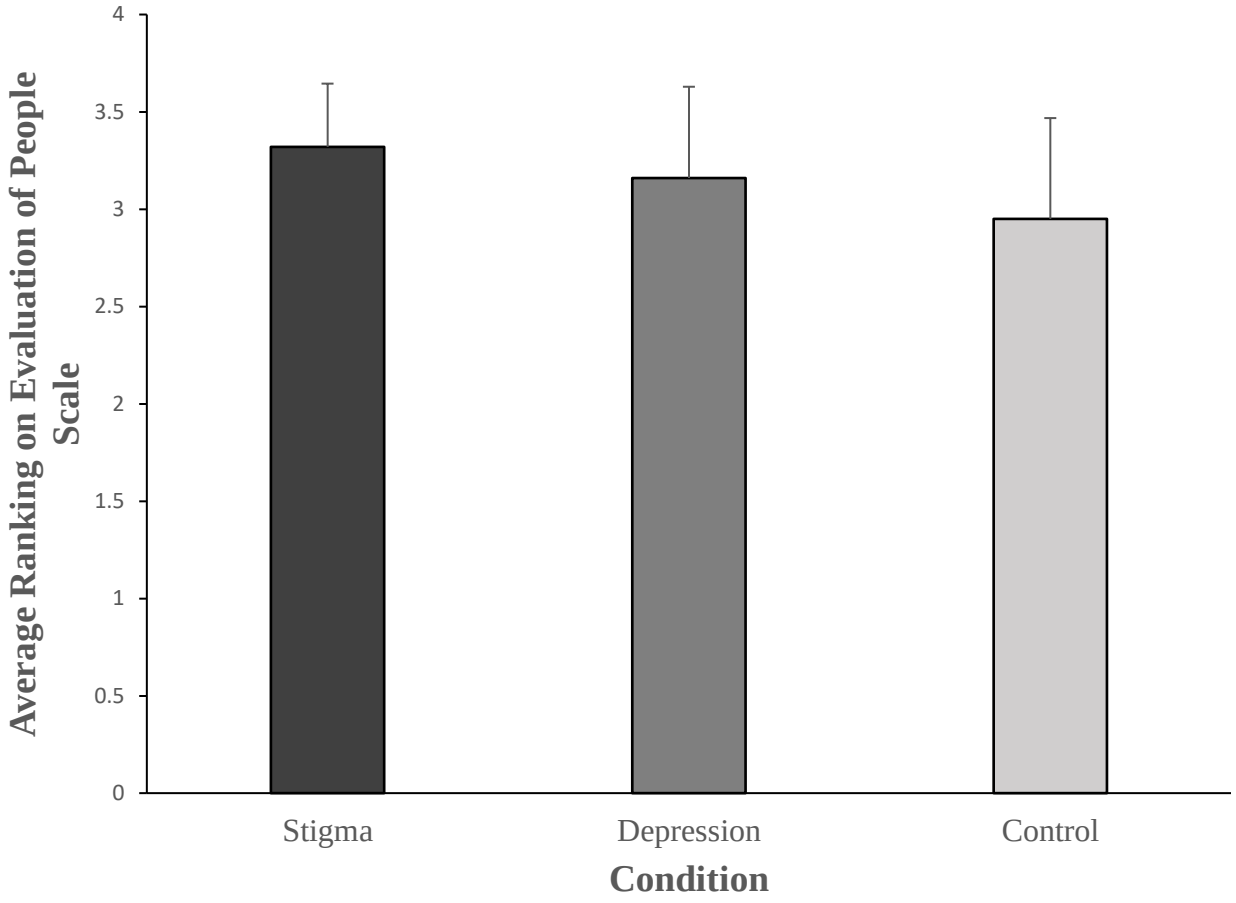
Von Dem Knesebeck, O., Angermeyer, M. C., Kofahl, C., Makowski, A. C., & Mnich, E. (2014). Education and the public's desire for social distance from people with depression and schizophrenia: the contribution of emotional reactions and causal attributions. *The*

International journal of social psychiatry, *60*(5), 468–473. https://doi.org/10.1177/0020764013496082

Yokoya, S., Maeno, T., Sakamoto, N., Goto, R., & Maeno, T. (2018). A Brief Survey of Public Knowledge and Stigma Towards Depression. *Journal of clinical medicine research*, *10*(3), 202–209. https://doi.org/10.14740/jocmr3282w

Figure 1

Average Ranking on Evaluation of People Scale Per Condition



Note. This figure demonstrates the average ranking on the Evaluation of People Scale based on the condition each group was in. The x-axis shows the type of condition, and the y-axis has the average ranking score. The error bar for each condition represents standard deviation.

Appendix

Evaluation of People Scale (Marks & Fraley, 2005)

Subscale 1: Values

This person is trustworthy.

This person is respectful.

This person would make someone a good boyfriend/girlfriend.

This person would make someone a good husband/wife.

This person is immoral**.

This person is dishonest**.

This person is careless**.

I could be friends with this person.

I would not like to know this person**.

I would like to socially distance myself from this person*.

This person is moral***.

This person is honest***.

This person is responsible***.

I would like to know this person***.

Subscale 2: Popularity with Peers

This person is popular.

This person has a lot of friends.

This person is fun at parties.

People like this person.

This person would be fun to hang out with.

This person is physically attractive.

People listen to this person.

No one likes this person**.

Subscale 3: Power/Success

This person makes a lot of money.

This person will hold a job with lots of power.

This person is in charge of many people.

This person has a good job.

This person would make a good leader.

This person is successful.

This person often takes control of situations.

This person influences others.

Subscale 4: Intelligence

This person is intelligent.

This person is a failure**.

This person performs well in everything he/she does.

This person makes a lot of mistakes**.

This person did well in school.

This person makes a few mistakes***.

*Added by researcher of the current study
**Reverse scored in analysis
***Not included in original source; reverse worded