

# Effects of Diagnosis and Response Style on Social Distance and Perceived Dangerousness

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#### **ABSTRACT**

In the present study, I investigated the effects of different diagnoses (depression, bipolar disorder, schizophrenia, and asthma) and response styles (education, secrecy, and withdrawal) on social distance and perceived dangerousness. The response styles were developed from the modified labeling theory of mental illness. Participants read a vignette depicting a dorm neighbor suffering from one of the four diagnoses who then responded with one of the three response styles. Depression produced a lower social distance score than bipolar disorder and schizophrenia. Educating was deemed less dangerous than being secretive, but neither differed from withdrawing. High social distance in the asthma/withdraw condition resulted in a significant interaction. Lastly, social distance was found to be positively correlated with perceived dangerousness. My results are consistent with the previous literature on the effects of different diagnoses on social distance.

#### **INTRODUCTION**

- Professionals in many disciplines have done research on how the diagnosis of mental illness affects the person suffering with it.
  - Labeling Theory (Scheff, 1966)
    - Highly criticized for its lack of focus on outside factors such as stigma and discrimination (Link, Cullen, Struening, Shrout, & Dohrewend, 1989; Scheff, 1974).
  - Modified Labeling Theory (Link et al., 1989)
  - Even though the label itself does not harm the individual, it can still lead to negative reactions such as stigma and discrimination (Link et al., 1989).
  - Individuals can react to their diagnosis in three ways:
    - Education individual discloses their diagnosis to others and educates them about the disorder to reduce stigma and negative attitudes.
    - Secrecy individual withholds information about their diagnosis.
    - Withdrawal individual associates themselves only with others who know about their diagnosis or those who are accepting of mental disorders in general.
      - » However, these reactions also have the ability to inadvertently promote isolation, shame, and discrimination (Ray & Dollar, 2014).
- To help understand how people interact with those who have a stigmatized feature, Bogardus (1925) coined the term social distance.
  - Many later studies examining social distance found that participants held a more negative view towards mental disorders than physical disorders (Breheny, 2007; Corrigan et al., 2000; Phelan, 2005).
- Research has found that different mental disorders yield different amounts of social distance (Feldman & Crandall, 2007; Marie & Miles, 2008).
  - More willing to interact with someone who has depression than someone who has schizophrenia (Marie & Miles, 2008).
- Perceived dangerousness has been identified as a significant factor in both social distance and mental illness stigma (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Marie & Miles, 2008; Martinez, Piff, Mendoza-Denton, & Hinshaw, 2011).

#### **HYPOTHESES**

- Participants would have greater social distance for withdrawal than education and secrecy.
- Schizophrenia would produce higher levels of social distance than depression, bipolar disorder, and asthma.
- I expected the same patterns for perceived dangerousness.
- Perceived dangerousness would be positively correlated with social distance.
- No interactions were predicted.

#### **METHOD**

- Participants
  - 256 (184 women, 78 men, 2 other, and 1 prefer not to answer) undergraduate students from a private, liberal arts and sciences college in southwestern Pennsylvania.
  - Ages ranged from 18 to 39 (M = 19.73, SD = 1.75).
  - Predominately Caucasian at 89.1% (3.8% Black or African American, 0.8% Asian, 0.8% Hispanic or Latino, 0.4% prefer not to answer, 5.3% multiple ethnicities).
- Materials
  - Vignettes
  - Details stayed constant except for the diagnosis of the target and how he responded to his label.
  - Attention Check Questions
    - Five multiple choice questions about the vignette was used to help determine if participants paid sufficient attention.
  - Social Distance Scale
    - Participants were asked to rate how likely they would be to engage in 10 specific activities with a person like the target on a 5-point Likert scale that ranged from 1 (definitely unwilling) to 5 (definitely willing).
    - All responses were reversed scored so higher scores translated to greater social distance.
  - Perceived Dangerousness
  - Participants were asked to rate how dangerousness they perceived the target to be on a 5-point Likert scale that ranged from 1 (not at all dangerous) to 5 (extremely dangerous).

#### Design

4x3 factorial independent groups design with 12 possible conditions.

### Procedure

- Participants were emailed a link to the study on Qualtrics after signing up to participate in one of their classes.
- Began by reading the informed consent and clicked "Agree" to continue.
- Read a vignette that incorporated their randomly assigned diagnosis and response style.
- Answered the five attention check questions regarding the vignette.
- Completed the Social Distance Scale.
- Rated the target on the perceived dangerousness scale.
- Reported demographic information.
- Participants were asked to input their name;
   therefore, the data were confidential.
- Participants who received extra credit were asked to input which class and professor the extra credit was for.

#### **VIGNETTES**

Imagine you just woke up for your first class on Monday and you are getting ready to leave. As you are leaving your room you overhear this conversation between John, your neighbor next door, and his friend, Mike. John and Mike have been friends since high school. They are both hard working and successful students. You have not seen John on campus since Wednesday or Thursday of last week.

Mike: "Hey John, how are you doing?"

John: "Well, it has been a rough couple of weeks, but it's getting better."

Mike: "What was the hospital like?"

John: "It was like what you'd expect, small rooms, bad food, the usual."

Mike: "It's [disorder], right? Were they able to help you?"

John: "Yeah, [disorder]. I am better than I was before but not 100% of course."

Mike: "Of course, but I'm glad you are back. Let me know if you need anything."

John: "Thanks, I appreciate it."

You walk over to say hello. As you approach them, John becomes quiet. Mike greets you. You say hello to them both and tell John that you have not seen him around lately. John responds by saying [response style].

You check the time and say goodbye before rushing off to class.

#### Disorder

- Depression, Bipolar Disorder, Schizophrenia, Asthma Response style:
- Education: "Yeah, I was in the hospital over the weekend for treatment for my [disorder]. It can get a little rough sometimes, but I'm doing better now because they adjusted my medication. I'm happy to be back at school again."
- Secrecy: "Oh, uh, yeah I was just away for the weekend for something."
- Withdrawal: "Oh, I just remembered I have something to do so I have to go now." John goes back into his room and closes the door.

# **FIGURE**

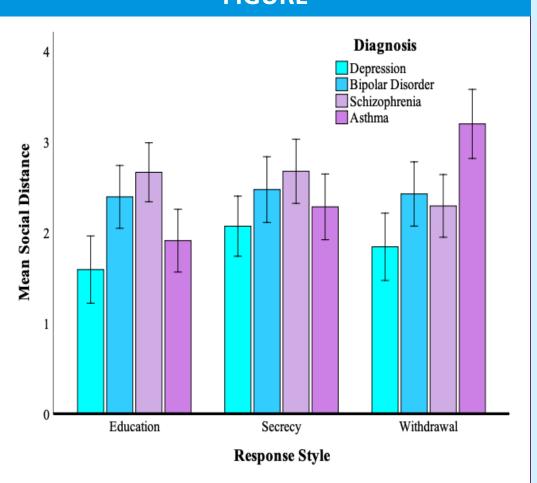


Figure 1. Diagnosis x Response Style Interaction for Social Distance.

#### RESULTS

- A 4x3 between-subjects Factorial MANOVA was used to calculate the main effects and interactions of diagnosis and response style on social distance and perceived dangerousness.
- Main Effect: Diagnosis on Social Distance
  - Significant: F(1,264) = 9.75, p < .001,  $\eta_p^2 = .104$ .
  - Depression produced a significantly lower social distance score than the bipolar disorder (p < .001), schizophrenia (p < .001), and asthma (p < .001) diagnoses.
  - Bipolar disorder did not differ from schizophrenia (p = .414) and asthma (p = .396).
  - Schizophrenia and asthma did not differ (p = .964).
- Main Effect: Response Style on Social Distance
  - Significant: F(1,264) = 3.10, p = .047, η<sub>p</sub><sup>2</sup> = .024.
     Education produced a lower social distance score than withdrawal (p = .020).
  - Secrecy did not differ from education (p = .062) and withdrawal (p = .619).
- Interaction: Diagnosis x Response Style on Social Distance
- Significant: F(1,264) = 4.45, p < .001,  $\eta_p^2 = .095$ .
- As shown in Figure 1, social distance for asthma is either lower than or does not differ from the other diagnoses in both the education and secrecy conditions, but in the withdrawal condition, it is significantly greater than all other diagnoses.
- Main Effect: Diagnosis on Perceived Dangerousness
  - Significant: F(1,264) = 3.48, p = .016,  $\eta_p^2 = .040$ .
  - Asthma was deemed significantly less dangerous than bipolar disorder (p = .004) and schizophrenia (p = .015), which did not differ from each other (p = .004)
  - Asthma, bipolar disorder, and schizophrenia did not differ from depression (p = .280, p = .068, p = .179).
- Main Effect: Response Style on Perceived Dangerousness
  - Significant: F(1,264) = 3.13, p = .045,  $\eta_p^2 = .024$ . - Education was deemed less dangerous than secrecy (p = .045) and withdrawal (p = .024).
- Secrecy and withdrawal did not differ (p = .771).
- Interaction: Diagnosis x Response Style on Perceived Dangerousness
  - Nonsignificant: F(1,264) = 1.22, p = .299.
- A 3x3 between-subjects Factorial MANOVA was run without the control condition, asthma, because it did not seem like it was acting as a proper control condition.
- Main Effect: Diagnosis on Social Distance

  Remained Significant: F(1, 201)
  - Remained Significant: F(1,201) = 13.14, p < .001,  $\eta_p^2 = .120$ .
  - Depression continued to be lower in social distance than bipolar disorder (p < .001) and schizophrenia (p < .001), which did not differ from each other (p = .414).</li>
- Main Effect: Response Style on Perceived Dangerousness
  - Remained Significant: F(1,201) = 3.51, p = .032,  $\eta_p^2 = .035$ .
  - Education continued to be perceived as less dangerous than secrecy (p = .013), but this time, it did not differ from withdrawal (p = .115).
  - Secrecy and withdrawal continued to not differ (p = .378).
- A two-tailed Pearson correlation was used to determine if there was a significant correlation between social distance and perceived dangerousness.
  - Perceived dangerousness was positively correlated with social distancer(265) = .485, p < .001.</li>
  - As perceived dangerousness increases, so does social distance.

# DISCUSSION

- As predicted, social distance tends to vary depending on the mental illness in question (Feldman & Crandall, 2007; Marie & Miles, 2008).
  - scores than the schizophrenia condition.
  - In line with previous literature (Lee et al., 2014; Marie & Miles, 2018).

Depression condition produced lower social distance

than the bipolar disorder condition.Previous research found no difference (Lee et

Depression condition produced lower social distance

- al., 2014).Bipolar disorder and schizophrenia did not differ in
- social distance.
  Previous literature found that schizophrenia produced a higher level of social distance than
- Results are consistent with my hypothesis that the different response styles impacted the perceived dangerousness of the target

bipolar disorder (Lee et al., 2014).

- No previous literature to back up my prediction because, to my knowledge, this was the first study to employ the modified labeling theory in this way.
- However, my results seem to be in line with the hypothesis that Ray and Dollar (2014) proposed because the different response styles affected perceived dangerousness which can promote discrimination.
- More research in this area will be needed to further validate these findings.
- Positive correlation between social distance and perceived dangerousness supports previous literature that perceived dangerousness acts as an important factor when determining social distance (Ellison, Mason, Scior, 2015; Lee et al., 2014; Link et al., 1999; Marie & Miles, 2008; Martinez et al., 2011).
- Significant interaction may suggest that people socially distance themselves more from individuals who use the extreme response style of withdrawal with a nonstigmatized illness.
  - Might have felt the target was lying.
    Sheds a light on a future direction in this research

### **REFERENCES**

Bogardus, E. S. (1925). Measuring social distances. *Journal of Applied Sociology*, *9*, 299-308. Breheny, M. (2007). Genetic attribution for schizophrenia, depression, and skin cancer: impact on

social distance. New Zealand Journal of Psychology, 36(3), 154-160.

Corrigan, P. W., River, L. P., Lundin, R. K., Uphoff-Wasowski, K., Campion, J., Mathisen, J., Goldstein, H., Bergman, M., Gagnon, C., & Kubiak, M. A. (2000). Stigmatizing attributions

about mental illness. *Journal of Community Psychology*, 28(1), 91-102.

Ellison, N., Mason, O., & Scior, K. (2015). Public beliefs about and attitudes towards bipolar disorder: testing theory based models of stigma. *Journal of Affective Disorders*, 175, 116-123.

Feldman, D. B., & Crandall, C. S. (2007). Dimensions of mental illness stigma: what about mental illness causes social rejection? *Journal of Social and Clinical Psychology*, 26(2), 137-154.
Lee, A. A., Laurent, S. M., Wykes, T. L., Kitchen Andren, K. A., Bourassa, K. A., & McKibbin, C. L. (2014). Genetic attributions and mental illness diagnosis: effects on perceptions of danger,

social distance, and real helping decisions. Social Psychiatry & Psychiatric Epidemiology, 49, 781-789.

Link, B. G., Cullen, F. T., Struening, E., Shrout, P. E., & Dohrenwend B. P. (1989). A modified labeling theory approach to mental disorders: an empirical assessment. American Sociological

Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: labels, causes, dangerousness, and social distance. *American Journal of Public Health*, 89(9), 1328-1333.

Marie, D., & Miles, B. (2008). Social distance and perceived dangerousness across four diagnostic categories of mental disorder. Australian and New Zealand Journal of Psychiatry, 43, 126-133.

Martinez, A. G., Piff, P. K., Mendoza-Denton, R., & Hinshaw, S. P. (2011). The power of a label: mental illness diagnoses, ascribed humanity, and social rejection. *Journal of Social and Clinical Psychology*, 30(1), 1-23.

Phelan, J. C. (2005). Geneticization of deviant behavior and consequences for stigma: the case of mental illness. *Journal of Health and Social Behavior*, 46(4), 307-322.
Ray, B., & Dollar, C. B. (2014). Exploring stigmatization and stigma management in mental health court: assessing modified labeling theory in a new context. *Sociological Forum*, 29(3), 720-

Scheff, T. J. (1966). Being mentally ill: a sociological theory. Chicago: Aldine.
Scheff, T. J. (1974). The labelling theory of mental illness. American Sociological Review, 39(3),

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