The Perception of Mental Illness in Comparison to Physical Ailments

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Abstract

The difference in perceptions towards someone who has a mental illness and someone who has a physical impairment was determined by comparing the attitude people have towards each. Participants viewed a scenario describing an individual who has a mental illness (schizophrenia), an individual who uses a wheelchair, or an individual with no impairment at all. They then rated their perceptions on 9-point Likert scale questionnaire derived from the Attribution Questionnaire Short Form (AQ-27) (Corrigan, Markowitz, Watson, & Rowan, 2003). Eight perceptions were measured: blame, anger, fear, pity, help, dangerousness, avoidance, and coercion. Significant differences were discovered for fear, dangerousness, blame, and the overall score. The researchers believe further research can focus on how to diminish mental illness stigma all together.

*Keywords*: stigma, mental illness, perceptions, schizophrenia

Estimating Attitudes Towards People with Mental Illness in a Comparison of People with a Physical Impairment

Negative perceptions of those diagnosed with a mental illness often results in discrimination, stereotypes, and prejudice (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). One of the most common attributes associated with mental illness is dangerousness (Scheff, 1974). Such attitudes can lead to stigmatization among those diagnosed with a mental illness (Wahl, 1999). This has developed a stigma with mental illness that can be either internal or external; meaning a person may experience self-stigma or experience feeling stigmatized by others. Berkovitz, Heruti, and Shlioh (2011) found that stigma is more apparent with individuals described as having a disability caused by an illness that is not necessarily visible than it is with individuals who have a visible physical injury. Purvis, Brandy, Vera, and Range (1988) demonstrated that people view those with schizophrenia less favorably than they do those with cancer. One reason for this may be because individuals who have a mental illness are commonly viewed to be violent and unpredictable individuals (Link, Phelan, Brensnaham, Stueve, & Pecosolido, 1999).

Although our research looks at the application of external stigma, it is important to note that it can manifest into self-stigma. Wahl (1999) conducted an extensive study and found significant findings on individuals with mental illness. The first part of the study included a consumer experience survey. The survey sought to identify stigma and discrimination experiences among participants. The findings from this initial survey served as the basis for the development of the second survey (Wahl, 1999). The second survey consisted of three parts. In the “Stigma” section, Wahl asked participants nine questions about their experience of treatment by others, specifically if they felt that others have ostracized them due to their mental illness and if they have witnessed negative connotation in the media referring to mental illness. They rated their answers on a 5-point scale ranging from “never” to “very often.” The next section, the “Discrimination” section asked 12 questions concerning experiences in which participants felt they had been discriminated against in situations such as applying for a job, volunteer work, renting an apartment or house, and trying to attain a license. A 5-point Likert scale ranging from “never” to “very often” was used to rate participants answers. The third section consisted of demographic questions (Wahl, 1999). Approximately 80 percent of participants reported overhearing people making offensive comments in reference to mental illness – half of those stated this happened frequently. Seventy-seven percent of participants stated that they have witnessed negative portrayals of mental illness in the media. Sixty percent of participants reported that had felt ostracized because of their mental illness. Seventy four percent of participants indicated that they often avoided telling others about their illness because they feared having a stigma attached to their illness (Wahl, 1999). Self-stigma can be detrimental to a person’s self-esteem and reduce their chances of recovery (Drapalski, Lucksted, Perrin, Aakre, Brown, Clayton, DeForge, & Boyd, 2013).

Additional research conducted by Corrigan, Thompson, Lambert, Sangster, Noel, and Campbell (2003) supports that those with mental illness often experience feeling stigmatized by others, experience low self-esteem due to stigma, and expect poor treatment from others. When compared to poor economic situations, 73.3 of those with mental illness reported feelings of discrimination, in relation to 51.1 percent of those with poor economic situations (Corrigan et al., 2003).

Further research suggests that one way of determining stigmatization of mental illness would be to compare to it another demographic such as sexual orientation, race or gender (Corrigan et al., 2003). Our study takes a different approach by comparing it physical impairment.

One study that took an approach using physical impairment found that participants saw those described as injured in a more positive light than those described as ill (Berkovitz et al., 2011). To do so, participants filled out questionnaires labeled “Social Distancing” and “Patient Resentment” after reading a scenario describing a person with either a disability caused by injury or illness. The design of the scenario made the illness blend in to avoid the true nature of the study being reveled (Berkovitz et al., 2011).

Ostapczuk and Musch (2001) took a unique approach at measuring stigma. The researchers used a within groups design and a technique referred to as, Most People Project Questioning (MPPQ) when asking questions. This method involves asking participants how they think other people would feel instead of how they themselves feel. The purpose of this technique is to reduce response bias from participants who fear that the researchers may view their responses unfavorably. Every participant experiences exposure to the mental disability condition as well as the physical disability condition. Results yielded that people felt more negatively towards those with a mental illness than those with a physical disability (Ostapczuk & Musch, 2001).

The current study looks to examine how attitudes and perceptions towards those who have a mental illness differ from those who have a physical impairment. Purvis et al. (1988) conducted a similar study in which they compared mental illness to a physical illness. Participants read a scenario that described an individual who had either schizophrenia, or cancer that has to stay at the hospital on one or multiple occasions. Participants then answered questions on a seven-point Likert scale designed to rate perceptions of dangerousness, intelligence, and friendliness. Results yielded a main effect for diagnosis; participants viewed the individual described as having a mental illness as less able to function in the community, less desirable as a friend, less acceptable as a group member, and less likely to be successful in obtaining a job (Purvis et al., 1988). The results from this research demonstrate that there is a more apparent stigma with mental illness than there is physical illness.

The results of further research demonstrates that many of those with mental illness are aware of the stigma that comes with their illness and often feel discriminated against in social situations (Wahl, 1999). Self-stigma leads to avoidance of treatment

It is apparent that mental illness stigma exists. One of the main causes for such negative perceptions towards those who harbor a mental illness may be because many view mental illness as being dangerous. In a study of 1444 people, conducted by Phelan, Brensnahm, and Pecosolido (1999) it was determined that many people feel that there is a significant connection between dangerousness and mental disorders. Along with this finding, the researchers also found that people prefer to distance themselves from those they know to have a mental illness (Phelan et al., 1999). Although some researches have claimed to find a connection between mental illness and dangerousness, it is important to note that applying that notion to all of who suffer from a mental illness due to a fraction of population demonstrating dangerous behavior only intensifies the stigma, prejudice, and discrimination towards those with a mental illness. This results in a stereotype towards all of those with a mental illness and defers many from seeking the help they need in order to avoid being stereotyped (Corrigan & Watson, 2005). Proper education about mental illness can cause people to feel empathy towards those with an illness instead of fear (Corrigan, Markowitz, Watson, & Rowan, 2003).

**Method**

**Participants**

112 participants served in one of three conditions; a mental illness condition (30 women, 7 men, *M*age 19 years, 18-23 years), a physical impairment condition (35 women, 5 men, *M*age 19.5 years, 18-22 years), or a control condition with no stated ailment (27 women, 8 men, *M*age 19 years, 18- 22 years). There were 91 females and 21 males of which there were; 35 freshmen, 28 sophomores, 27 juniors, 20 seniors, and 2 others. Participants were part of a convenience sample consisting of Longwood University students, who signed up via Sona Systems (an online subject pool). Participant’s compensation provided them with a point of extra credit in a psychology class.

**Materials and Procedure**

When participants arrived they were shown a scenario on a projector describing one of the following: a fifth year senior with schizophrenia who works at the University’s dining hall that does not have many friends and sometimes has to be hospitalized (Appendix A), a fifth year senior who uses a wheel chair that also works at the dining hall and does not have many friends and sometimes has to be hospitalized (Appendix B), and finally, a fifth year senior with no identifiable impairment that works at the dining hall (Appendix C), does not have many friends, and sometimes has to be hospitalized. The schizophrenia and the physical impairment scenario serve, as our manipulation variables, while the scenario involving a person with no specified impairment serves as our control.

Participants had 45 seconds to view the scenario, after which they rated their perceptions on a 25-item questionnaire in order to rank their attitudes towards the individual described. The questionnaire consisted of questions from the AQ-27 (Appendix D), which is a preexisting questionnaire that is used to rate stereotypes and stigmas (Corrigan et al., 2003). The original questionnaire measures 9 different categories of stigmas that a person may have including fear, dangerousness, blame, anger, pity, help, avoidance, coercion and segregation. The 9th category segregation was removed due to being incongruent with the physical impairment condition and control. The revised questionnaire and the answer key accordingly altered. These perceptions had three questions each in the questionnaire and, were measured on a 9 point Likert scale, which were added together to get a score for each construct. The final question of the questionnaire serves as a manipulation check, which asks participants why “Harrison” has to stay at the hospital.

Participants completed the questionnaire, which took approximately 10 minutes to finish and debriefed on the actual purpose of the study. We measured the total the three questions for each construct, which gave a stigma score for each, then took those scores and created an overall stigma score.

**Results**

We conducted a one-way Analysis of Variance (ANOVA) for each of the following perceptions: blame, anger, pity, help, dangerousness, fear, avoidance, coercion, and the overall score. To diminish family wise error rate we conducted a Bonferroni correction which resulted in α = .006. We found significant differences in three of the eight perceptions, which are: fear, dangerousness, and blame. We also found significant differences in the overall stigma score between the mental illness condition and both the physical impairment and control conditions.

For the overall score *F*(2,109) = 7.568, p = .001, 2 = .141 we found meaningful difference between the mental illness condition (*M* = 99.11, *SD* = 16.891, 95% CI[93.48, 104.74]), and the physical impairment condition (M = 86.03, SD = 11.263, 95% CI[82.42, 89.63]). There were no significant differences between the mental illness or physical impairment conditions and the control (*M* = 93.57, *SD* = 16.041, 95% CI[88.06, 99.08]).

Within the fear construct, *F*(7,28) = 24.165, *p* < .001, 2 = .310, which the AQ-27 asked questions about fear of someone with a mental illness, or physical impairment; significant differences were found between the mental illness scenario (*M* = 8.68, *SD* = 3.873, 95% CI[7.38, 9.97]) and the physical impairment scenario (*M* = 4.00, *SD* = 2.051, 95% CI[3.34, 4.66]) (Figure 1). We also found meaningful differences between the mental illness and the control conditions (*M* = 5.09, *SD* = 3.052, 95% CI[4.04, 6.13]). The mental illness condition received the most negative responses, and garnered the highest stigma score. The scores for the physical impairment and control conditions were similar with no significant differences between them.

In regards of the dangerousness category *F*(9,28) = 2.091, *p* = .066, 2  = .386, which asks question pertaining to the perceived dangerousness of the person described in the scenario (figure 2). We found that individuals responded the most negatively in the mental illness condition (schizophrenia) (*M* = 9.57, *SD* = 3.841 95% CI[ 3.96, 5.98]). There was no significant difference between the control condition where no impairment was identified (*M* = 4.97, *SD* = 2.935, 95% CI[3.96, 5.98]) and the physical impairment control where an individual was described as someone who used a wheelchair (*M* = 4.20, *SD* = 2.210, 95% CI[3.49, 4.91]).

Although we found significant findings in the blameconstraint *F*(17,28) = 6.787, *p* = .002, 2 = .144, which is described as Harrisons responsibility for his condition. The results were the opposite of what we found with the other perceptions. There was a significant difference between the stimulus conditions and the control (*M*= 12.03, *SD* = 4.469, 95% CI[10.49, 13.56]). Unlike the other perceptions, the mean for the control condition was the highest for the blame category. There was no significant difference between the mental illness condition (*M* = 8.32, *SD* = 3.528, 95% CI[7.15, 9.50]) and the physical impairment condition (*M* = 9.00, *SD* = 5.349, 95% CI[7.29, 10.71]).

**Discussion**

We hypothesized that participants would respond more negatively towards an individual described as having a mental illness than they would someone described as having a physical impairment. Our results support our hypothesis in the following perceptions: blame, fear, dangerousness, and the overall score. Other perceptions we measured included anger, pity, help, avoidance, and coercion.

In terms of dangerousness, participants rated the individual in the scenario that describes someone with schizophrenia as the most dangerous, followed by the individual with no identifiable impairment, and then the individual who uses a wheelchair. Prior research indicates this may be due to lack of information on schizophrenia, and lack of exposure to people with mental illness. Penn, Kommana, Mansfield, and Link (1999) have found that people who are familiar and informed about mental illness, such as schizophrenia, tend to perceive people who have one as being less dangerous than those with no experience on the matter.

In relation to fear, participants who were in the mental illness condition reported being the most fearful of the individual described, followed by the control group, and the physical impairment condition. The media plays a role in how society views mental illness; in particular, the portrayal of schizophrenia is typically negative. People on television and in movies diagnosed with schizophrenia have the portrayal of being violent individuals. Corrigan, Powell, and Michaels (2013) found that mental illness stigma can be reduced by displaying positive outcomes. They also found that positive stories regarding mental illness can help those diagnosed with one reduce self-stigma and encourage them to seek out treatment.

In the blame condition, which included questions about Harrisons responsibility for his condition, the results were opposite of what was hypothesized. The findings showed significant differences between the control and meatal illness condition with the score being the highest for the control. Of the three conditions, mental illness had the lowest rating of stigma. This may be indication that mental illness stigma is shifting. The control condition describes Harrison as a fifth year senior who has to spend a few days in the hospital, and there is no explanation as to why. We believe that some individuals may place more blame on Harrison in this condition because there is nothing to attribute him being a fifth year senior or having to be in the hospital.

For most of the perceptions, we found that participants felt more negatively toward the individual described in the control condition than in the physical impairment condition. Although those differences are not significant, we believe it may be because in the control condition the individual in the scenario has to be hospitalized for a few days, and then there is no further information explaining why this is. In the physical impairment condition one can assume the reason the individual has to be hospitalized is because of the same reason he is in a wheelchair. If we conducted this study again, we would change the scenario so that it does not include the hospitalization factor so that participants in the control condition do not assume that something is wrong with the individual described. Another confounding variable could be that the scenario states Harrison is a 5th year senior. This may have negative connotations to the people surveyed and effected their answers.

To expand our research, we would have participants interact with people that have a mentally illness. This can create a more real life experience rather than reading a scenario, which is a more subjective experience. This could lead to research on the development of more programs to help people understand those that have a mental illness and reduce stigma. Programs that work on a large scale would require a large amount of research into specific ways that mental illness stigma is reducible, and what tactics are effective for what mental illnesses.

There is sufficient research to support that mental illness stigma is real, and it is a problem. We believe that future research should emphasize how to reduce and eventually eliminate mental illness stigma. We feel that if people were more informed about mental illness that there would not be as much of a stigma associated with it. Phelan, Cruz-rojas, and Reiff (2011) found that stressing the impact that genetics play in mental illness can cause people to see those who have one in a more positive light. This may be because when people understand how something is happening, they are less afraid of it. One of the most effective ways to diminish the mental illness stigma would be to inform people about the myths associated with it along with information on the subject (Corrigan & Watson, 2005).

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Appendix A

Harrison is a fifth year senior at a University where he also works at the dining hall. Harrison has schizophrenia and sometimes has to be hospitalized for a few days. On most weekends, Harrison stays in his apartment watching movies or reading novels. He does not have many friends at school whose relationship doesn’t go beyond eating together on campus or studying. His friends go out to parties almost every weekend, but never invite him.

Appendix B

Harrison is a fifth year senior at a University where he also works at the dining hall. Harrison is in a wheel chair and sometimes has to be hospitalized for a few days. On most weekends, Harrison stays in his apartment watching movies or reading novels. He does not have many friends at school whose relationship doesn’t go beyond eating together on campus or studying. His friends go out to parties almost every weekend, but never invite him.

Appendix C

Harrison is a fifth year senior at a University where he also works at the dining hall. Sometimes Harrison has to be hospitalized for a few days. On most weekends, Harrison stays in his apartment watching movies or reading novels. He does not have many friends at school whose relationship doesn’t go beyond eating together on campus or studying. His friends go out to parties almost every weekend, but never invite him.

Appendix D

Attribution Questionnaire Short Form (AQ-27) (Revised)

Age:\_\_\_\_\_

Sex: M F Other

Class Rank: Freshman Sophomore Junior Senior Other

**After reading the assigned scenario, answer the following questions about Harrison. Circle the number that best describes the answer to the questions.**

1. I would feel aggravated by Harrison.

**1 2 3 4 5 6 7 8 9**

not at all very much

2. I would feel unsafe around Harrison.

**1 2 3 4 5 6 7 8 9**

no, not at all yes, very much

1. Harrison would terrify me.

**1 2 3 4 5 6 7 8 9**

not at all very much

1. How angry would you feel at Harrison?

**1 2 3 4 5 6 7 8 9**

not at all very much

1. If I were in charge of Harrison’s treatment, I would require him to take his medication.

**1 2 3 4 5 6 7 8 9**

not at all very much

1. If I were an employer, I would interview Harrison for a job.

**1 2 3 4 5 6 7 8 9**

not likely very likely

1. I would be willing to talk to Harrison about his problems.

**1 2 3 4 5 6 7 8 9**

not at all very much

1. I would feel pity for Harrison.

**1 2 3 4 5 6 7 8 9**

none at all very much

1. I would think that it was Harrison’s own fault that he is in the present condition.

**1 2 3 4 5 6 7 8 9**

no, not at all yes, absolutely so

1. How controllable, do you think, is the cause of Harrison present condition?

**1 2 3 4 5 6 7 8 9**

not at all under completely under

personal control personal control

1. How irritated would you feel by Harrison?

**1 2 3 4 5 6 7 8 9**

not at all very much

1. How dangerous would you feel Harrison is?
2. **2 3 4 5 6 7 8 9**

not at all very much

1. How much do you agree that Harrison should be forced into treatment with his doctor even if he does not want to?

**1 2 3 4 5 6 7 8 9**

not at all very much

14. I would share a car pool with Harrison every day.

**1 2 3 4 5 6 7 8 9**

not likely very much likely

15. I would feel threatened by Harrison.

**1 2 3 4 5 6 7 8 9**

no, not at all yes, very much

16. How scared of Harrison would you feel?

**1 2 3 4 5 6 7 8 9**

not at all very much

17. How likely is it that you would help Harrison?

**1 2 3 4 5 6 7 8 9**

definitely definitely

would not help would help

18. How certain would you feel that you would help Harrison?

**1 2 3 4 5 6 7 8 9**

not at all certain absolutely certain

19. How much sympathy would you feel for Harrison?

**1 2 3 4 5 6 7 8 9**

none at all very much

20. How responsible, do you think, is Harrison for his present condition?

**1 2 3 4 5 6 7 8 9**

not at all very much

responsible responsible

21. How frightened of Harrison would you feel?

**1 2 3 4 5 6 7 8 9**

not at all very much

22. If I were in charge of Harrison’s treatment, I would force him to live in a group home.

**1 2 3 4 5 6 7 8 9**

not at all very much

23. If I were a landlord, I probably would rent an apartment to Harrison.

**1 2 3 4 5 6 7 8 9**

not likely very likely

24. How much concern would you feel for Harrison?

**1 2 3 4 5 6 7 8 9**

none at all very much

25. Why does Harrison have to be hospitalized? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Appendix E

Attribute Questionnaire Short Form: Revised from AQ-27

Participant Number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

The following scoring sheet is used to measure which of the 8 following stereotypes are present among participants based on their answers from the questionnaire.

\_\_\_\_\_\_\_\_ Blame = AQ9+ AQ10 +AQ20

\_\_\_\_\_\_\_\_ Anger = AQ1 + AQ4 + AQ11

\_\_\_\_\_\_\_\_ P*i*ty = AQ8 + AQ19 + AQ24

\_\_\_\_\_\_\_\_ Help = AQ7 + AQ17 + AQ18

\_\_\_\_\_\_\_\_ Dangerousness = AQ2 + AQ12 + AQ15

\_\_\_\_\_\_\_\_ Fear = AQ3 + AQ16 + AQ21

\_\_\_\_\_\_\_\_ Avoidance = AQ6 + AQ14 + AQ23 (Reverse score all three questions)

\_\_\_\_\_\_\_\_ Coercion = AQ5 + AQ13 + AQ22

The higher the score, the more that factor is being endorsed by the subject.

*Figure 1*. The overall score shows that there were significant differences between the mental illness and physical impairment conditions. There were no substantial differences found between any of the other conditions.

*Figure 2.* Within the fear, construct significant differences between the mental illness condition and the physical impairment as well as the control condition. There were no substantial differences discovered between the control and physical impairment condition.

*Figure 3.* The research shows that there were significant differences in the dangerousness perception between the mental illness condition and the physical impairment and control conditions. There were no substantial differences found between the control and physical impairment condition.

*Figure 4.* In the blame construct, there were significant differences between the control and mental illness and physical impairment conditions. There were no substantial differences found between the mental illness and physical impairment conditions.