MENTAL ILLNESS STIGMA AND BARRIERS TO CARE:

EXPLORING THE ROLE OF SOCIAL SUPPORT AS A MODERATOR

by

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ABSTRACT

Every year in America approximately 43.8 million people face some form of mental illness (NAMNI, 2016). Stigma acts as a barrier to care for many people experiencing mental illness (Corrigan, 2004), yet there is evidence that social support may act as a resilience tool by protecting people from the negative impact of stigma (Cohen & Wills, 1985; Earnshaw et al., 2015). This study explored whether stigma is associated with poor attitudes toward help seeking among individuals living with mental illness, and if social support moderates this association. A total of 98 people with mental illness were surveyed online about their experience with mental health stigma impact, social support, and attitudes towards help seeking. The results demonstrate stigma impact is associated with poorer attitudes toward help seeking. Moreover, at low levels of social support, there is no association between stigma impact and help seeking attitudes. At high levels of social support, stigma impact is associated with worse attitudes toward help seeking. This suggests that social support may not act as a resilience tool against the stigma surrounding mental illness, indicating the need for future research to further understand associations between stigma impact, social support, and attitudes toward help seeking among people with mental illness.

Chapter 1

INTRODUCTION

Approximately 43.8 million people in America experience mental illness each year (NAMNI, 2016). A large number of individuals with mental illness, however, do not receive formal treatment. In 2015, it was estimated that 50% of youths and 60% of adults living with mental illness did not get treatment (NAMNI, 2016). Evidence suggests that stigma is a barrier to mental health treatment as well as wellbeing (Corrigan, 2004). Stigma is social devaluation and discrediting associated with a mark or characteristic (Goffman, 1963). Stigma is socially constructed, it includes labeling, stereotyping, separation, status loss, and discrimination toward certain individuals within a power context (Link & Phelan, 2001). Mental illness is stigmatized within the United States. For example, research suggests that people view individuals with mental illness as being weak and burdensome (Horsfall, Cleary, & Hunt, 2010). Yet, some people living with mental illness may be resilient to stigma. For example, there is evidence to suggest that high levels of social support can buffer stress generally, and experiences of stigma specifically, as well as help with overall wellbeing (Cohen & Wills, 1985; Earnshaw et al., 2015). This study aims to explore whether stigma is associated with barriers to care including poor attitudes toward help seeking among individuals living with mental illness, and if social support moderates this association.

Chapter 2

LITERATURE REVIEW

Mental Illness Stigma

People living with mental illness experience stigma in several ways, including what is known as anticipated stigma, enacted stigma, and internalized stigma. Anticipated stigma involves expectations of discrimination, stereotyping, and/or prejudice from others in the future due to one's mental illness (Smith et al., 2016). Anticipated stigma may contribute to individuals' fear of openly speaking about mental illness. For example, in a qualitative study, 89% of participants reported that they struggled with deciding whether to disclose their mental illness to friends, family, and employers because they were worried they would be judged (Dinos et al., 2004). In another study, 35% of adults reported that they would be embarrassed if a friend found out that they were receiving treatment for mental illness (Mojtabai, 2007). Similarly, in a study of 200 mental health patients, approximately 50% of participants reported that they occasionally avoided people because they were worried that they might be judged because they had been hospitalized due to mental illness (Lundenberg et al., 2009).

Enacted stigma includes an individual's past or present experiences of discrimination, stereotyping, and/or prejudice from others (Smith et al., 2016). For instance, 63% of participants in one study reported that they had been physically or verbally harassed and/or had damage done to their property because of their mental illness (Dinos et al., 2004). One participant with bi-polar disorder stated, "the whole street – they set dogs on me. I'd go into shops and the children would come and spit on me and stuff like that" (Dinos et al., 2004, p.178). People with mental illness experience enacted stigma from a variety of others, including healthcare providers. For example, in a study wherein 741 mental health patients were asked how they were treated by health care providers, 38.8% of participants said that they were treated with less respect, and

47.8% of participants said that healthcare providers treated them as less competent due to their mental illness (Verhaghe et al., 2010). Research demonstrates that anticipated and enacted stigma are associated with worse wellbeing among people living with a range of stigmatized characteristics, including mental illness (Livingston & Boyd, 2010; Pascoe & Smart Richman, 2009).

Stigma impact includes the extent to which individuals perceive that anticipated and enacted stigma have affected both their own and their family members' lives. Mileva and colleagues used the stigma impact scale, part of the Inventory of Stigmatizing Experiences (ISE) (Stuart, Milev, & Koller, 2005) to examine cross-cultural differences in how stigma affected the recovery, treatment, and daily lives of individuals living with Bipolar I and Bipolar II disorder in Argentina and Canada (Mileva, Vazquez, & Milev, 2013). Researchers used both an enacted stigma scale and a stigma impact scale in hopes of determining not only individuals own experience with stigma, but also the general impact of stigma on their daily life (Mileva et al., 2013). Both populations reported being impacted by stigma surrounding Bipolar Disorder; for this reason, the authors recommend that more research be done on how stigma impact affects individuals living with mental illness. In another study that used the same measure of stigma impact, researchers found that the impact of stigma was associated with less overall ability to function among individuals living with bipolar disorder (Vasquez et al., 2011). Although stigma impact has been understudied in comparison to enacted and anticipated stigma, it is important to further investigate whether stigma impact among individuals living with mental illness leads to worse outcomes in terms of help seeking, and therefore overall mental health treatment.

Measuring stigma impact can give researchers important insight into how stigma impacts an individual. Rather than just looking at stigma from one specific lens such as enacted or anticipated stigma, using a measure of stigma impact allows individuals to think about how stigma affects them in every aspect of their lives, making it a unique and

important measure when assessing the impact of stigma on marginalized groups. The current study extends previous research on mental illness stigma, which has focused on enacted and anticipated stigma, by examining stigma impact generally. Measuring stigma impact can allow researchers to get a full picture, rather than just little pieces, of how stigma impacts an individual's life.

Stigma as a Barrier to Care for Mental Illness

According to Morden et al. (2009), people with mental illness have a lower quality of life than people without mental illness, and health outcomes for individuals with mental illness have gotten worse over time. For example, the risk of death among people with schizophrenia, a severe mental illness, is 2.5 times higher than the general population due to the low quality of life that schizophrenia can cause (Saha, Chant, & McGrath, 2007). Mental health treatment, including counseling and medication, can improve the health and wellbeing of people living with mental illness. Yet, there are barriers to mental health treatment. The nature of mental illness itself can pose some unique challenges to accessing care. For example, an individual experiencing mental illness may be too nervous or exhausted to keep up with their health care needs such as finding transportation to appointments or following procedures to sustain their health insurance (Mesidor et al., 2011). Similarly, mental health clients may have cognitive and emotional difficulties that inhibit them from verbally expressing their health concerns to health care providers (Mesidor et al., 2011). In addition, people experiencing mental illness may have worse attitudes toward seeking help, involving discomfort surrounding and resistance to accessing professional help (Fischer & Turner, 1970). For example, in a study on mental health and stigma, one participant described her reluctance towards seeking help: "I regret not going to the hospital. I listened to too many people and I suddenly thought I am going to be labeled a looney" (Dinos et al., 2004).

Evidence suggests that stigma acts as a barrier to quality and consistent care among individuals with mental illness, inhibiting individuals living with mental illness from getting needed medical attention and treatment (Van Den Tillaart, Kurtz, & Cash, 2009). For example, healthcare providers might treat mental health patients differently due to stereotypes that suggest individuals with mental illnesses are non-compliant when it comes to following healthcare instructions (Verhaeghe et al., 2010). Additionally, individuals known for having a history of substance use disorders, a form of mental illness, may be denied access to pain medication and other forms of medical treatment because health care providers believe that they are pill shopping (Earnshaw et al., 2013). These experiences of enacted stigma may lead people with mental illness to have poor attitudes towards health care.

Social Support as a Resilience Tool

Individuals living with mental illness who perceive higher levels of social support, however, may be more resilient to stigma and have better attitudes towards seeking care. Social support includes comfort, informative, and emotional assistance a person or group gives to an individual (Wallston, Alagna, DeVellis, & DeVellis, 1983). Social support can buffer stressful situations and positively impact an individual's wellbeing (Cohen & Wills, 1985). In addition, individuals who have more social support have lower levels of reported stress overall (Taylor, 1995). Evidence suggests that social support moderates associations between stigma and health outcomes among people living with stigmatized characteristics such as HIV, protecting them from the negative effects of stigma (Earnshaw et al., 2015). Although associations between stigma and social support are understudied among people living with mental illness, it is possible that social support also moderates associations between stigma and attitudes towards seeking care among this population.

Chapter 3

CURRENT STUDY

The current study examined the association between stigma impact and attitudes toward help seeking among people living with mental illness, and whether social support moderates this association. It is hypothesized that stigma impact is associated with negative attitudes toward help seeking among people living with mental illness, and that social support is associated with positive attitudes toward help seeking. It is further hypothesized that social support may moderate the association between stigma impact and attitudes toward help seeking. Specifically, high levels of social support may protect, or buffer, people from the association between stigma impact with negative attitudes toward help seeking.

Chapter 4

METHODS

This study was an online quantitative survey about stigma impact, attitudes towards seeking help, and social support among people with mental illness. Study procedures were approved by the University of Delaware Institutional Review Board.

Participants and Procedure

Adults living with various mental health diagnoses were recruited from anxiety and depression support groups that were conducted by the Mental Health Association in Delaware (MHA) across the state of Delaware, and other mental health organizations in Delaware and Pennsylvania. To be eligible to participate, individuals had to have an existing mental health diagnosis and be over the age of 18. Individuals were sent an email inviting them to participate in an online survey, the study was cross-sectional, meaning it occurred at one point in time. Based on an a-priori power analysis using G-power, approximately 100 participants were needed for the planned regression-based analyses to detect medium effect sizes (0.15) with an alpha of 0.05 and power of 0.80 (Buchner et al., 2007).

Measures

The quantitative survey took 15 – 20 minutes to complete, and included self-report measures of participants' demographics, stigma impact, social support, and attitudes towards help seeking. Participants assented to study procedures before completing measures. See Appendix A for the quantitative survey.

Demographics and Mental Health Description

Participants reported mental health diagnosis, age, gender, race/ethnicity, relationship status, sexual orientation, employment status, monthly income, and current

living situation. In addition, participants were asked to list their specific mental health diagnosis.

Mental Illness Stigma Impact

The Stigma Impact Scale (Mileva, Vasquez, & Milev, 2013) was used to measure how much anticipated and enacted stigma impacted participants' lives. Participants were asked to rate, on a scale of one to 10 with one being the least amount of stigma and 10 being the most, how much stigma affected their quality of life, social contacts, family relations, and self-esteem. The scale was reliable in the current sample (Cronbach's alpha = 0.91), and a composite score was created by taking a mean of the scale.

Definition of Stigma

The Stigma Impact Scale asks participants to reflect on their experiences with stigma. A subset of participants were asked how they define stigma in an open-ended format. Participants' definitions of stigma were consistent with the definition used by the researchers. Examples of how participants of the current study defined stigma included: "a negative opinion based on a physical, mental or societal attribute," "a mark of disgrace associated with a particular circumstance, quality, or person," and "a perceived negative attribute that causes someone to devalue or think less of a person, based on fear, misunderstanding, prejudice, and lack of education on the subject".

Social Support

Social support was measured using the modified Medical Outcomes Social Support Survey (MOS social support survey; Sherbourne & Stewart, 1991). The MOS social support survey includes eight questions asking if individuals have someone to support them with activities of daily living such as "someone to help you if you were confined to bed." Questions are answered based on a Likert-type scale ranging from 1 (none of the time) to 5 (all of the time). The scale was reliable in the current sample

(Cronbach's alpha = 0.86), and a composite score was created by taking a mean of the scale.

Attitudes Towards Help Seeking

Participants' feelings about seeking professional help was measured using the Attitudes Towards Seeking Professional Psychological Help Scale (ATSPPH scale; Fisher & Turner, 1970). The scale contained 29 items that participants could rate on a scale of 0 (disagreement) to 3 (agreement), such as "If a good friend asked my advice about a mental health problem, I might recommend that he see a psychiatrist." The scale was reliable in the current sample (Cronbach's alpha = 0.86), and a composite score was created by taking a mean of the scale.

Analysis

First, preliminary analyses explored descriptive statistics and associations between variables. Correlations and t-tests were used to explore associations between socio-demographic characteristics and stigma impact. Next, Hayes's PROCESS tool, which is a regression-based macro, was used to test study hypotheses, including associations between stigma impact and social support with attitudes toward help seeking, and whether social support moderated associations between stigma impact with attitudes toward help seeking (Hayes, 2013). PROCESS is a statistical modeling tool that is available to run in conjunction with several statistical software packages (Hayes, 2017). This tool follows recommendations for testing moderation proposed by Aiken & West (1991). PROCESS automatically centers the independent and moderator variables, and then creates an interaction term representing the product of the independent and moderator variables. It then regresses the independent variable, moderator variable, interaction term, and all control variables on the dependent variable. A significant interaction term suggests that moderation exists. PROCESS additionally probes the

interaction by indicating the association between the independent variable and dependent variable at several levels of the moderator variable, including the 25th and 75th percentiles. This enables researchers to determine the association between the independent and dependent variables at relatively low versus high values of the moderator variable. The regression models controlled for age, race, gender, and employment as an indicator of socio-economic status. Stigma theory and previous research suggest that experiences of mental illness stigma and/or associations between mental illness stigma and health outcomes may vary, or depend on, other characteristics of the self that represent dimensions of oppression and/or privilege (Bauer, 2014). Therefore, the regression analyses controlled for several key socio-demographic characteristics that may relate to these dimensions, including age (ageism), race (racism), gender (sexism), and employment (classism). All analysis were conducted in SPSS version 24.

Chapter 5

RESULTS

Socio-demographic characteristics of participants are included in Table 1. A total of 98 individuals participated in the study and had complete data. All subject variables were self-reported. Analysis of mental health diagnosis data indicated that 57 participants had depression, 42 had anxiety, 39 had bipolar disorder, three had obsessive compulsive disorder, two had schizophrenia, and 22 had another form of mental illness. Analysis of the socio-demographic characteristics showed that participants ranged in age from 19 to 72 years [M(SD) = 46.11 (11.66)], 82.7% of participants were women, 67.3% had a college degree, 65.3% were employed, and 79.2% were white. Age, gender, education, employment and race were not associated with stigma impact. The mean of stigma impact [M(SD) = 5.32(0.87)] indicated that the majority of participants, on average, felt that they were moderately impacted by stigma. The mean of social support [M(SD) = 3.09(0.87)] indicated that participants, on average, felt they had social support "some of the time." Finally, the mean of help seeking attitudes [M(SD) = 3.17 (0.39)] indicated that people generally had positive attitudes towards help seeking, as a score of three indicated "agreement" with positive attitudes toward help seeking

Results of the regression analyses are included in Table 2. Stigma impact was negatively associated with help seeking attitudes, indicating that as people were more impacted by stigma, they had worse attitudes towards help seeking. A statistically significant positive association existed between social support and help seeking attitudes. Thus, people with more social support reported better attitudes towards help seeking. The interaction between stigma impact and social support was statistically significant, indicating that social support had an impact on the relationship between stigma impact and help seeking attitudes. Age was positively associated with help seeking attitudes, all

other socio-demographic characteristics including mental health diagnosis were not statistically significantly associated with help seeking attitudes.

The interaction effect was further probed to understand the association between stigma impact and help seeking attitudes at different levels of social support. At low levels of social support (i.e., the 25th percentile), stigma impact had a non-statistically significant association with help seeking attitudes [B (SE) = -0.02(0.02), p =0.33]. At high levels of social support (i.e., the 75th percentile), stigma impact had a negative association with help seeking attitudes [B (SE) = -0.06(0.02), p=0.01]. A graph of the interaction is included in Figure 1.

Table 1 Participant Characteristics, N = 98

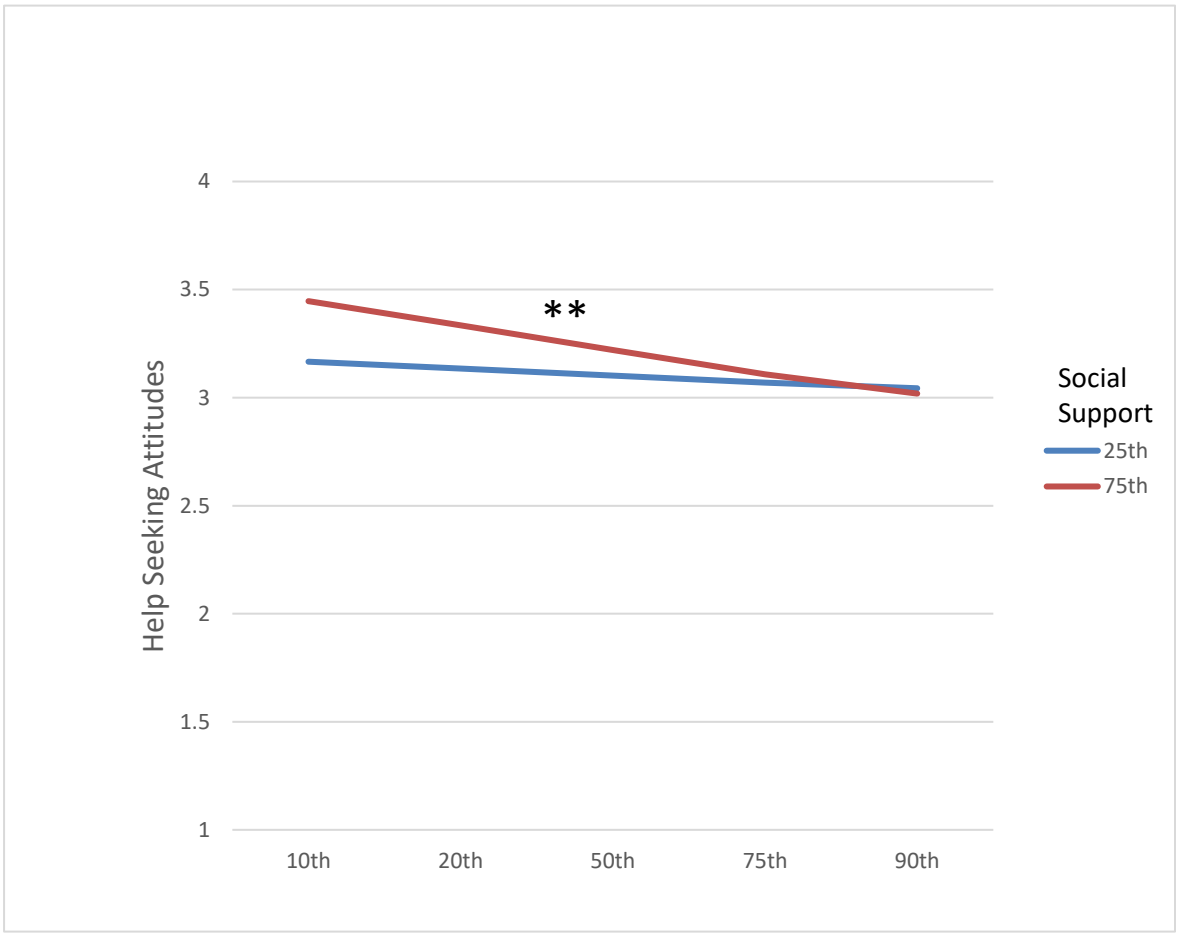
Characteristic	% (n)	M (SD)
Age		46.11 (11.66)
Gender		
Women	82.7 (81)	
Men	17.3 (17)	
Education Level		
College Degree	67.3 (66)	
No Degree	32.7 (32)	
Employment		
Employed	67.3 (66)	
Unemployed	32.7 (32)	
Race		
White	81.6 (80)	
Non-white	18.4 (18)	
MH Diagnosis		
Depression	58.2 (57)	
Anxiety	42.9 (42)	
Bi-Polar	39.8 (39)	
OCD	3.1 (3)	
Schizophrenia	2.0 (2)	
Other	22.4 (22)	
Stigma Impact		5.32 (2.48)
Social Support		3.09 (0.87)
Help Seeking Attitudes		3.17 (0.39)

Table 2 Results of Regression Analysis Predicting Help Seeking Attitudes

	B (SE)	p-value
Stigma Impact	-0.04 (0.02)	0.01
Social Support	0.10 (0.05)	0.03
Stigma Impact *Social Support Interaction	-0.04 (0.02)	0.05
Age	0.01 (0.01)	0.05
Gender	0.18 (0.11)	0.11
Race	0.06 (0.10)	0.54
Employment	0.10 (0.09)	0.26
Depression	-0.02 (0.09)	0.81
Anxiety	-0.13 (0.08)	0.10
Bi-Polar	0.05 (0.10)	0.64

Figure 1 Effect of Social Support on the Relationship Between Help Seeking and Stigma Impact

**Note p = 0.01



Chapter 6

DISCUSSION

Based on the previous literature, hypotheses for the current study were that stigma impact is associated with negative attitudes toward help seeking among people living with mental illness, and that social support is associated with positive attitudes toward help seeking. These hypotheses were confirmed: participants reporting greater stigma impact had more negative attitudes toward help seeking whereas participants reporting greater social support had more positive attitudes toward help seeking. It was further hypothesized that social support may moderate the association between stigma impact and attitudes toward help seeking such that high levels of social support may protect, or buffer, people from the association between stigma impact with negative attitudes toward help seeking. Results suggested that social support did moderate associations between stigma impact with attitudes toward help seeking, but not in the direction that was hypothesized. At low levels of social support, there was no association between stigma impact and help seeking attitudes, yet at high levels of social support, stigma impact was associated with negative attitudes toward help seeking. In other words, people with mental illness who reported greater social support and stigma impact had poor attitudes toward help seeking.

Previous literature suggests that social support acts as a protective factor, creating more positive attitudes towards help seeking and buffering individuals from the negative effects of stigma on help seeking attitudes (Cohen & Wills, 1983; Taylor, 1995). In addition, literature surrounding other types of illnesses, such as HIV, suggests that social support moderates associations between stigma and health outcomes (Earnshaw et al., 2015). There are several reasons why these findings may not have replicated those in the previous literature, including the characteristics of the sample, the way stigma was measured, and the focus on stigma surrounding mental health.

Additionally, the current study focused on the impact of stigma, or the extent to which participants perceive that stigma has affected their lives. The stigma impact scale (Mileva et al., 2013) used in this study asked participants how much stigma impacted themselves personally and their family in terms of quality of life, social contacts, family relations, and self-esteem. In contrast, previous work has focused on anticipated and enacted stigma (Earnshaw et al., 2015; Verhaege et al., 2010; Pascoe & Richman, 2009). While enacted and anticipated stigma involve specific, active experiences individuals have had with stigma, stigma impact essentially captures the extent to which participants perceive that stigma, broadly, has influenced their lives. For example, Earnshaw and colleagues (2015) carried out a study where they examined the relationship between social support and enacted and anticipated HIV stigma. They found that social support acted as a resilience tool against stress associated with anticipated stigma among individuals living with HIV (Earnshaw et al., 2015). Since this study asked individuals to think about stigma from such a broad perspective, it was different from other studies, possibly causing the difference in results. Previous studies suggest that social support may buffer individuals from specific experiences of stigma (i.e., enacted and anticipated stigma). The current study suggests that social support may not buffer individuals who are impacted by stigma more generally.

Finally, it is possible that mental health stigma differs from other forms of health stigma. Yang and colleagues (2007) discuss stigma as a cultural and social construct, wherein people attach cultural meanings and react and respond in certain ways further perpetuating the marginalization of a certain group. Stigmatized groups typically already feel shame and the reaction they receive from society keeps them from advancing in society and further marginalizes the group (Yang et al., 2015). People often view individuals with mental illness as being a burden or weak (Horsfall, Cleary, & Hunt, 2010). Even worse, many people view individuals with mental illness as dangerous (Parcespe & Cabassa, 2013; Lawson, 2016; Link, Phelan, Bresnahan, Stueve, &

Pescosolido, 1999). Unfortunately, many people with mental illness who come into contact with police ultimately becoming criminalized, further perpetuating these perceptions and misconceptions surrounding mental illness (Corrigan, 2004). It is possible that people with mental illness keep their illnesses and experiences with stigma more concealed because others in their social networks may not share their stigmatized identity. People living with other stigmatized characteristics, particularly visible ones or ones more likely to be shared by friends and family, may be more open about their experiences because others within their social network may share their experiences. For example, in a study on racism and achievement in African American males attending college, researchers found that the participants in their study relied on each other for peer support and they attributed many of their success to their support from peers from within their same racial group (Harper, 2006). In contrast, people experiencing mental illness stigma may not have a peer support group of others who also have mental illness. Social support may not be helpful when the sources of support do not share or are not aware of the individual's mental illness.

Chapter 7

LIMITATIONS AND FUTURE DIRECTIONS

This study had several limitations that may be addressed within future research. First, this sample was homogenous both in terms of education, employment status, and racial background. More research is needed to determine the extent to which findings generalize to more diverse populations.

The current study looked at one form of stigma, stigma impact, and how it related to help seeking attitudes among individuals with mental illness. Future research is needed to determine how different forms of stigma contribute to the overall recovery and treatment of those living with mental illness. It is recommended that future studies include multiple different types of stigma measures such as an enacted and anticipated stigma, in addition to stigma impact measures, so researchers and practitioners can better understand how different forms of stigma might cause different implications for daily living, recovery, and treatment of individuals living with mental illness. A stronger understanding of the interactions between different types of stigma and the interaction each type has on mental illness can lead to better care and treatment outcomes in the future. In addition, understanding the complex relationships of different forms of stigma and mental illness can allow researchers to better understand when different resilience tools like social support might be helpful, and might not be as helpful. All of this can better inform mental health treatment practices and outcomes.

In addition, the current study only focused on mental health stigma. It is recommended that more research be done on mental health stigma as compared to stigma around other marginalized groups. This research suggests that mental health stigma is potentially different than other forms of stigma, and this should be explored further. Future studies should compare and contrast different types of chronic illnesses and mental health in regard to treatment outcomes, recovery, and other aspects of daily living.

Having a better understanding of the etiology and processes involved in mental health stigma as compared to other forms of stigma can allow researchers and practitioners to better understand the impact of stigma on marginalized groups in general, and hopefully lead to more specialized research surrounding mental health and stigma.

In addition, because this was a cross-sectional study, causality cannot be determined. Individuals took a survey at one single time point making it impossible to determine the exact causes of individuals' help seeking attitudes as they relate to mental health. Future research using longitudinal methodologies could provide insight into the causal effects of social support on the relationship between mental health stigma impact and attitudes towards help seeking.

Chapter 8

CONCLUSION

In conclusion, this study suggests that social support may not protect individuals from negative associations between the impact of stigma surrounding mental illness and help seeking attitudes. Furthermore, this study suggests that not only is social support not a protective factor in the relationship between mental health stigma and help seeking attitudes, but that it is potentially harmful. That is, people with mental illness reporting greater levels of social support and stigma impact had worse attitudes towards help seeking. The findings from this study indicate that more research is needed in the area of mental health stigma, social support, and help seeking to better understand associations between these constructs.

Understanding how social support influences the relationship between mental health stigma impact and attitudes towards help seeking could lead to better mental health treatment. It is important that doctors are aware of both the benefits and possible harms of social support. Practitioners and clinicians can provide guidance to their clients about these benefits and possible harms, and advise clients on when and how to use protective factors such as social support. Further understanding the implications of this study could improve the way our society delivers and provides access to mental health care, and can help with identifying strategies to reducing the negative impact stigma has on those living with mental illness.

REFERENCES

Aiken, L. S., West, S. G., & Reno, R. R. (1991). Multiple regression: Testing and interpreting interactions. Sage.

Asseraff, M., & Vaillancourt, T. (2015). Longitudinal links between perfectionism and depression in children. *Journal of Abnormal Child Psychology: An Official Publication of the International Society for Research in Child and Adolescent Psychopathology*, *43*(5), 895-908.

Buchner, A., Erdfelder, E., Faul, F., & Lang, A. (2007). Heinrich-Heine-Universität Düsseldorf. Retrieved May 16, 2017, from http://www.gpower.hhu.de/en.html

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*(2), 310-57.

Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist, 59,* 614-625. doi 10.1037/0003-006X.59.7.614

Dinos, S., Stevens, S., Serfaty, M., Weich, S., & King, M. (2004). Stigma: The feelings and experiences of 46 people with mental illness. *The British Journal of Psychiatry*, *184*(2), 176-181.

Earnshaw, V. A., Lang, S. M., Lippitt, M., Jin, H., & Chaudoir, S. R. (2015). HIV stigma and physical health symptoms: Do social support, adaptive coping, and/or identity centrality act as resilience resources? *AIDS and Behavior*, *19*(1), 41-49.

Earnshaw V, Smith L, Copenhaver M. (2013). Drug addiction stigma in the context of methadone maintenance therapy: An investigation into understudied sources of stigma. *International Journal of Mental Health and Addiction, 11*, 110–122.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Mosher, S. W. (1995). Perfectionism,

life events, and depressive symptoms: A test of a diathesis-stress model. *Current Psychology, 14*, 112 –137.

Goffman E. (1963). Stigma–Notes on the management of spoiled identity. New York: Simon & Schuster Inc. Publishers.

Harper, S. R. (2006). Peer support for African American male college achievement: Beyond internalized racism and the burden of "acting White". *The Journal of Men's Studies*, *14*(3), 337-358.

Hayes AF. (2013) Introduction to mediation, moderation, and conditional process analysis: a regression-based approach. New York: The Guilford Press.

Hewitt, P. L., Caelian, C. F., Flett, G. L., Sherry, S. B., Collins, L., & Flynn, C. A. (2002). Perfectionism in children: Associations with depression, anxiety, and anger. *Personality and Individual Differences*, *32*, 1049–1061. doi:10.1016/S0191-8869(01) 00109-X.

Hewitt, P. L., & Flett, G. L. (1991). Dimensions of perfectionism in unipolardepression. *Journal of Abnormal Psychology*, *100*, 98–101. doi:10.1037/0021-843X.100.1.98.

Horsfall, J., Cleary, M., & Hunt, G. E., (2010). Stigma in mental health: Clients and professionals. *Issues in Mental Health Nursing, 31*, 450-455. doi 10.3109/01612840903537167

Huggins, L., Davis, M. C., Rooney, R., & Kane, R. (2008). Socially prescribed and self-oriented perfectionism as predictors of depressive diagnosis in preadolescents. *Australian Journal of Guidance and Counselling*, *1*82-194.

Lawson, N. D. (2016) Public perception of the lifetime morbid risk of mental

disorders in the United States and associations with public stigma. *Springerplus, 5*, 1. doi 10.1186/s40064-016-2974-

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, 38*, 177-190.

Link, B. G., Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27*, 363-385.

Livingston, J. D., & Boyd, J. E. (2010). Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. *Social Science & Medicine, 71*(12), 2150-2161.

Lundberg, B., Hansson, L., Wentz, E., & Bjorkman, T. (2009). Are stigma experiences among persons with mental illness, related to perceptions of self-esteem, empowerment and sense of coherence? *Journal of Psychiatric and Mental Health Nursing, 16*(6), 516-522.

Morden, N. E., Mistler, L. A., Weeks, W. B., & Bartels, S. J. (2009). Health care for patients with serious mental illness: Family medicine's role. *Journal of the American Board of Family Medicine,* 187-195.

National Alliance on Mental Illness. (2016). Mental health by the numbers. NAMNI. Retrieved from http://www.nami.org/Learn-More/Mentalresearch, -Health-By-the-Numbers

Mileva VR, Vazquez GH, & Milev R. (2013). Effects, experiences, and impact of stigma on patients with bipolar disorder. *Neuropsychiatric Disease and Treatment*, 2013, 31-40.

Mojtabai, R., (2007). Americans' attitudes toward mental health treatment seeking: 1990-2003. *Psychiatric Services, 58,* 642-651.

Mesidor, M., Gidugu, V., Rogers, E. S., Kash-Macdonald, V. M., & Boardman, J. B. (2011). A qualitative study: Barriers and facilitators to health care access for individuals with psychiatric disabilities. *Psychiatric Rehabilitation Journal, 34*(4), 285-94.

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,* 384-399. doi 10.1007/s10488-012-0430-z

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*(4), 531-554.

Saha, S., Chant, D., & McGrath, J. (2007). A systematic review of mortality in schizophrenia: Is the differential mortality gap worsening over time? *Archives of General Psychiatry, 64*(10), 1123-31.

Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine, 32*(6), 705-714.

Smith LR, Earnshaw VA, Copenhaver MM, Cunningham C. (in press). Substance use stigma: Reliability and validity of a theory-based scale for substance-using populations. *Drug and Alcohol Dependence.*

Stuart H, Milev R, Koller M. (2005). The Inventory of Stigmatizing Experiences: Its development and reliability. *World Psychiatry, 4*(1), 33–37

Sturman, E. D., Flett, G. L., Hewitt, P. L., & Rudolph, S. G. (2009).

Dimensions of perfectionism and self-worth contingencies in depression. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 27*(4), 213-231.

Taylor, S. E. (1995). Healthy Psychology (3rd ed.). New York: Mc-Graw Hill.

Van Den Tillaart, S., Kurtz, D., & Cash, P. (2009). Powerless, marginalized identity, and silencing of health concerns: Voiced realities of women living with a mental health diagnosis. *International Journal of Mental Health Nursing, 18,* 153–163.

Vázquez, G. H., Kapczinski, F., Magalhaes, P. V., Córdoba, R., Lopez, J. C., Rosa, A. R., Sanchez., C. M., Tohen, M. (2011). Stigma and functioning in patients with bipolar disorder. *Journal of Affective Disorders, 130,* 323-327.

Verhaeghe, M., Bracke, P., & Christiaens, W. (2010). Stigma and client satisfaction in Mental health services. *Journal of Applied Psychology, 40*, 2295-2318.

Wallston, B. S., Alagna, S. W., DeVellis, B. M., & DeVellis, R. F. (1983). Social support and physical health. *Health Psychology*, *2*(4), 367-391.

Yang, L. H., Kleinman, A., Link, B. G., Phelan, J., Lee, S., & Good, B. (2007). Culture and stigma: Adding moral experience to stigma theory. *Social Science and Medicine, 64,* 1524-1535.

QUANTITATIVE SURVEY

Demographics

Instructions: Please answer the following questions about yourself.

1. How old are you? Please write your age below:

_____

2. What is your race or ethnicity? Please check all that apply:
- ☐ Asian or Asian-American
- ☐ Black or African-American
- ☐ Native American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White or European-American
- ☐ Other

3. Are you Latino(a) or Hispanic-American? Please check one:
- ☐ Yes
- ☐ No

4. What is your gender? Please check all that apply:
- ☐ Female
- ☐ Male
- ☐ Transgender Male-to-Female
- ☐ Transgender Female-to-Male
- ☐ Other

5. What is your relationship status? Please check one:
- ☐ Single
- ☐ Dating
- ☐ Married
- ☐ In a relationship
- ☐ Separated
- ☐ Divorced
- ☐ Widowed
- ☐ Other

6. What is your sexual orientation? Please check all that apply:
- ☐ Straight or Heterosexual
- ☐ Gay or Lesbian
- ☐ Bisexual
- ☐ Other

7. Which of the following best describes the highest level of education you have completed? Please check one:
- ☐ Grade School: 1-5th grade or less

□ Middle School: 6th-8th grade or
□ Some High School (no diploma or GED)
□ Completed High School or GED
□ Some College (no degree) or Technical School
□ College Degree (AA, BA, MA, etc)

8. What is your employment status? Please check one:
□ On disability or sick leave
□ Disability benefits pending
□ Employed full-time
□ Employed part-time
□ Currently unemployed
□ Retired
□ Other

9. What is your family income per month? If there is more than one person in your household who gets some type of income, please include their income in the total. If you don't know, please make your best guess. Please check one:
□ $0 – 250
□ $251 – 500
□ $501 – 1000
□ $1001 – 1500
□ $1501 – 2000
□ $2001 or more

10. Which of the following best describes where you are living right now? Please check one:
□ A home that you own
□ A house, condominium, apartment or room that you rent on your own
□ A house, condominium, or apartment that you rent with roommate(s)
□ Staying at a friend's or family member's house or apartment temporarily
□ Hospital, nursing home or other medical facility
□ A halfway house, transitional residence, assisted living residence, or rehabilitation program
□ A homeless shelter
□ On the street
□ Other

How would you define stigma?

The Stigma Impact Scale

Mileva, V. R., Vazquez, G. H., & Milev, R. (2013). Effects, experiences, and impact of stigma on patients with bipolar disorder. ***Neuropsychiatric Disease and Treatment*****, 9, 31-40. doi: 10.2147/NDT.S38560**

The next several questions ask about you experiences with stigma. For these questions, please define stigma as being treated poorly or differently by others due to mental illness.

On a scale where 0 is the lowest possible amount and 10 is the highest possible amount, how much has stigma affected you personally?

- Quality of Life
- Social Contacts
- Family Relations
- Self-esteem

On a scale where 0 is the lowest possible amount and 10 is the highest possible amount, how much has stigma affected your family as a whole?

- Quality of life
- Social contacts
- Family relationships

ATSPPH SCALE – Attitudes Towards Seeking Professional Psychological Help

Fisher, E. H. & Turner, J.L. (1970). Orientations to seeking professional help: development and research utility of an attitude scale. ***Journal of Clinical Phycology*****,35, pp. 82-83.**

Directions: Read each statement carefully and indicate your agreement or disagreement, using the scale below. Please express your frank opinion in responding to each statement, answering as you honestly feel or believe.
0 = Disagreement 1= Probable disagreement 2= Probable agreement 3= Agreement

_____1. Although there are clinics for people with mental troubles, I would not have much faith
in them.
_____2. If a good friend asked my advice about a mental health problem, I might recommend
that he see a psychiatrist.
_____3. I would feel uneasy going to a psychiatrist because of what some people might think.

_____4. A person with strong character can get over mental conflicts by himself, and would have
little need of a psychiatrist.
_____5. There are a few times when I have felt completely lost and would have welcomed
professional advice for a personal or emotional problem.
_____6. Considering the time and expense involved in psychotherapy, it would have doubtful
value for a person like me.
_____7. I would willingly confide intimate matters to an appropriate person if I thought it might
help me or a member of my family.
_____8. I would rather live with certain mental conflicts than go through the ordeal of getting
psychiatric treatment.
_____9. Emotional difficulties, like many things, tend to work out by themselves.
_____10. There are certain problems that should not be discussed outside one's immediate
family.
_____11. A person with a serious emotional disturbance would probably feel most secure in a
good mental hospital.
_____12. If I believed I was having a mental breakdown, my first inclination would be to
get professional attention.
_____13. Keeping one's mind on a job is a good solution for avoiding personal worries and
concerns.
_____14. Having been a psychiatric patient is a blot on a person's life.
_____15. I would rather be advised by a close friend than by a psychologist, even for an
emotional problem.
_____16. A person with an emotional problem is not likely to solve it alone; he or she is likely to
solve it with professional help.
_____17. I resent a person- professionally trained or not- who wants to know about my personal
difficulties.
_____18. I would want to get psychiatric attention if I was worried or upset for a long period of
time.

_____19. The idea of talking about problems with a psychologist strikes me as a poor way to get
rid of emotional conflicts.
_____20. Having been mentally ill carries with it a burden of shame.
_____21. There are experiences in my life I would not discuss with anyone.
_____22. It is probably best not to know everything about oneself.
_____23. If I were experiencing a serious emotional crisis at any point in my life, I would be
confident that I could find relief in psychotherapy.
_____24. There is something admirable in the attitude of a person willing to cope with his
conflicts and fears without resorting to professional help.
_____25. At some future time I might want to have psychological counseling.
_____26. A person should work out his own problems; getting psychological counseling would
be a last resort.
_____27. Had I received treatment in a mental hospital, I would not feel that it had to be
"covered up."
_____28. If I thought I needed psychiatric help, I would get it no matter who knew about it.
_____29. It is difficult to talk about personal affairs with highly educated people such as doctors,
teachers, and clergymen.

Social Support: Emotional/Informational, Tangible, Affectionate, Positive Social Interaction

Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine, 32*(6), 705-714.

Moser, A., Stuck, A. E., Silliman, R. A., Ganz, P. A., & Clough-Gorr. (2012). The eight-item modified Medical Outcomes Social Support Survey: psychometric evaluation showed excellent performance. *Journal of Clinical Epidemiology, 65,* 1107-1116.

Instructions: Now are some questions about the support that is available to you.

1. About how many close friends and close relatives do you have (people you feel at ease with and can talk to about what is on your mind)? _____

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it?

		None of the time	A little of the time	Some of the time	Most of the time	All of the time
1.	Someone to help you if you were confined to bed	1	2	3	4	5
2.	Someone to take you to the doctor if you needed it	1	2	3	4	5
3.	Someone to have a good time with	1	2	3	4	5
4.	Someone to prepare your meals if you were unable to do it yourself	1	2	3	4	5
5.	Someone to help with daily chores if you were sick	1	2	3	4	5
6.	Someone to turn to for suggestions about how to deal with a personal problem	1	2	3	4	5
7.	Someone who understands your problems	1	2	3	4	5
8.	Someone to love and make you feel wanted	1	2	3	4	5

IRB APPROVAL

RESEARCH OFFICE

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DATE: March 22, 2018

TO: Taylor Ryan
FROM: University of Delaware IRB

STUDY TITLE: [1040069-4] Mental Illness and Stigma

SUBMISSION TYPE: Continuing Review/Progress Report

ACTION: APPROVED
APPROVAL DATE: March 22, 2018
EXPIRATION DATE: March 23, 2019
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # *6, 7*

Thank you for your submission of Continuing Review/Progress Report materials for this research study. The University of Delaware IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.