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The Evaluation of Attitudes towards Individuals with Mental Illness among Counselors in Training

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THE EVALUATION OF ATTITUDES TOWARDS INDIVIDUALS WITH MENTAL
ILLNESS AMONG COUNSELORS IN TRAINING

by

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B.S., Austin Peay State University, 2010
M.S., Southern Illinois University Carbondale, 2014

A Dissertation
Submitted in Partial Fulfillment of the Requirements for the
Doctor of Philosophy Degree

Rehabilitation Institute
in the Graduate School
Southern Illinois University Carbondale
December, 2018

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DISSERTATION APPROVAL

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By

Randall D Boen

A Dissertation Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Doctor of Philosophy

in the field of Rehabilitation Counseling

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AN ABSTRACT OF THE DISSERTATION OF

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TITLE: THE EVALUATION OF ATTITUDES TOWARDS INDIVIDUALS WITH MENTAL ILLNESS AMONG COUNSELORS IN TRAINING

MAJOR PROFESSOR: Dr. Thomas Upton

Negative attitudes and stigma associated with mental illness have a profound impact on individuals who experience them. Researchers have defined stigma as the attribution of a deviant characteristic to members of a particular group. Persons with severe and persistent mental illness (SPMI) face many difficulties that impact their full participation in social life. Although attitudinal reactions to individuals with SPMI have improved considerably over the last few decades, there are still areas for improvement. Limited research has been conducted to evaluate attitudes and stigma associated with individuals with SPMI among human service professionals-in-training (HSPs). For this study, HSPs were defined as individuals preparing to enter social service, mental health, and substance abuse professions. Further, there have only been a few published studies in attitude research that utilized randomized vignettes portraying individuals with two different mental health diagnoses.

Data collection occurred in counselor education and similar HSP programs at 27 universities in the contiguous United States. A total of 79 participants (20 males and 58 females) took part in this study. Participants were asked to respond to self-report surveys and to one of two written vignettes to quantify their attitudes toward the individuals depicted in them. The two vignettes described an individual with a mental illness and differed in the diagnosis attributed to the individual: schizophrenia spectrum disorder in one vignette and generalized anxiety disorder in the other vignette. Results indicated that although there were slight mean differences between

the two groups of participants, the differences were not statistically significant, $t(77) = 0.63$, $p = .53$. The Attribution Questionnaire-27 (AQ-27; Corrigan, 2012) gathered data on overall attitudes towards mental illness. The Mental Health Provider Stigma Inventory (MHPSI; Kennedy, Abell, & Mennicke, 2014) collected data on attitudes, behaviors, and social pressure impacting stigma towards individuals who have SPMI. Data collected with these two scales yielded evidence to indicate that participants held stigmatizing attitudes towards individuals with SPMI.

The data suggested that graduate students in rehabilitation counselor education programs reported fewer stigmatizing attitudes than students from other programs. This result was seen across both measures. Data were collected on frequency of contact with persons with mental illness to evaluate the association between contact frequency and knowledge of mental illness and negative attitudes. Demographic data included gender, age, professional training, and number of years of work experience in a counseling-related role. A hierarchical multiple regression was used to determine if a pre-determined order of predictors was statistically significant to the outcome measure. Prior literature suggested that prior contact and familiarity scores played a more important role in predicting the outcome variable (AQ-27) than demographic information. The first model was statistically significant, $F(6,72) = 3.64$, $p = .003$, and explained 23% of the variance in the dependent variable (AQ-27 total scores). After the input of these demographic factors, the second step included LOF and SADP-PCF-R scores. After entry of the second step, the overall variance was 28%. The second model was statistically significant, $F(8,70) = 3.39$, $p = .002$, and explained an additional 4% variance in the model. In the final adjusted model, four out of the seven predictor variables were statistically significant.

A small pilot study consisting of rehabilitation counseling professionals was used to develop the methodologies for this study. The primary limitation of the primary study was the sample size. Further details of the methodology used and limitations of this particular study are provided. Implications of this study and suggested future research are proposed.

Keywords: severe and persistent mental illness, stigma of mental illness, rehabilitation counselors in training, Attribution Questionnaire-27 (AQ-27), Mental Health Provider Stigma Inventory (MHPSI), mental health service providers

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DEDICATION

For all those who supported me along my journey, I dedicate this work to you. My Father David, whose unwavering and unrelenting support has made me the person I am. My late Mother Debbie, whose love and kindness will remain with me wherever I go. To my sister Gwen Ayers and to all my family and friends. To Lauren, thank you for your love and support. None of this would have been possible without you.

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CHAPTER 1

INTRODUCTION

Severe and persistent mental illness (SPMI) affects approximately 4.0% of the entire adult population (18 years and older) in the United States. This is equivalent to approximately 10 million individuals according to data collected in 2015 by the National Institute of Mental Health [NIMH] (2017). Individuals with SPMI face many obstacles in their daily lives (Corrigan & Watson, 2002). Possible difficulties include locating and maintaining employment, fulfilling social roles, securing housing, and fulfilling educational goals (Ackerman & McReynolds, 2005; American Psychiatric Association [APA], 2013; Pratt, Gill, Barrett, & Roberts, 2007). SPMI is defined in this study as representing a range of psychological disorders as defined by the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5) that substantially impact the major life roles. Walton-Moss, Gerson, and Rose (2005) found that mental illness could have a significant impact on both individuals and their family systems (see also Falvo, 2014). Data collected in 2015 by the Bureau of Labor Statistics (BLS, 2016) suggested that unemployment rates for persons with disabilities were nearly twice the rates for the general population. Furthermore, persons with disabilities were more likely to work part time or to be self-employed (BLS, 2016; Cook, 2006).

Definition of Stigma

Throughout much of history, to *stigmatize an individual* involved a practice of physically branding individuals with a mark to identify them as a criminal or as being a social outcast (Fink & Tasman, 1992). Further, this mark indicated someone to be mistrusted or avoided (Pratt et al., 2007). The study of stigma as a human phenomenon can be traced back to the work of Erving Goffman (1963) who laid the foundation of our modern conceptions of stigma (Ainlay, Becker,

& Coleman, 1986; Link, Yang, Phelan, & Collins, 2004). For example, Goffman (1963) was one of the first to identify stigma as representing a social rather than an individualistic phenomenon. Stigma, as defined by Goffman, is directly related to an observed attribute (Link et al., 2004). Stigma can be understood as it impacts affects, beliefs, and behaviors (Jussim, Palumbo, Chatman, Madon, & Smith, 2000). For example, individuals may feel uneasy or unsafe around a person with mental illness (affect) and they may believe that people with mental illness are often violent and unpredictable (belief); therefore they avoid interacting with people with mental illness (behaviors). Many authors have investigated the effects of stigma in society and how it affects social interactions (Bar-Tal, Graumann, Kruglanski, & Stroebe, 1989; Corrigan, 2005, 2014; Heatherton, Kleck, Helb, & Hull, 2000; Hinshaw, 2007; Jones et al., 1984).

Stigma has been defined as an attribute resulting from a negative evaluation made by an individual towards an observable characteristic that deviates from societal norms (Hinshaw, 2007; Wright, 1980). Further, this deviation from social norms extends beyond the normal individual differences that are expected (Coleman, 1986; Goffman, 1983). For example, hand washing is accepted as an appropriate personal hygiene practice. Washing one's hands frequently is generally seen as appropriate given contextual factors (e.g., medical professionals who wash their hands after every patient interaction). However, individuals who compulsively wash their hands 50 or 60 times a day may be seen as deviant from a societal norm.

Distinctions have been made between social stigma, structural stigma, and self-stigma (Livingston & Boyd, 2010). Social or public stigmas have been defined as the attitudes and beliefs attributed to a particular group of people that are widely shared within a society. These attitudes are transmitted through a society via media and word of mouth (Corrigan, Powell, & Michaels, 2013). One example of social stigma might be that all individuals with mental illness

are either potentially dangerous or hopeless (Corrigan & Watson, 2007). These widely held belief structures could influence structural and self-stigma (Corrigan, 2005). How individuals with mental illness are viewed socially has been heavily influenced by mass media (Corrigan, et al., 2013). How mental illness is portrayed by mass media (television, newspapers, and social media) has been reviewed at length (Corrigan et al., 2013; Coverdale, Nairn, & Claasen, 2001; Stout, Villegas, & Jennings 2004).

Some researchers have suggested that the attribution of public stigma may contribute to devaluation of an individual's self-concept and perceived standing in society (Lin, Chang, Wu, & Wang, 2016). However, this reaction to stigma may not be universal. Corrigan (2005) suggested that many individuals with mental illness recognize and work against the negative attitudes around them. Personal knowledge or understanding of mental illness has been correlated with fewer stigmatizing reactions from others (Upton, Harper, & Wadsworth, 2005).

Self-stigma refers to the stigma that is internalized by the stigmatized group (Fink & Tasman, 1992). Self-stigma may contribute to feelings of shame about having a disability (Corrigan & Watson, 2007; Olney & Kim, 2001; Watson, Corrigan, Larson, & Sells, 2007). Feelings of shame may hinder individuals from self-identifying as having an illness or disability. This process was further discussed by Goffman (1963):

How does the stigmatized person respond to his situation? In some cases it will be possible for him to make a direct attempt to correct what he sees as the objective basis of his failing ... a transformation of self from someone with a particular blemish into someone with a record of having corrected a particular blemish. (p. 9)

Within his work, Goffman (1963) suggested that individuals with mental illness would make attempts to distance themselves from the stigmatizing effects of the mental illness. This is

done to avoid being classified as distrustful or subjected to pity. Researchers have identified several attributes common to mental illness that have been linked to stigmatizing responses by others and therefore influencing social stigma (Hinshaw, 2007). These attributes can include the presence of psychiatric symptoms, social skills deficits, physical appearance, or labels (Corrigan, 2005). These attributes may lead a person to conclude that another individual has a mental illness. Mislabeled a potential mental illness can occur due to the presence of one or more attributes. For example, an individual might be classified as mentally ill because of appearance or unusual behavior. One difficulty in identifying the potential sources of attitudes towards individuals with mental illness are these misattributions and incorrect judgments of what is mental illness and what is not (Corrigan, 2014).

The stigmatizing effects of mental illness may also have a powerful effect on how persons with SPMI are described in society. For example, rather than referring to a person with schizophrenia, some may refer to “the schizophrenic,” thereby labeling an individual by his or her disability rather than by other individual characteristics (Corrigan, 2000, 2016). The causal attributions of mental illness can lead to the stigmatizing reactions of others. If a mental illness is attributed to personal responsibility, then individuals are more likely to hold more negative views of the condition (Weiner, 1993).

Both public and self-stigma may be further understood through stereotypes, prejudice, and discrimination. A stereotype represents a belief about the personal attributes of a group of people (Bar-Tal et al., 1989). These beliefs are formed to provide a mental shortcut when thinking of a member of a particular group. Prejudice can include both the negative belief structure and an adverse reaction such as fear or hostility towards the other group (Ainlay et al., 1986). Discrimination occurs when a negative belief or adverse reaction translates into

behavioral responses (Corrigan & Watson, 2002). Researchers have correlated stereotypes, prejudice, and discrimination to negative independent living and vocational outcomes for persons with SPMI (Rusinova, Griffin, Bloch, Wewiorski, & Rosoklija, 2011).

Attitudes are enduring patterns of evaluation of a person or of an issue (Hinshaw, 2007). Historically the term has denoted a pattern of affective, cognitive, or behavioral responses to a psychological construct (Colman, 2006). Sources of attitudes towards individuals with disabilities have included viewing them as victims of their condition (Lynch & Thomas, 1994). From this standpoint, some may refer to individuals as *suffering* with mental illness, view them as being highly dependent on others, and regard them as seeking pity or charity (Wright, 1980). Further, viewing individuals as victims of their condition may lead to the devaluation of individual capabilities and strengths. The purpose of the current study is to evaluate attitudes and stigma associated with SPMI.

Past researchers have suggested that changing individual stigma associated with individuals with SPMI is possible (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Corrigan, Morris, Michaels, Rafacz, & Rusch, 2012; Hackler, Cornish, & Vogel, 2016; Hinshaw, 2007; Reinke, Corrigan, Leonhard, Lundin, & Kubiak, 2004). Positive personal interactions with individuals with SPMI have been shown to decrease individual stigma (Corrigan et al., 2003). With personal interactions, individuals may start to understand how an SPMI impacts the daily lives of those who experience it. Further, personal interactions tend to lead to more favorable views of persons with SPMI than other approaches. For example, an educational approach in which information is provided about SPMI can impact the learner's understanding of mental illness; however, this may not impact his or her perceptions of the disorders. If past personal

interactions with individuals with SPMI are negative, stigma reactions can persist or worsen (Corrigan et al., 2012).

Other studies have shown that after being presented with a video vignette depicting an individual with a mental illness, participants' reactions towards mental illness were altered (Hackler et al., 2016). Factors such as age, gender, and personal contact with persons with disabilities are associated with differing attitudes towards those persons (Yuker, 1988; Yuker, Block, & Youngg, 1966). Other factors that may have a moderating effect on disability attitudes in postsecondary settings include the academic status (i.e., freshman, sophomore, junior, or senior) and major area of study of the participant (Boen, Upton, Knickmeyer, & Anuar, 2016). In the current study, the contribution of factors including age, gender, academic standing, and prior contact were evaluated.

Corrigan et al. (2012) identified several areas that need further study regarding interventions that reduce stigma. The first gap identified was the effect of interventions that target specific mental health conditions (e.g., major depression or schizophrenia). The authors discussed how both contact and education have a positive impact on reducing stigma. However, moderating factors such as the level of contact or degree of exposure should also be evaluated. Hackler et al. (2016) emphasized that more research was needed to evaluate if the age of the contact group (persons with SPMI) has an effect on stigma. For example, if the participant age group were similar to that of the contact group, would this similarity result in lower levels of stigma? Finally, Corrigan et al. (2012) suggested that many of the reviewed studies relied on self-reported measures and not on behavioral observations (see also Hinshaw, 2007). There is a need to investigate the degree to which behavioral reactions towards persons with SPMI are influenced by negative attitudes and stigma (Reinke et al., 2004). Some authors have called for

collecting evidence to further understand how stigma associated with SPMI may influence hiring decisions made by employers (Corrigan et al., 2012). Other research may examine landlords choosing to lease a property to an individual with SPMI (Rusinova et al., 2011).

Theoretical Framework

The underlying theory of the study was attribution theory (AT; Heider, 1958; Weiner, 1993). AT seeks to conceptualize the social motivation factors that affect acting positively towards some groups while acting negatively towards others. This cognitive process includes making an attribution of the cause and controllability of a condition that can lead to judgment of responsibility for that condition (Corrigan et al., 2003). For the purposes of this study, AT was defined in terms of the degree to which a condition (e.g., mental illness or other disability) that is viewed as being influenced by the individual will impact how others view the condition. In general, this theory holds that the more a condition is viewed as being caused by the individual (ruling out uncontrollable factors), the more negative reactions will result.

Mental health conditions can be misattributed to personal causes or life choices (Kvaale, Haslam, & Gottdiener 2013). For example, if an individual with a substance dependence disorder develops a mental illness, the cause or controllability of the mental illness may be called into question (Corrigan et al., 2003). Individuals with mental illness may be viewed more negatively than those with illnesses attributed to natural or environmental causes (Martin, Pescosolido, & Tuch, 2000). These reactions can also influence how others are viewed and therefore contribute to negative attitudes and stigma. Forming an attitude towards someone may be seen as the process by which we make sense of the complex information we are faced with. Attitudes may also serve as the enduring evaluation of others (Colman, 2006; Macrae & Bodenhausen, 2001). Within this context, attitudes are seen as *mental shortcuts* used in the

evaluation of others. In one study, patients with lung cancer who were also lifelong cigarette smokers were viewed as having more personal responsibility for their condition than those who did not smoke (Hamann, Howell, & McDonald, 2013).

Significance of the Problem

Stigma associated with individuals with SPMI can pose a significant barrier to full social participation of those individuals (Corrigan, 2016). Negative attitudes and stigma may impact persons with SPMI in their efforts to access employment, housing, and other activities of daily living (Falvo, 2014; Russinova et al., 2011). Persons with mental illness tend to be discriminated against by employers when compared with individuals with physical disabilities (Brodwin, Parker, & DeLaGarza, 2010). Rates of unemployment for individuals with bipolar disorder are considerably higher than for the general population (Falvo, 2014; Hergenrather, Gitlin, & Rhodes, 2011). Nevertheless, individuals with mental illness generally wish to be gainfully employed. Employment for persons with SPMI contributes many social, economic, and psychological benefits (Turner et al., 2015). For example, individuals with schizophrenia may benefit from the structure, social interactions, and boost in self-confidence that work can provide (Arns & Linney, 1993; Falvo, 2014; Twamley et al., 2005). Public stigma has been shown to have a negative impact on treatment outcomes for individuals with SPMI, including vocational rehabilitation (Perlick, 2001). This effect may be a factor of service availability or the attitudes held by the service providers.

Smith and Cashwell (2010) suggested that stigma attributed to individuals with mental illness permeates society. The authors suggest that those who work in the mental health field are not immune from these attitudes. The authors investigated the attribution of stigma among individuals in the mental health field (e.g., social workers, psychologists) compared with those

who were from a different field (business administration). Their results suggested that training and exposure to information regarding mental illness increased positive attitudes. Although Smith and Cashwell's (2010) study relied on a relatively small sample size, their examination of attitudes among mental health professionals yielded important data for the current study (Crowe & Averett, 2015).

Researchers have examined subtle differences in language associated with attitudinal reactions. For example, Granello and Gibbs (2016) randomly assigned participants to one of two groups that differed in how individuals with mental illness were referred to. One group was exposed to content that included the term "the mentally ill" while the other group was exposed to the person-first language of "persons with mental illness." The authors found that the difference in terms had an impact on participants' attitudinal responses (Taylor & Dear, 1981). Further, this effect held true for the three different samples drawn from populations of undergraduate students, adults in the general population, and human service professionals/counselors in training (Granello & Gibbs, 2016).

Purpose of Study

The primary purpose of this study was to examine three primary factors. First, this study collected data to determine the degree to which human service professionals (HSPs) in training reported stigmatizing attitudes towards persons with SPMI. Second, the study investigated the effects of different mental health labels (i.e., schizophrenia spectrum disorder or generalized anxiety disorder) on attitudes and stigma associated with individuals with SPMI. Finally, this study collected data to evaluate if prior contact, work experience, and other demographic factors influenced these attitudes.

Summary

Prior research has evaluated the impact of mental health stigma on social relationships, social participation, and social mores. Researchers have investigated the role of interventions in decreasing negative attitudes and mental health stigma. This study examined disability attitudes among HSPs. Further, through the use of vignettes, this study explored differences among participants in responses to two mental health diagnoses. To manipulate the independent variable, two vignettes were used. These vignettes were designed to be identical except for the name of the individual and his mental health diagnosis. In the first vignette, the individual (Harry) was described as having a diagnosis of schizophrenia spectrum disorder. In the second vignette, the individual (Gary) was described as having a diagnosis of generalized anxiety disorder. The underlying theory of the current study was attribution theory. Attribution theory considers the assumption of cause (as defined in Jones et al., 1984) when individuals form attributions about a particular group.

This chapter identified and described mental health stigma and the prior research that has explored this phenomenon. This chapter also made the case for the significance of the problems that currently exist in the literature and how this study was designed to address these issues. Attribution theory, the current theoretical framework, was initially defined in this chapter. The next chapter will include a more detailed review of previous literature on mental health stigma. Furthermore, Chapter 2 will provide more details on the topics introduced in the first chapter. Chapter 3 (Methodology) will offer detailed descriptions of the sample, procedures, and other methodology used in the analysis. Further, the Methodology section will detail how each of the research questions was addressed through statistical analysis. Chapter 4 (Results) details the

analysis conducted to address each question. Chapter 5 concludes with a general summary of the results and a review of implications and limitations of this study.

Definition of Terms

Attribution theory – This term is defined as the degree to which a condition (e.g., severe and persistent mental illness) is influenced, or caused, by the individual him or herself and the degree to which other environmental or genetic factors are ruled out as potentially causing the condition. This theory holds that the more a condition is viewed as being caused by the individual (ruling out uncontrollable factors), the more negative reactions will result.

Generalized Anxiety Disorder (GAD) – GAD is a mental disorder defined in the 5th edition of the *Diagnostic and Statistical Manual of Mental Disorders* [DSM-5] (American Psychiatric Association, 2013). As defined in the DSM- 5, GAD contributes to excessive worry over many activities, events, or topics. This persistent worry must last longer than 6 months and impact three or more physical or mental areas (DSM-5, 2013). GAD typically affects an individual’s sleep quality or mental processing, therefore impacting daily activities and quality of life (Falvo, 2014). Co-occurring mental or physical disorders must be ruled out.

Human Service Professional (HSP) – An HSP or human service worker is a term used to describe an individual who works with others to enhance their quality of life through the services he or she provides (Moffat, 2011). They work with homeless populations, veterans, immigrants, individuals with substance use, individual with mental illness, individuals with disabilities, children, and the elderly (Moffat, 2011).

Person with a disability – An individual who has a physical or mental impairment that substantially impacts one or more major life activities such as caring for oneself, walking, seeing, breathing, or learning (Riggar & Maki, 2004)

Schizophrenia Spectrum Disorder – A mental disorder whose symptoms may include delusions, hallucinations, disorganized speech, disorganized or catatonic behavior, or other negative symptomology. At least two of the aforementioned symptoms must be present for 1 month and substantially impact an individual's daily life or social functioning. These symptoms must not be better explained by any other co-occurring disorder (American Psychiatric Association, 2013).

Severe and Persistent Mental Illness (SPMI) – SPMI is defined as (a) any mental, behavioral, or emotional disorder that meets the diagnostic criteria outlined in the DSM-5, currently or within the last year; (b) a condition that results in functional impairment that substantially interferes with one or more major life activities (e.g., housing, education, vocational, or activities of daily living; Center for Behavioral Health Statistics and Quality, 2016).

Stigma – For the purposes of the current study, stigma is defined as the negative evaluation made by an individual towards an observable characteristic that deviates from societal norms (Hinshaw, 2007; Wright, 1980). Further, this deviation from social norms extends beyond the normal individual differences that are expected (Coleman, 1986; Goffman, 1963).

CHAPTER 2

LITERATURE REVIEW

Introduction

The purpose of this study was to examine the attitudes towards individuals with severe mental illness held by human service professionals in training using two vignettes that depicted an individual with a severe and persistent mental illness. Data were collected to examine attitudinal differences toward two different diagnosable conditions, schizophrenia spectrum disorder and generalized anxiety disorder, as depicted in the vignettes. Surveys were used to collect participants' perceptions of the individual depicted in the vignette as well as their overall attitudes towards mental illness. Participants were randomly assigned to one of two groups, which differed according to the vignette presented. Participants were recruited from counselor education and related academic programs throughout the United States.

Prevalence and Definitions of Severe Mental Illness

As mentioned previously, in 2015 approximately 9.8 million individuals, 18 years and older, had severe and persistent mental illness in the United States (NIMH, 2015). According to national data, 3.1% of the U.S. population had a diagnosis of generalized anxiety disorder (APA, 2013). Individuals diagnosed with a mental illness may face many difficulties in their daily lives (Corrigan et al., 2015). These areas of disruption may include vocational pursuits (Auerbach & Richardson, 2005; Brohan & Thornicroft, 2010; Cook, 2006), education (Hunt & Eisenberg, 2010), social interaction (Schulze & Angermeyer, 2003), and general quality of life (Walton-Moss et al., 2005). These issues may contribute to considerable distress and personal interference in the individual's life (Falvo, 2014).

In some circumstances, individuals with mental health issues may conceal their illness from others and choose to disclose their illness to a limited few. Given this fact, mental illness can be considered a *hidden disability*, meaning that these disabilities may exist without being recognized by others. Hidden disabilities, as illustrated by Olney and Kim (2001), may pose certain disadvantages as well as advantages to those impacted by them. One disadvantage is that an individual's mental disability may be viewed as less legitimate than an individual's physical disability. On the other hand, individuals with mental illness may have more liberty to self-disclose their disability to others but not to all those with whom they come in contact (versus an individual with a physical limitation; Olney & Kim, 2001).

For the purposes of this study, SPMI was defined as (a) any mental, behavioral, or emotional disorder that meets the diagnostic criteria outlined in the DSM-5 currently or within the last year, and (b) a condition that results in functional impairment, which substantially interferes with one or more major life activities (Center for Behavioral Health Statistics and Quality, 2016). The diagnostic system used to define mental illness carries both benefits and limitations. The DSM-5, along with the International Classification of Diseases, provides structure and organization to the professional understanding of mental illnesses, substance abuse, and developmental disabilities. However, these classification systems are often seen as necessary but not sufficient for understanding the subjective experiences faced by persons with SPMI. Two individuals who share a common diagnosis, for example, may have varied experiences with their illness (Pratt et al., 2007).

The Stigma of Mental Illness

Many factors have been shown to correlate with negative attitudes towards persons with disabilities. Personal factors, including age, gender, and education level, will therefore be under

review in this study. Other contextual factors that have been related to stigmatizing attitudes include personal contact and familiarity with persons with disabilities. The aforementioned factors will affect the degree of social distance or closeness individuals may feel towards others with mental illness. As mentioned previously, factors such as media portrayals of mental illness play an important role in the formation of public stigma (Corrigan et al., 2013). However, these factors are beyond the scope of this study.

Age. The age of participants was collected in the current study. In previous studies, the age of participants correlated with attitudes towards persons with disabilities in general (Yuker, 1988). These studies suggest that older individuals generally tended to endorse stigmatizing attitudes more than younger individuals (Link et al., 2004). These differences may be due to life experiences, cultural influences, or some other factor (Hampton & Sharp, 2014).

Gender. The prior research in this area indicates that, in general, women have more favorable attitudes than men toward individuals with disabilities (Boysen, 2017; Corrigan & Watson, 2007; Upton & Harper, 2002; Wright, 1980; Yuker, 1988). Corrigan and Watson (2007) found that women were less likely to project pity and feel less personal blame towards individuals with mental illness. Women also indicated being more willing than men to offer help to people with mental illness according to this study. When examining why these differences exist, some have pointed to gender socialization differences between the sexes. Growing up, boys and men may be taught to be competitive, to strive for achievement, and to control their emotions, whereas girls and women may be brought up in a context that values relationships, caring, and understanding the emotional experiences of others (Hampton & Sharp, 2014).

Education Level. Several studies have suggested more educated individuals are less likely to have negative attitudes towards persons with disabilities (Boen et al., 2016; Lam et al.,

2010). In a previous study, I found that among 400 undergraduate students surveyed, seniors and graduate-level students were more likely to hold more favorable attitudes towards persons with disabilities than freshman (Boen et al., 2016). However, these results may be due in part to other factors such as specialized training or personal knowledge (Upton & Harper, 2002). In general, those with more education are less likely to view individuals with mental health issues as dangerous (Corrigan & Watson, 2007).

Personal Contact. Personal contact with individuals who have mental illness has been examined as an indicator of attitudinal reactions towards mental illness (Corrigan et al., 2012; Hackler et al., 2016; Sadow, Ryder, & Webster, 2002; Upton et al., 2005). Having a relative, a spouse, a friend, or another acquaintance that has a mental illness has been shown to have the strongest effect on one's attitudinal reactions towards mental illness (Corrigan et al., 2012; Hayward & Bright, 1997). The Level of Familiarity Scale (LOF) and the Scale of Attitudes toward Disabled Persons-Prior Contact Form R (SADP-PCF-R) were used in the current study to evaluate personal contact information from all participants.

Social Distance. Miller, Chen, Glover-Graf, and Kranz (2009) found that among college students, many preferred less intimate relationships with individuals who had psychiatric illnesses than with those with a physical disability. Gordon, Chariboga-Tantillo, Feldman, and Perrone (2004) also found individuals reported being more willing to have closer relationships with individuals who had physical disabilities than with those with severe mental disabilities. Perceptions of both fear and discomfort appeared to influence decisions related to social closeness (Marili, Glover-Graf, & Millington, 2012).

Human Services Professionals

This study evaluated the attribution of stigma towards individuals with mental illness among human services providers. Human services professional or human service worker are terms used to describe an individual who works with others to enhance their quality of life through the services they provide (Moffat, 2011). HSPs work with homeless populations, veterans, immigrants, individuals with substance use, individuals with mental illness, individuals with physical disabilities, children, and the elderly (Moffat, 2011). These professionals work collaboratively with individuals to identify and implement treatment goals, identify community resources, and fulfill their educational and vocational goals. The clients whom these professionals serve may be experiencing psychological distress due to traumatic events, mental illness, or adjustment to a disability (Harker, Pidgeon, Klaassen, & King 2016). Professionals in human services typically work in either a social service organization or a mental health agency (Moffat, 2011). Occupational roles typically include either direct care or administration. Before assuming these roles, individuals undergo professional training, typically at the postsecondary level, in the academic disciplines of psychology, social work, school counseling, rehabilitation counseling, or human services.

Academic Disciplines. The current study defined the target population as graduate-level, human services professionals in training throughout the United States. This target population was chosen to address the research questions posed. The academic fields considered for this study were counseling psychology, mental health counseling, rehabilitation counseling, school counseling, marriage and family therapy, and social work.

Counseling psychologist is a term to describe an individual who works in general practice or direct health services provision. These professionals work with individuals of any age to

address emotional, social, environmental, or disability-related issues. Counseling psychologists have training to address a wide range of issues from acute adjustment issues to severe and persistent mental health concerns (American Psychological Association, 2018). Typical work settings include academic, public sector, not-for-profit, and private practice (Stedman, Neff, & Morrow 1995).

A mental health counselor is a professional who has training in clinical mental health or closely related degree program to conduct individual or group counseling or psychotherapy. These professionals have expertise in helping individuals deal with emotional distress, life problems, or mental illness. A mental health counselor may work alongside psychologists and social workers in community-based agencies, for-profit centers, or private practice (Neukrug, 2006). Marriage and family therapists have specialized knowledge in working with couples and families. These areas may include family dynamics, family therapy techniques, human dynamics, and human sexuality (Neukrug, 2006).

Rehabilitation counselors are professionals who help individuals with physical, mental, developmental, and emotional disabilities. Rehabilitation counselors assist individuals to adjust to disability, find employment, or live independently. They work with clients to overcome or manage the personal, social, or psychological effects of disabilities in employment or independent living settings (Riggat & Maki, 2004; Wright, 1980). A school counselor is a professional who has a master's-level degree in school counseling. A school counselor has knowledge of child academic, career, and social/emotional developmental processes. They work in primary education settings, kindergarten through 12th grade, developing programs to foster student success (American School Counselor Association, n.d.). Clinical social workers represent the largest organization of behavioral health practitioners in the nation (Barker, 2003). They

work in many different settings and with many different populations. They work with the homeless population, immigrants/migrants, veterans, minorities, children, and individuals with disabilities (Barker, 2003).

The Stigmatized Individual

The impact of social stigma towards individuals with mental illness can pose a significant barrier to full participation for those individuals (Corrigan et al., 2015). For example, stigma can negatively impact their employment outcomes and housing options (Cook, 2006; Falvo, 2014). If members of the general public endorse the image of individuals with mental illness as dangerous, incompetent, or unstable, it may negatively impact relationships and increase social distance (Cooper, Corrigan & Watson, 2003; Falvo, 2014). The effects of public stigma of mental illness can lead individuals to feel ashamed of their mental illness. Some may attempt to hide symptoms of mental illness from friends and acquaintances (Corrigan, 2000; Schulze & Angermeyer, 2003).

Individuals with mental illness may be less willing to seek treatment within an environment where such help is stigmatized (Corrigan et al., 2015; Perlick, 2001). The stigma towards mental health treatment may contribute to less willingness to seek help among individuals with SPMI (Hunt & Eisenberg, 2010; Sadow et al., 2002; Schulze, 2007). For example, Eisenberg and colleagues (2009) found that among university students, perceived level of stigma was associated with higher levels of self-stigma and lower levels of help-seeking behaviors. Furthermore, the individuals' degree of self-stigma towards their mental illness was directly related to their willingness to seek treatment. However, the authors noted that contextual factors also played a role in help-seeking behavior including the degree of confidentiality surrounding seeking counseling or psychiatric care on campus. Hunt and Eisenberg (2010) found

that stigma associated with mental illness had an impact on college age students seeking out services and treatment. Other factors such as time, cost, and confidentiality also impacted help-seeking behaviors.

Schulze and Angermeyer (2003) conducted group interviews to gather personal experiences of stigma among individuals with schizophrenia. They developed several themes from these focus groups highlighting the personal impact of public stigma. Participants talked about experiences of being rejected by friends and acquaintances after they disclosed their mental illness. The participants also indicated that they were aware of how schizophrenia was portrayed in the media influencing the stereotype that people like them were violent and dangerous. Finally, the authors recognized that the impact of stigma towards mental illness had a significant impact on participants' daily lives.

Attribution Theory

Identified by the Austrian-born psychologist, Fritz Heider (1896-1988), attribution theory (AT) seeks to identify the cognitive-emotional processes that influence human behavior (Colman, 2006; Maio & Olson, 2000). Humans tend to seek the underlying cause of everyday events that includes understanding others. Attributions are formed from the environment and directly relate to the larger social context (Corrigan, 2000). Factors that seem to have the most influence on negative reactions towards others include the stability of causality and controllability of cause (Corrigan, 2000; Corrigan et al., 2003). The *stability of causality* refers to whether or not the perception of cause is maintained throughout the duration of the condition. For example, persons with SPMI may be viewed as less likely to recover fully from their illnesses or achieve major life goals (Corrigan et al., 2013).

The second factor, *controllability of cause*, refers to the actual or perceived control an individual has over his or her own actions. For example, a mental health issue may be seen as being caused, or maintained, by the individual and therefore be viewed less favorably than other physical disabilities. Similar judgments regarding cause are not typically attributed to persons with neuromuscular diseases or blindness (Jones et al., 1984; Weiner, 1993). By extension, mental illness may be perceived among some as resulting from poor life choices. Following this logic, some may conclude that individuals with mental illness deserve the negative consequences that may result from the disorder. However, according to AT, if the condition is seen as influenced by forces outside the control of the individual, others may react with pity or offer to help the individual. Therefore, if mental illness were viewed as resulting from abnormalities in brain chemistry, and not by personal choice, attitudinal reactions would be more favorable towards offering help and support.

Researchers have attempted to understand the function of attitude development and maintenance (Hayward & Bright, 1997). Although a consensus has not been reached, four areas have been identified: “an adaptation function, a value expression function, an ego-defense function, and a knowledge organizational function” (Reeder & Pryor, 2000, p. 296). Physical appearance influences how individuals are perceived within their context. Therefore, the appearance of a disability influences the attitudinal reactions that occur (Wright, 1980). A value-expressive attitude, one in which the attitude is formed, is consistent with the perceiver’s personal values (Maio & Olson, 2000). Further studies supporting this phenomenon can be found in evidence gathered through conditions linked to genetic factors (e.g., rather than environmental ones), in which participants tend to respond with fewer stigmatizing reactions (Hamann et al., 2013).

Other researchers have made the argument that the presence of a mental illness (either actual or perceived) can contribute to how others act around those individuals (e.g., avoiding an individual who acts in a socially deviant way; Corrigan, 2004; Fink & Tasman, 1992).

Attributions that are formed can be linked to behavioral responses including fear, anger, or pity (Hinshaw, 2007).

Measuring Attitudes

A number of direct measures have been developed to evaluate stigma and attitudes towards persons with disabilities (Antonak & Livneh, 2000), including persons with mental illness (Findler, Vilchinsky, & Werner, 2007). These scales have included the Scale of Attitudes Toward Disabled Persons (SADP; Antonak, 1982), the Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS; Findler et al., 2007), the Social Distance Scale (Link, Cullen, Frank, & Wozniak, 1987; Penn et al., 1994; Reinke et al., 2004), the Perceived Devaluation–Discrimination Scale (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989), and the Level of Contact Report scale (Holmes, Corrigan, Williams, Canar, & Kubiak, 1999). These scales have provided researchers with the methods to examine attitudes for the past half century (Parker, Szymanski, & Patterson, 2004; Yucker, 1988). Furthermore, these instruments have substantially impacted what we know about attitudes and stigma towards persons with disabilities.

Antonak and Livneh (2000) suggested that when examining attitudes, the use of existing measurement scales is preferable to the development of a new scale that examines similar domains. Three existing scales were used for this study. The first, the Scale of Attitudes toward Disabled Persons (SADP)-Prior Contact Form R (SADP-PCF-R; Appendix B) quantifies the degree of participants' level of contact and interactions with persons with disabilities. This scale was chosen to quantify self-reported contact among participants. The use of the SADP-PCF-R

separately from the full SADP has been demonstrated in Brostrand (2006) and was duplicated in the current study. In addition to the SADP- PCF-R, another form was used to determine prior contact with persons with mental illness called the Level of Familiarity Scale (LOF; (Appendix C). The LOF is designed to quantify how familiar a participant is with a mental illness. Greater familiarity is correlated with lower levels of stigma associated with individuals with mental illness (Hayward & Bright, 1997). The Attribution Questionnaire (AQ; Corrigan, 2012 [Appendix D]), which quantifies participants' reactions to individuals with mental illness, was paired with the vignettes in this study. Finally the Mental Health Provider Stigma Inventory (MHPSI; Kennedy et al., 2014 [Appendix E]) was utilized in this study. The MHPSI was initially constructed to be administered to mental health professionals to quantify the presence and extent of stigma towards their clients (Kennedy et al., 2014).

This study was designed to examine stigmatizing attitudes toward individuals with SPMI among students in human services counselor education programs. The attitudes of human services professionals affect the quality of services they provide (Kennedy et al., 2014; Sadow et al., 2002). Students in these programs may have negative or positive attitudes towards others. As mentioned, attitudes may potentially impact emotional responses, cognitive schemas, and behavioral reactions towards the stigmatized group (Hayward & Bright, 1997). Negative perceptions of individuals with SPMI among human services providers in training (HSPs and related fields) were examined in the current study. Further, these attitudes may impact the perception of cause of mental illness, treatment recommendations, and prognosis. On the other hand, positive attitudes towards mental illness may contribute to better outcomes for patients seeking services.

Anticipated Findings

Through the examination of stigmatizing attitudes toward mental illness among counselors in training, the researcher expected to draw several conclusions. The first research question examined how students from different academic disciplines (e.g., rehabilitation counseling, mental health counseling, social work, etc.) would respond to questions on the AQ-27 and the MHPSI. The researchers expected to find that participants would have stigmatizing attitudes toward mental illness based upon previous research (Kennedy et al., 2014; Smith & Cashwell, 2010). However, what remained to be investigated was how students from different HSP programs may differ in their attitudes towards individuals with SPMI. Based on the prior research, it was hypothesized that mental health counselors would have the lowest level of stigma related to individuals with mental illness (Neukrug, 2006; Lam, Lam, Lam, & Sun, 2015).

The second research question examined the relations between the diagnostic label of mental illness and stigmatized attitudes towards mental illness measured by the AQ-27. This research question was developed based on existing literature (e.g., Corrigan et al., 2012). It was hypothesized that individuals exposed to the first vignette (Harry, who has schizophrenia) would report more stigmatizing attitudes towards mental illness than individuals exposed to the second vignette (Gary, who has generalized anxiety disorder). As indicated previously, the only differences between Vignettes A and B were the name of the individual described and the diagnostic label given to the individual. The extent to which this key information was recalled from each vignette was tested during the pilot study. The rationale for this hypothesis was based on the prior literature indicating that diagnostic labels are correlated with the stigmatization of mental illness (Corrigan, 2000, 2016; Granello & Gibbs, 2016; Schulze & Angermeyer, 2003; Taylor & Dear, 1981)

The final research question concerned the extent to which demographic characteristics (e.g., age, gender, work experience), frequency of contact with persons with mental illness (as measured by the LOF), and degree of knowledge of persons with disabilities (as measured by the SADP-PCF) would impact individual attitudes towards SPMI. Past research indicated that these demographic factors may not only affect individuals' perceptions of SPMI but also impact the effectiveness of anti-stigma interventions (Couture & Penn, 2003). The demographic factors gathered for this study were proposed to have an impact on perceptions of SPMI. For example, individuals who are older may have fewer stigmatizing attitudes towards SPMI than younger individuals (Link et al., 2004; Yuker, 1988). Females may report fewer stigmatizing attitudes when compared to males (Boysen, 2017; Corrigan & Watson, 2007; Wright, 1980; Yuker, 1988). Individuals with higher levels of education level may report less stigma and feel less need for social distance than those with lower levels of education (Marili et al., 2012; Miller et al., 2009). Individuals from different educational programs may have differing levels of attitudes towards individuals with SPMI (Boen, et al., 2016; Todor, 2013).

Individuals who report having more frequent or personal contact with individuals who have SPMI may have fewer stigmatizing attitudes towards SPMI than those who report less contact (Corrigan et al., 2012; Hackler et al., 2016; Sadow et al., 2002; Upton et al., 2005). Prior research has indicated that the frequency of contact and level of familiarity may have more predictive qualities than the demographic factors (Corrigan et al., 2012; Fichten, Schipper, & Cutler 2005). Chapter 3 will summarize the methodology used in the current study. Chapter 4 will provide an overview of the results. Chapter 5, Discussion, will summarize the results and their relation to the existing literature. Study implications will be offered as well as recommendations for future research.

Summary of Key Findings

Nearly 10 million individuals, 18 years and older, have SPMI in the United States (NIMH, 2015). The stigma of mental illness has persisted through time and has affected the social and personal integration of this segment of the population into greater society. Personal and environmental factors that contribute to stigma are also areas to be further explored (Hayward & Bright, 1997). These factors include the perceiver's age, gender, education level, personal contact, and knowledge of individuals who have mental illness (Boysen, 2017; Corrigan & Watson, 2007; Link et al., 2004; Upton & Harper, 2002; Wright, 1980; Yuker, 1988). Those who work with individuals with SPMI are unfortunately not immune from stigmatizing reactions towards those with mental illness (Kennedy et al., 2014; Smith & Cashwell, 2010). Rehabilitation counselors seek to maintain and improve the functional independence of persons with disabilities (Parker et al., 2004). These professionals advocate for the rights of persons with disabilities and for their full participation in mainstream society (Riggan & Maki, 2003; Wright, 1980). The purpose of this study was to examine stigma towards SPMI among counselors in training. A further goal of this particular study was to provide evidence to demonstrate the extent to which stigma is impacted by the diagnosis presented in vignettes of two separate diagnosable conditions.

CHAPTER 3

METHODOLOGY

In this study, I evaluated the degree to which perceptions of mental illness may impact negative attitudes and stigma among counselors in training. Data were collected to examine how these perceptions are influenced by demographic characteristics, level of contact, and frequency of contact. I used two surveys to gather data both on mental health stigma (Attribution Questionnaire-27) and on service recommendations (the Mental Health Provider Stigma Inventory). Data were also gathered through a demographic form (Appendix A), frequency of contact form (Prior Contact Form-R, Appendix B), and Level of Familiarity scale (Appendix C). Participants consisted of university students from HSP disciplines including counselor education, rehabilitation counseling, school counseling, and social work. Participants were identified and recruited from Southern Illinois University Carbondale and other universities and institutions. Further details will be provided in the participant section. This chapter will include a detailed description of the design, the research questions, the instruments used to collect data, the planned data analysis, and limitations of the current study.

Research Questions

The following three research questions were developed for the study.

1. Is there a significant difference in mean scores on the AQ-27 and MHPSI between students from counselor education, rehabilitation counseling, and other academic programs?
2. What is the function of the type of mental illness (schizophrenia spectrum disorder versus generalized anxiety disorder) on attitudes towards individuals with SPMI among HSPs in training?

3. How do prior contact and familiarity factors influence attitudes towards individuals with SPMI while controlling for demographic characteristics?

Instrumentation

Two primary attitude scales, a demographic form, a level of contact form, and a frequency of contact scale were the instruments used in this study. Table 1 provides a brief summary of each instrument.

Table 1

List of Instruments Used

Instrument name	Abbreviation	Number of items	Intended purpose
Demographic form	DF	6 items	This form was used to gather background information from each participant including age, gender, and disability status.
Prior Contact Form R (Antonak, 1982)	SADP-PCF-R	3 items ^a	This scale was used to quantify participants' perceived knowledge, frequency of contact, and intensity of contact with persons with disabilities.
Level of Familiarity Scale (Corrigan, 2012)	LOF	11 item checklist	Participants used this scale to indicate their prior experiences with severe mental illness.
Attribution Questionnaire (Corrigan, 2012)	AQ-27	27 items ^a	This scale was used to quantify participants' reactions to a brief vignette ^b along nine stereotypical factors.
Mental Health Provider Stigma Inventory (Kennedy et al., 2014)	MHPSI	24 items ^a	This inventory was developed to evaluate the degree of mental health stigma among human services providers.

Note. ^aMeasured using a Likert scale. ^bModified for the purposes of this study.

Scale of Attitudes toward Disabled Persons-Prior Contact Form-R (SADP-PCF-R).

The SADP (Appendix B; Antonak, 1982) was first developed in 1981 to measure general

attitudes among the public towards others' disabilities. Further, this scale was developed as an alternative to the Attitudes toward Disabled Persons, Form O (Lam et al., 2010). The SADP-PCF-R is a brief three-question questionnaire given to participants to indicate prior level of contact with persons with disabilities (Antonak & Livneh, 1988). The questions prompt participants to report their frequency of contact, intensity of contact, and knowledge of people with disabilities (Brostrand, 2006). For scoring and data analysis purposes, participants' scores were added for a total score ranging from 3 to 18. Higher scores from the SADP-PCF-R are indicative of more frequent contact with persons with disabilities (Lam et al., 2010). This scale was used for this study to quantify prior contact and knowledge of persons with disabilities. Participants were asked to rank all their responses on a 6-point Likert-type scale. Past research has illustrated that personal interactions with persons with disabilities positively correlate with favorable attitudes (Corrigan et al., 2003; Fichten, et al., 2005).

Level of Familiarity Scale (LOF). The LOF (Appendix C; Corrigan, 2012) presents a series of 11 statements that range from no contact (e.g., "I have never observed a person that I was aware had a severe mental illness") to frequent contact including personal experiences with mental illness (e.g., "I have a severe mental illness"; Corrigan, 2012). Instructions provided on the LOF indicate that participants are to place a checkmark next to the statements that represent their personal experiences. Scoring of the LOF may be complicated by the fact that participants may have placed checkmarks next to more than one statement. Therefore, scoring procedures provided by Corrigan (2012) indicate that the selected statement that corresponds to the highest degree of contact should be considered for the overall score. For example, if a participant placed a checkmark by both statements, "I have observed, in passing, a person I believed may have had a severe mental illness" (score 2) and "I have watched a documentary on television about severe

mental illness” (score 4), the form was given an overall score of “4.” This score produced by the LOF (e.g., 1-11) represents level of intimacy with persons with mental illness. Therefore, a score of “11” denotes the most intimate contact and a score of “1” represents the least contact with persons with SPMI (Corrigan, 2012). This scale was developed by Corrigan, Edwards, and colleagues (2001) and based upon other instruments that existed in the literature. High interrater reliability (0.83) and rank order of the items were established upon the initial development of the LOF (Corrigan, Edwards, Green, Diwan, & Penn 2001). The SADP-PCF-R and LOF used to collect data for this study can be found in Appendixes B and C, respectively. Permission to use the LOF was granted on February 20, 2017, by Dr. Corrigan for use in the current study (see Appendix K).

The researcher constructed the demographic form (DF) for this study (see Appendix A). This form gathered information from each participant including age, gender, and academic level at the university. Data obtained for this form were used to describe the demographics of the sample and for statistical analysis. Age, gender, number of years worked professionally, and academic standing were used as predictors in a hierarchical multiple regression analysis as discussed later in this chapter.

Attitude Measurements

A number of scales and instruments have been developed to evaluate the effects of stigma and attitudes towards persons with disabilities (Antonak & Livneh, 2000). Other scales evaluate attitudes towards persons with mental illness (Findler et al., 2007). Both the Attribution Questionnaire (AQ) and the Mental Health Provider Stigma Inventory (MHPSI) were used for the purposes of quantifying attitudes towards persons with SPMI.

The Attribution Questionnaire-27 (AQ-27). The AQ measures fundamental elements of Corrigan’s social cognitive model (Corrigan et al., 2003; Link et al., 2004). This model was informed by the work of Weiner et al. (1993) on attribution theory to understand the personal attitudes and social stereotypes regarding mental illness (Corrigan, 2014). The initial AQ included 21 questions and measured reactions to an individual with an SPMI. This scale measured perceptions of personal responsibility, pity, anger, fear, helping avoidant behavior, coercion, and segregation (Corrigan et al., 2002). The evaluation of attitudes towards individuals who have SPMI was collected using the AQ-27.

Three updated versions of the AQ were developed for use with different populations, including children (Corrigan, 2014). The full 27-item version (AQ-27) includes items that address nine stereotypes about mental illness. The updated AQ-27 (Appendix D) includes factors similar to the original AQ. However, the AQ-27 has slightly altered domains that Corrigan (2014) defined as responsibility, pity, anger, dangerousness, fear, help, avoidance, segregation, and coercion towards individuals with mental illness. Coercion, in this context, is defined as the degree to which persons with mental illness should be forced into treatment for their condition (Corrigan, 2014).

The original AQ-27 scale includes a short vignette about a 30-year-old man named Harry, who has schizophrenia. For the purposes of the current study, the instructions for the AQ-27 were slightly altered in that participants were to reflect upon the vignette that they were exposed to (see Appendix D). Further details of the modified vignette are provided later in this chapter. Respondents were asked to read the vignette and respond to each question using a 9-point Likert-type scale (e.g., 1 = *not at all*, 9 = *very much*). Questions included: “I would feel unsafe around Harry” (dangerousness) or “I would share a car pool with Harry every day” (avoidance). Scoring

of the AQ-27 included calculating the sum of three items in each domain, including reversing scores in the help and avoidance domains. Each domain received a score between 3 and 27. High scores represented a higher degree of agreement with each domain (Corrigan et al., 2004).

Test-retest reliability coefficients were collected on the AQ-27 in Corrigan et al. (2004). The results indicated fairly strong evidence for all nine domains: responsibility (0.55), pity (0.82), anger (0.64), dangerousness (0.87), fear (0.86), help (0.80), avoidance (0.78), segregation (0.75), and coercion (0.56). The AQ has been utilized in many different scientific investigations (Cooper et al., 2003; Corrigan et al., 2001; Corrigan et al., 2003). The AQ has been translated and used in different languages (Pingani et al., 2012). Permission to use the AQ-27 was granted on February 20, 2017, by Dr. Corrigan for use in this study (Appendix K).

The Mental Health Provider Stigma Inventory (MHPSI). The MHPSI (Appendix E; Kennedy et al., 2014) is a scale developed to evaluate the degree of mental health stigma among human services providers. Further, this scale evaluates stigma influences, attitudes, behaviors, and coworker influence (Kennedy et al., 2014). The environmental context also impacts human services providers' stigmatization of mental health. Social desirability within a work environment impacts the attitudes towards individuals with mental illness (Kopera et al., 2015). Therefore, the MHPSI also takes into account how coworkers' attitudes or behaviors influence others within the same work environment. Scoring of the instrument and interpretation of the MHPSI are provided by Kennedy et al. (2014). Three subscales, attitudes, behavior, and coworker influences, are calculated by obtaining the total score of the items within each respective section. Higher scores on all subscales denote less favorable attitudes towards clients with mental illness.

Through the development phase, Kennedy and colleagues (2014) found the internal scale consistency of the MHPSI as measured by Cronbach's α coefficients were relatively high ($\alpha = .94$). Additionally the internal scale consistencies for all three subscales were measured as attitudes ($\alpha = .83$), behaviors ($\alpha = .85$), and coworker influences ($\alpha = .94$). The construct validation of the MHPSI occurred when items in the subsection were correlated with established measures in the field. Permission to use the MHPSI was granted on August 4, 2017, by Dr. Stephanie Kennedy for use in this study (Appendix L). The full version of this scale is provided in Appendix E of this document.

Research Design

The intervention consisted of two vignettes. Both vignettes provided information about an individual who has a mental illness diagnosis. In the first vignette (Vignette A), a person (Harry) with schizophrenia spectrum disorder was described. The second (Vignette B) was similar to Vignette A; however, the description provided information about an individual (Gary) with a diagnosis of generalized anxiety disorder (GAD). Further details will be given. Following exposure to either vignette, each participant completed the Attribution Questionnaire-27 (AQ-27; Corrigan, 2012) and the Mental Health Provider Stigma Inventory (MHPSI; Kennedy et al., 2014).

An equal number of approximately 40 participants were exposed to either Vignette A or Vignette B; excluding the differences in the vignettes, participants' experiences were similar. Random assignment to Vignette A or B was achieved through the use of SurveyMonkey software (Howell, 2010). All participants were asked to complete frequency of contact (LOF) and prior contact (SADP-PCF-R) forms first. Then each participant viewed the vignette followed

by administration of the AQ-27 and MHPSI. Finally, all participants answered demographic information on the demographic form.

Methods

Data collection occurred using the online survey program called SurveyMonkey. SurveyMonkey is a password-protected survey program that was used to develop and distribute all materials for this study (2018). There are many benefits of using an online survey including less administrative cost, ease of use for participants, less risk of error in data, and quicker response time (Dillman et al., 2009). The online survey incorporated random assignment to groups by design. Each condition was weighted equally to ensure participants were assigned to each group randomly.

Email requests, flyers, and in person requests by the primary researcher were used to inform potential participants of the study. Using the methods proposed by Dillman et al. (2009), multiple email requests were sent to encourage participation (Appendix F). Potential participants were sent a total of three emails over the course of 6 weeks at Southern Illinois University-Carbondale (SIU). Participant recruitment from other universities was undertaken in this study through national professional organizations. Each participant accessed all documents required for participation including the consent for voluntary participation document, prior contact measures (see Appendix B), the attitudinal measures (see Appendices D and E), and the demographic form (see Appendix A). Participants took an average of 11 minutes to complete the online survey.

Population and Sample. A convenience sampling procedure was used to approach 120 total participants. Power analysis was used to inform the minimum number of participants needed for this study, as will be discussed later (Creswell, 2014). The choice of using a

convenience sampling procedure was made due to the need to approach participants who were in counseling and other related programs at SIU and other universities (Creswell, 2014; Gliner, Morgan, & Leech, 2009). Inclusion criteria for participation in this study were used. First, individuals may not have previously participated. Second, individuals must be at least 18 years of age or over. Finally, individuals must be currently enrolled (at the time of data collection) either full or part time in a human service graduate program (e.g., rehabilitation counseling, social work, counseling psychology, etc.) at a postsecondary institution in the United States.

The recruitment strategy included three approaches. First, potential participants were identified and recruited from Southern Illinois University, Carbondale (SIU) in Carbondale, Illinois. Next, the researcher expanded the recruitment of participants from other universities throughout the United States (the number and location of these universities are provided). Finally, the researcher sought approval from regional and national professional organizations in counseling and human services to notify student members.

As mentioned, the first approach at participant recruitment occurred on the SIU campus. I (primary researcher) had face-to-face meetings with faculty and instructors on campus to request permission to enter their classes and email requests for voluntary participation. I posted informational flyers (Appendix G) in many human services departments on the SIU campus. Some individuals taking part in this study were asked in person to volunteer. I entered classes in human services disciplines and explained the general purpose, inclusion criteria, incentives for participation, and specific time requirements needed for participation.

The second recruitment strategy involved the recruitment of participants from other universities throughout the United States. Personal email requests were sent to departmental chairs and administrative staff of 16 different universities throughout the United States. I made

several contacts to university departments and professional organizations throughout January through late April of 2018.

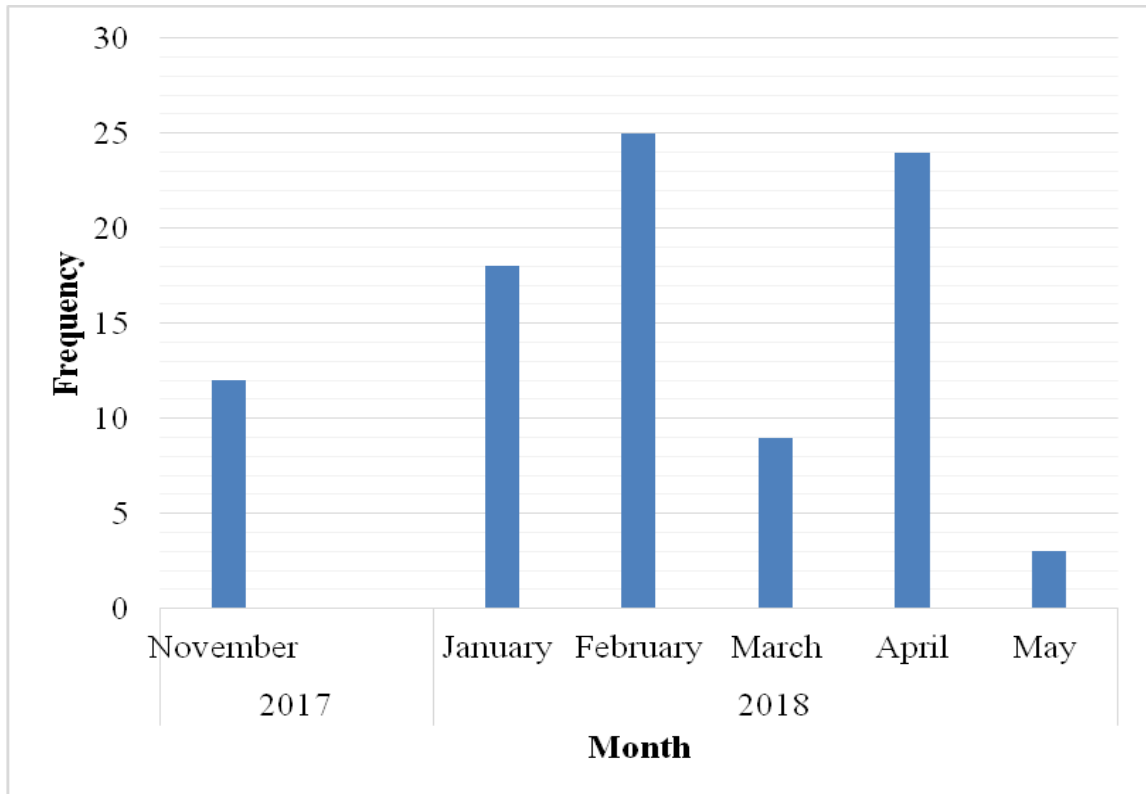


Figure 1. Number of participants obtained per month.

Each university was chosen based upon the proximity to Southern Illinois, or professional contacts at the institution. Through the aforementioned procedures, participants from 27 different universities took part in this study. The majority of participants (72%) reported being from universities located in the Midwest. The Midwestern states were Illinois, Indiana, Ohio, Minnesota, Michigan, Iowa, and Wisconsin. Others reported being from universities and colleges located in Western (6.6%), Southern (7.9%), and Eastern (13%) regions of the United States.

The final recruitment procedure used was the contact of professional organizations. These organizations consisted of student members whom this study targeted and who lived throughout the United States. Student members of these professional organizations were approached because they represented a variety of individuals enrolled in counseling (or closely related) programs throughout the country. Professional organizations contacted for this study included the National Council on Rehabilitation Education (NCRE), the American Counseling Association (ACA), the National Association of Social Workers (NASW), the Missouri Mental Health Counselors Association (MMHCA), the Illinois Mental Health Counselors Association (IMHCA), and the Illinois Counseling Association (ICA). Permission to distribute the survey was obtained from NCRE, ACA, and NASW for this study. Given the number of programs and organizations approached for the purposes of participant recruitment, I was unable to determine the approximate number of students in each program that was contacted for the purposes of this study. Figure 1 displays the frequency of participation for each month of data collection.

Vignettes. As discussed previously, two modified vignettes were used for this study. Both vignettes provided information about an individual who lives with an SPMI. Additional information included how the mental illness impacted the daily life and functioning of that individual. The only differences between the two vignettes were the disclosed diagnosis and the individual's name.

Vignettes A and B were based on the vignette developed in Corrigan's (2012) Attribution Questionnaire. The original vignette states: "*Harry is a 30-year-old single man with schizophrenia. Sometimes he hears voices and becomes upset. He lives alone in an apartment and works as a clerk at a large law firm. He has been hospitalized six times because of his illness*" (Corrigan, 2013, p. 12). The current study modified this vignette to reflect the aims of

the current design. In one vignette, the subject named “Harry” was described as having a diagnosis of schizophrenia spectrum disorder (Vignette A). In the other vignette, the subject named “Gary” was described as having a diagnosis of generalized anxiety disorder (Vignette B).

For the current study, the first vignette (A) stated: *“Harry is a 25-year-old single man with schizophrenia. Harry is a part time student studying psychology at a university and lives in his own apartment. Because of his illness, Harry misses classes and does not leave his apartment for days. He has been hospitalized in the past because of his illness”*.

The second vignette (B) stated: *“Gary is a 25-year-old single man with generalized anxiety disorder. Gary is a part time student studying psychology at a university and lives in his own apartment. Because of his illness, Gary misses classes and does not leave his apartment for days. He has been hospitalized in the past because of his illness”*.

Both vignettes were designed to be the approximate length of the original and provided a similar amount of information about the subject. The use of vignettes can prompt participants in a specific way according to the purpose of the planned analysis (Finch, 1987; Hayward & Bright 1997). Vignettes have many advantages over other methodologies, one being their reasonable cost and accessibility to researchers (Wilson & While, 1998). Vignettes also have the advantage of presenting a consistent stimulus to each participant. Participants in this study may have had a wide range of prior knowledge or experience with mental illness. Vignettes are generally accessible to participants who do not have a thorough understanding of the topic (Hughes & Hughes, 2001, 2004). As described, the AQ-27 was used to gather data from each participant following his or her reviewing of the vignette.

Pilot Study. All materials used were submitted to the dissertation committee overseeing this project in the Rehabilitation Institute at Southern Illinois University-Carbondale (SIU).

Upon permission of this committee, the materials were sent to the SIU and Troy University Human Subjects Committees for review and approval (Appendices H & I). A pilot study was conducted to test the methodologies developed for this study using a group of participants (Gliner et al., 2009). The subject pool for the pilot study consisted of alumni of the rehabilitation counseling program. Access to this group was obtained through the Rehabilitation Institute at SIU. Pilot testing is used for many purposes, including understanding the feasibility of testing materials. Pilot test data were gathered to assess average time to participate and content validity of the surveyed items. Hertzog (2008) recommended that an appropriate size of the pilot study is dependent on what the researcher hopes to accomplish with the data. For example when a researcher is evaluating the feasibility of testing materials, the selection of the sample size has a direct influence on predicting the outcome of the full study; thus, the greater the sample size, the better the prediction of some property of interest. Using Hertzog's (2008) recommendations for sample size, I may have been able to make inferences to the collection of all data. The aim of this pilot study was to gather feedback (Appendix J) to identify ease of process, test the effects of the vignette, and identify any concerns about the study materials. Twelve participants were approached to take part in the pilot study. Data results are presented in the next chapter.

Statistical Analysis

Table 2 summarizes each research question, the corresponding variable list, and the statistical analysis used to address each question. A description of the independent and dependent variables is provided as well as the scale of measurement for each.

Table 2

Summary Table of the Completed Data Analyses

Research Question	Variable list* (Scale of Measurement)	Statistical Analysis
1: Is there a significant difference in mean scores on the AQ-27 and MHPSI between students from counselor education, rehabilitation counseling, and other academic programs?	DV(1): Scores obtained MHPSI (Interval) DV(2): Scores obtained on the AQ-27 scale (Interval) IV (1): Specialty Area (Nominal) “Mental Health Counselor” - 1 “Rehabilitation Counselor” - 2 “Other” ^a - 3.	One-way between-groups analysis of variance (ANOVA) Ryan-Einot-Gabriel-Welsch Range (REGWR)
2: What is the function of the type of mental illness (schizophrenia spectrum disorder versus generalized anxiety disorder) on attitudes towards individuals with SPMI among HSPs in training?	DV (1): Scores obtained on the AQ-27 scale (Interval) IV (1): Type of mental illness (Nominal): • Group 1: Vignette A (Harry) • Group 2: Vignette B (Gary)	Independent sample t-test Pearson correlation coefficient
3: How do prior contact and familiarity factors influence attitudes towards individuals with SPMI while controlling for demographic characteristics?	DV(1): Scores obtained on the AQ-27 total scale (Interval) Level 1 • IV (1a): Age. (Ordinal) “18 to 24” - 1, “25 to 34” - 2, “35 to 44” - 3, “45 to 54” - 4, “55 to 64” - 5, “65 to 74” - 6, & “75 and older” -7 • IV (1b): Gender (Nominal) “Male” - 1, “Female” -2 • IV (1c): Program of study (Nominal) ^b Dummy variable 1:	Hierarchical Multiple Regression

Mental health counselor – 1,
Rehabilitation counselor – 0,
Other - 0
Dummy variable 2:
Mental health counselor – 0,
Rehabilitation counselor – 1,
Other – 0.

- IV (1d): Work experience
(Ordinal)
“Under 1 year” – 1, “1 -2 years”
-2, “3-4 years” – 3, “5-6 years” –
3, & “Over 6 years”– 4
- IV (1e): Level of education
(Ordinal) “Undergraduate” – 1,
"Graduate" - 2

Level 2

- IV(2a): Score obtained from
LOF (Interval)
- IV(2b): Score obtained from the
SADP- PCF-R (Interval)

Note. DV = Dependent Variable, IV = Independent Variable. The coding scheme used for data analysis is provided.

^aThe “other” category includes participants whose specialty areas were counseling psychology, marriage and family therapy, mental health counseling, school counseling, and social work.

^bDummy variables used for the purposes of conducting the hierarchical multiple regression.

Table 3 outlines the subscales from the AQ-27 and MHPSI used for this study. This table presents all variables and the range for each subscale for both the AQ-27 and MHPSI. This table shows the dependent measures obtained by using the AQ-27 and MHPSI. For this study, I calculated the total score through the addition of the subscores for each subscale.

Table 3

Defining all Subscales Including Range Values of the AQ-27 and MHPSI

Attribution Questionnaire-27		Mental Health Provider Stigma Inventory	
Subscale	Range	Subscale	Range
Blame	3 – 27	Attitudes	9 – 63
Anger	3 – 27	Behaviors ^a	8 – 56
Pity	3 – 27	Coworker Influences	7 – 49
Help ^a	3 – 27		
Dangerousness	3 – 27		
Fear	3 – 27		
Avoidance ^a	3 – 27		
Segregation	3 – 27		
Coercion	3 – 27		
Total Score (Range)	27 – 243	Total Score (Range)	24 – 168

Note. ^aReverse scoring used

The total scores obtained from the AQ-27 and MHPSI were used in the statistical analysis of this study. Using the total score from both the AQ-27 and MHPSI simplified the data analysis. Furthermore, this allowed for the comparisons between means (using procedures such as independent sample t-test and one-way ANOVA). Working with multiple dependent variables (subscore values) was considered but avoided due to the limits of the overall sample size (Huitema, 2011). I conducted a hierarchical multiple regression analysis to address the third research question (Petrocelli, 2003; Tabachnick & Fidell, 2007). This procedure is used to predict a criterion (Y) on the basis of simultaneous knowledge of all the predictors (Green & Salkind, 2014; Howell, 2010). A hierarchical multiple regression analyses was used because a

hypothesized order to the predictors was established prior to analysis (Petrocelli, 2003). Further, based on the prior literature, I expected that the prior contact or familiarity scores would play a more important role in predicting the outcome variable (AQ-27) than the demographic information (Corrigan et al., 2012; Fichten et al., 2005; Hackler et al., 2016; Sadow et al., 2002; Upton et al., 2005). Therefore, I implemented a two-step level process for the evaluation of these factors in the specific order established to address the research question (Petrocelli, 2003).

Further, using this design, I was able to examine the influence of particular predictors while holding others constant in the model (Howell, 2010). Finally, to further evaluate the role of stigmatized attitudes towards individuals with SPMI, several predictors were examined (e.g., demographic factors, attitudes, and degree/ frequency of contact).

Statistical Assumptions. The statistical assumptions of a between-subjects one-way ANOVA, independent samples t-test, Pearson correlation coefficient analysis, and hierarchical multiple regression will be discussed. A between-subjects one-way ANOVA and follow-up post-hoc procedures were used to address the first research question. The statistical assumptions of a one-way ANOVA include homogeneity of variance, normality, and independent observations (Howell, 2010). Normality in each condition was checked, and the normality assumption was not markedly violated. Finally, each data point represented an individual response and was assumed not to be influenced by others.

An independent sample t-test and Pearson correlation coefficients were used to address the second research question. The statistical assumptions of the independent samples t-test are the assumption of normality and the homogeneity of variance assumption. These assumptions were addressed prior to data analysis.

There are many statistical assumptions for multiple regressions that specifically apply to fixed effects models (Green & Salkind, 2014). These assumptions are that the multivariate variable is normally distributed, there is a linear relationship between the predictor and outcome measures, multicollinearity, and independence of observations (Tabachnick & Fidell, 2007). To insure the multivariate variable was normally distributed, visual inspection of the P-P plots was used. To evaluate the linear relationship between the independent and dependent variables, a graph was created to explore the relationship between the expected and observed cumulative probability values. Visual inspection of these graphs showed that these values fell approximately along a linear path. Second, the standardized residual values (min/max) were within appropriate ranges (-3 and +3). Finally, Cook's distance values were all shown to have values within the 0 to +1 range. To address the issue of multicollinearity, a correlation matrix was established between the dependent variable and all predictor variables (see Table 12, Chapter 4). The correlation between all the predictor variables was small ($r < .70$; Howell, 2010).

Using participants who are attending a university carries a host of generalizability issues (Antonak & Livneh, 1988; Corrigan et al., 2012). Contributing to generalizability deficits, convenience sampling was used to access the sample. Nadler et al. (2015) suggested that the use of nonprobability sampling procedures is fairly common in psychological research. However, the use of these sampling procedures may produce results that cannot be generalized to the population, have increased variability, and pose other risks to external validity (Trochim & Donnelly, 2006). To counterbalance these effects, I used random assignment of participants to groups (Gliner et al., 2009). The current study used SurveyMonkey to randomly assign participants to either vignette. Random selection of a sample from the population was not achieved for this study.

Power Analysis. One issue with using null hypothesis significance testing is that the results from a sample do not necessarily reflect the true state of affairs in the population even when a statistically significant result is found (Rutherford, 2011). Other indices are therefore needed to support the results of a test to assist in the determination of practical significance. Effect size is used as a standard measure of how much impact the treatment had on the dependent variable (Gliner et al., 2009). The effect size is important in planning studies so that an estimate of an appropriate sample size can be made (Howell, 2010). Towards the goal of establishing an appropriate effect size, Murphy and Myers (2004) suggested using widely accepted conventions about what represents small, medium, or large effect sizes. Cohen (1988) published standards regarding small ($< .2$), medium ($< .5$), or large ($< .8$) effect sizes (Chan, Bezyak, Ramirez, Chiu, & Fujikawa, 2010).

Further, power analysis is a powerful tool in determining how many subjects should be used in a given study, how many observations should be used, and what are the appropriate criteria for determining statistical significance (e.g., setting an alpha level at .01 or .05; Gliner et al., 2009; Meline, 2006). The simplest method for increasing the test sensitivity is to increase the sample size. As the effect size increases, so does the statistical power of the test. In addition, when the alpha level is set to .05, the overall statistical power increases versus when it is set to .01 or .001. The relationship between statistical power and the alpha level is seen as a tradeoff. The decision to assign alpha to a given value is done to reduce the risk of a Type I error (or a false positive result). Murphy and Myers (2004) emphasized that any efforts to reduce the incidence of Type I error may impact the overall power of a result, further increasing the risk of a Type II error. Using the G*Power statistical program, I conducted three different power calculations corresponding to primary statistical analysis for each research question (Chan et al.,

2010). These calculations showed that sample sizes of 159, 102, and 68 were needed to address Research Questions 1, 2, and 3, respectively, with an expected power of 0.80 (see Table 4).

Table 4

A Priori Evaluation of Expected Sample Size Given Procedure, Effect Size, and Power

Calculations

Research question	Procedure used	Effect size	Expected power	DF	Sample size (minimum)
1	Between-subjects one-way ANOVA	Cohen's $f = .25$.80	(2, 156)	159
2	Independent samples t-test	Cohen's $d = .50$.80	(100)	102
3	Hierarchical multiple regression ^a	$r^2 = .15$.80	(2, 68)	68

Note. All calculations were found using G*Power.

^a Seven predictors were used in this analysis. Alpha level was set at .05.

CHAPTER 4

RESULTS

The goal of this study was to investigate three factors. The first factor was the effect of academic discipline on stigmatized attitudes towards SPMI. The second factor was the role of the independent variable (mental health diagnosis) in stigmatized attitudes towards SPMI. The third factor was the effect of demographic characteristics on stigmatized attitudes towards SPMI. This chapter will present the results of the pilot study and each research question and will conclude with a general review of the results. Data analyses were conducted using IBM SPSS Statistics (2015).

Pilot Study

Prior to the collection of all data, a pilot study was conducted. A total of 12 participants enrolled in the pilot study and included two males (16.7%) and 10 females (83.3%). The primary age range reported by pilot study participants was between 25 and 34 years (7; 58.3%), and the primary ethnicity was White/Caucasian (10; 83.3%). Data collected confirmed several factors: the relative ease of participation (completion took an average of 11 minutes), the successful manipulation of the independent variable, and recognition of the mental health diagnosis given. For example, subjects who were randomly assigned Vignette A (Harry, who had a schizophrenia diagnosis) correctly remembered that the mental health diagnosis was schizophrenia following the conclusion of the study. Visual inspection of the data appeared to confirm that there were differences between Vignettes A and B with respect to scores on the AQ-27 (see Figure 2). An independent sample t-test was conducted to test the mean difference between the two vignettes and the AQ-27 total score. In the pilot study, seven participants were exposed to Vignette A (mean = 97.71, SD= 15.85) and five participants were exposed to Vignette B (mean = 76.20, SD

= 12.40). The results of the t-test were statistically significant, $t(10) 2.52, p = .03$, (Cohen's $d = .50$). Based on the results obtained, I proceeded with data collection for the full study.

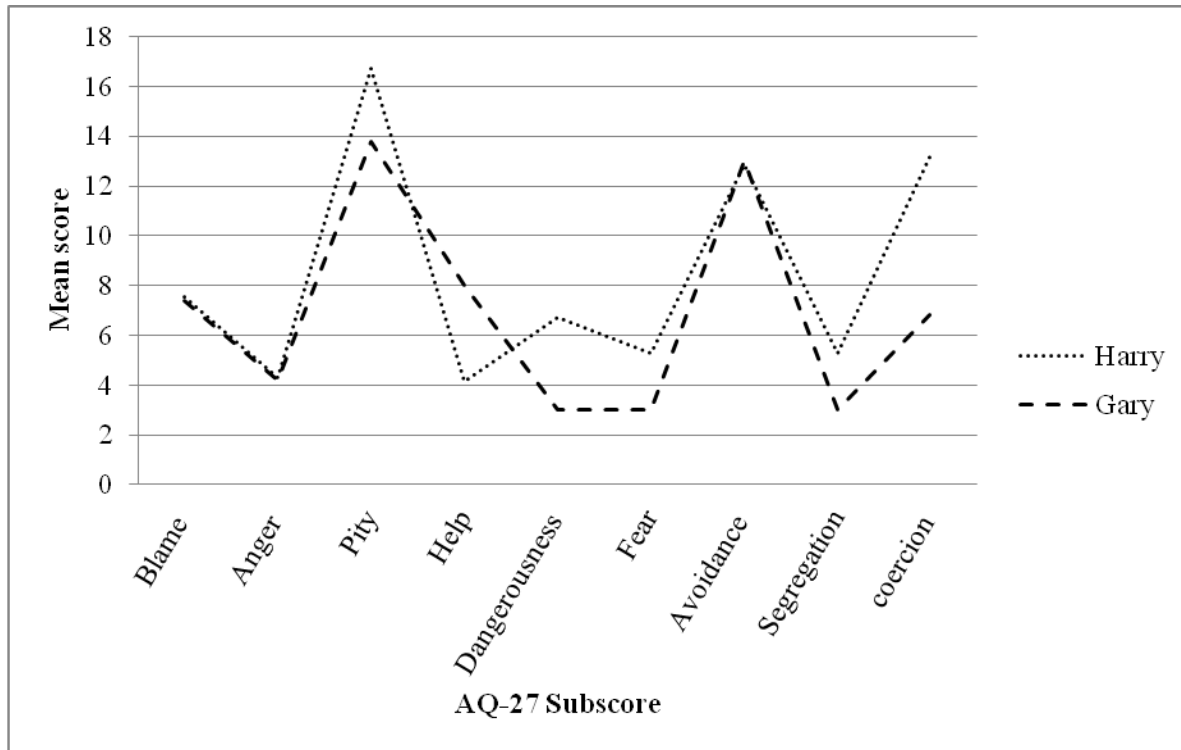


Figure 2. Line graph of vignette type by AQ-27 scale, pilot study.

Sample Characteristics

A total of 120 individuals took part in this study during the data collection period. Data collection for this study occurred from January 2018 to May 2018. A total of 12 individuals took part in the pilot study between November and December 2017. There was a 75% completion rate among all who started the study. The results from 21 individuals were not used due to incomplete data. Of these 21 individuals, 11 dropped out shortly after reviewing the consent form. Five participants discontinued after completing the LOF and SADP-PCF-R forms. The remainder of participants discontinued during the AQ-27 or MHPSI instruments. Therefore, the

primary study sample consisted of 79 graduate-level HSPs from 27 universities throughout the contiguous United States. Thirty individuals identified as entering the mental health counseling field (38%), 26 as rehabilitation counseling professionals in training (32.9%), 10 as social workers (12.7%), and four as counseling psychologists (5.1%). Twenty participants were males (20%) and 58 were females (73.4%). The majority of those who participated identified as being White/Caucasian (59, 74.7%) and between the ages of 18 and 34 years (27, 64.6%). A full account of the demographic information is shown in Table 5.

Table 5

Demographic Data Summary Table

Demographic Characteristics	Frequency (%)
Age (years)	
18 to 24	24 (30.4%)
25 to 34	27 (43.2%)
35 to 44	13 (16.5%)
45 to 54	11(13.9%)
55 to 64	4(5.1%)
65 to 74	-
75 or older	-
Gender	
Male	20 (25.3%)
Female	58 (73.4%)
Prefer not to answer	1 (1.3%)
Ethnicity	
American Indian or Alaskan Native	1 (1.3%)
Asian or Pacific Islander	2 (2.5%)
Black or African American	7 (8.9%)
Hispanic or Latino	2 (2.5%)
White / Caucasian	59 (74.7%)
Multiple responses	4 (5.1%)
Prefer not to answer	4 (5.1%)
Highest degree obtained	
Undergraduate degree	28 (35.4%) ^a
Graduate Masters	48 (60.8%)
Graduate Doctorate	3 (3.8%)

Other (please specify)	–
Specialty Area	
Counseling Psychology	4 (5.1%)
Marriage and Family Therapist	1 (1.3%)
Mental Health Counselor	30 (38%)
School Counselor	2 (2.5%)
Social Work	10 (12.7%)
Rehabilitation Counselor	26 (32.9%)
Other	–
Work Experience	
Under 1 year experience	13 (16.5%)
1-2 years	18 (22.8%)
3-4 years	11 (13.9%)
5-6 years	8 (10.1%)
Over 6 years	10 (12.7%)
Disability Status	
No	60 (75.9%)
Yes	19 (24.1%) ^b
Physical Disorder	1 (1.3%)
Psychological Disorder	34 (43%)
Learning Disability	5 (6.3%)
Other	16 (20.3%)

Note. ^a Participants’ answers were manually transcribed from the “other” category; ^b the total “yes” responses from the disability status do not correspond to the number of disability type specifications. This was due to an error in the skip logic established in SurveyMonkey.

Research Question 1 Results

Is there a significant difference in mean scores on the AQ-27 and MHPSI between students from counselor education, rehabilitation counseling, and other academic programs?

As indicated, 30 individuals self-identified as entering the mental health-counseling field (38%) and 26 identified as rehabilitation counseling professionals in training (32.9%). Other participants identified as enrolled in social work (10, 12.7%), marriage and family therapy programs (1, 1.5%), counseling psychology (4, 5.1%), school counseling programs (2, 2.5%), and other programs (6, 7.8%). Given the overall sample size, this third group of participants was

classified as “from other programs” (23, 29.1%). Table 6 provides descriptive statistics from the three programs categorized by the AQ-27 and MHPSI scores.

The statistical assumptions of the one-way ANOVA were first evaluated. To check the homogeneity of variance assumption, a Levene's statistic was conducted. Levene's test showed that the variance assumption for the AQ-27 total scores was not violated, $F(2,76) = .94, p = .40$. Further, Levene's test showed that the variance assumption for MHPSI total scores was violated $F(2,76) = 6.75, p = .002$. Given this second result, the Welch test was performed. The Shapiro Wilks statistic was used to test for normality; the results can be found in Table 6.

Table 6

Descriptive Statistics for Program of Study by AQ-27 and MHPSI Total Scores

Condition	n	Mean	Median	SD	Min.	Max.	Skew	Test for normality		
								Shapiro-Wilk		
								Statistic	df	Sig.
AQ-27										
Rehabilitation Counseling	26	64.50	26.50	16.91	27.00	107.00	0.36	.976	26	.77
Mental health counseling	30	74.23	68.00	19.62	43.00	116.00	0.52	.953	30	.20
Other Programs ^a	23	77.70	77.00	16.79	37.00	101.00	-0.53	.954	23	.36
MHPSI										
Rehabilitation Counseling	26	43.77	41.50	9.92	31.00	66.00	0.65	.934	26	.10
Mental health counseling	30	50.53	52.00	10.15	32.00	72.00	0.02	.966	30	.44
Other Programs ^a	23	52.92	52.00	16.16	34.00	87.00	0.57	.901	23	.03

Note. n = sample size; AQ- 27 = Attribution Questionnaire- 27; MHPSI = Mental Health Provider Stigma Inventory; the range for the AQ-27 total score is 27 – 243; the range for the MHPSI total score is 24 -168.

^a Other programs included all other participants who did not report being in a rehabilitation counseling or mental health counselor program; alpha level was set at .05.

A one-way between-groups ANOVA was conducted to analyze the mean difference between these three groups. Scores obtained on both the AQ-27 and MHPSI were used in the data analysis. The first ANOVA analysis to compare program of study by AQ-27 scores was statistically significant, $F(2,76) = 3.66, p = .03$. The second ANOVA analysis was conducted using a Welch test comparing program of study by MHPSI scores. This result was also statistically significant, $F(2, 45.90) 4.30, p = .02$. The strength of the relationship between the program of study and the dependent variables, as measured by eta squared (η^2), was small. Program of study accounted for only 8.8% of the variance in the first dependent variable (AQ-27) and 9.3% of the variance in the MHPSI scores (Tabachnick & Fidell, 2007).

Table 7

One-Way Analysis of Variance for the Effects of Program of Study by AQ-27 and MHPSI

Variable and source	SS	MS	df	F	p	(η^2)
AQ-27						
Between	2358.15	1179.08	(2, 76)	3.66	.030*	.088
Within	24510.74	322.51				
MHPSI						
	-	-	(2, 45.90)	4.30 ^a	.019*	.093

Note. AQ- 27 = Attribution Questionnaire- 27; MHPSI = Mental Health Provider Stigma Inventory; ^a Welch *F*-test statistic.

* $p < .05$

Given the significant difference in both ANOVAs, follow-up post-hoc procedures were conducted. The significance (α) levels for these procedures were set at .05. I chose to run the post-hoc procedure, Ryan-Einot-Gabriel-Welsch range (REGWR) for the first factor (AQ-27), and Tamhane's T2 procedure for the second (MHPSI). Tamhane's T2 was used as the variance assumption for MHPSI total scores was violated (Kim, 2015). REGWR is a step down post-hoc procedure based upon a modification of Student-Newman-Keuls (Kim, 2015). There was a

significant difference between rehabilitation counselors and participants from mental health counselor programs. Additionally, there was a significant difference between rehabilitation counselors and the other programs category. This result was the same for both the AQ-27 and MHPSI instruments. There was no significant difference between mental health counselors and the other program category as measured as by the REGWR (see Table 8). A boxplot was developed to display mean difference between program of study and the AQ-27 total scores (Figure 3) and the MHPSI total scores (Figure 4).

Table 8

Multiple Comparison Procedures for Program of Study by AQ-27 and MHPSI

Dependent variable	Independent Variable	Homogeneous Subsets		
		1	2	3
AQ-27	Rehabilitation Counselors	64.50	-	
	Mental health counselors		74.23	
	Other Programs ^b		77.70	
	<i>Sig.</i> [*]	1.00	0.49	
MHPSI ^a	1. Rehabilitation Counselors		-6.76*	-9.14
	2. Mental health counselors			2.38
	3. Other Programs ^b			
	<i>Sig.</i> ^a			

Note. AQ- 27 = Attribution Questionnaire- 27; MHPSI = Mental Health Provider Stigma Inventory

* Subset for alpha = .05; the REGWR is based upon the F statistic; ^a results based upon the Tamhane's T2 procedure; ^b Other programs included all other participants who did not report being in a rehabilitation counseling or mental health counselor program.

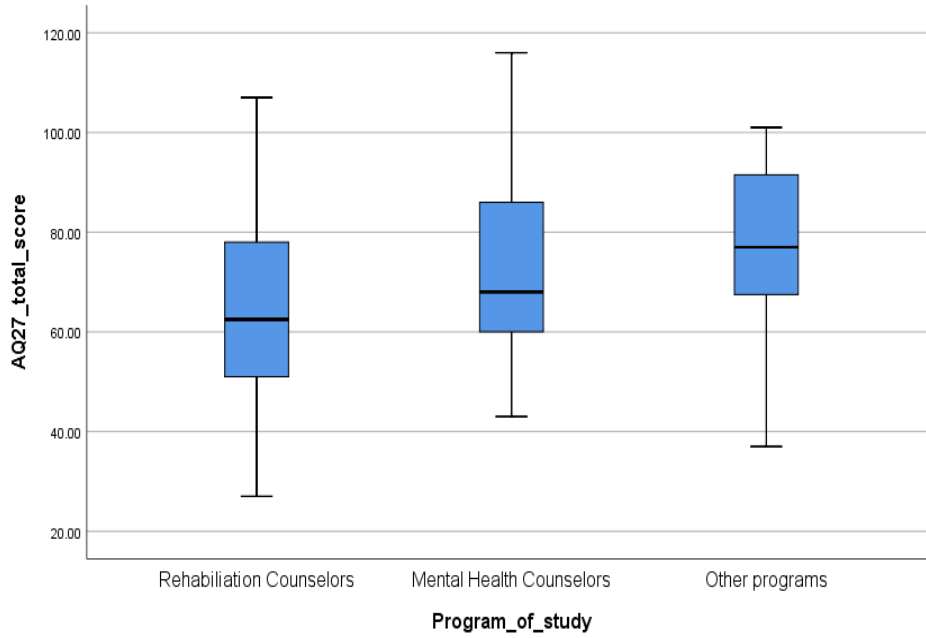


Figure 3. Boxplot of the program of study by AQ-27 total scores.

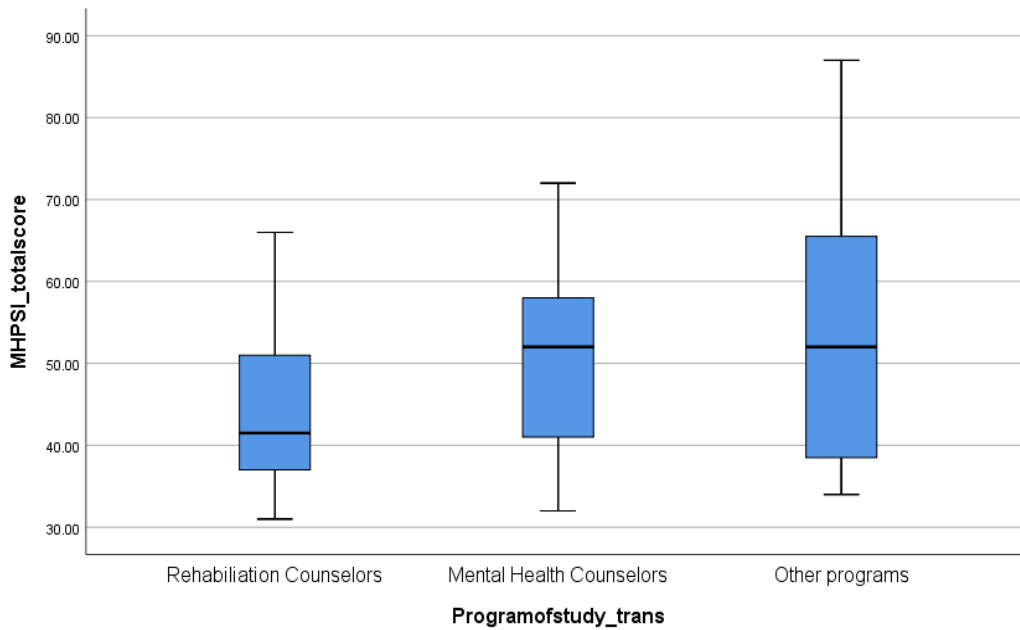


Figure 4. Boxplot of the program of study by MHPSI total scores.

Research Question 2 Results

What is the function of the type of mental illness (schizophrenia spectrum disorder versus generalized anxiety disorder) on attitudes towards individuals with SPMI among HSPs in training?

To address the second question, the total sample was divided into two groups: Participants who were exposed to Vignette A (Harry) – 46 (58.2%) and those who were exposed to Vignette B (Gary) – 33 (41.8%). Further descriptive statistics are provided in Table 9. To check the homogeneity of variance assumption for the independent samples t-test, a Levene's statistic was conducted. Levene's test showed that the variance assumption for the AQ-27 scores was not violated $F(77) = .39, p = .53$. The Shapiro-Wilk statistic was used to test for normality; the results can be found in Table 9.

Table 9

Descriptive Data From Both Vignettes by AQ-27 Scores

Condition	n	Mean	Median	SD	Min.	Max.	Skew	Test for normality		
								Shapiro-Wilk		
								Statistic	DF	Sig.
Vignette A (Harry)	46	75.15	71.00	19.35	27.00	116.00	0.13	.99	46	.89
Vignette B (Gary)	33	70.48	66.00	17.58	37.00	107.00	0.34	.97	33	.50

Note. The range for the AQ-27 total score is 27 – 243; DF = degrees of freedom; alpha level was set at .05.

The dependent measure was the AQ-27 total score to evaluate the degree to which the vignette viewed had an effect on the individual's attitude toward individuals with SPMI. Figure 5 includes a line graph of the mean average of each subscale by each group. The visual inspection

of this graph indicates that there was little significant difference between those who were exposed to the first vignette and those who were exposed to the second vignette.

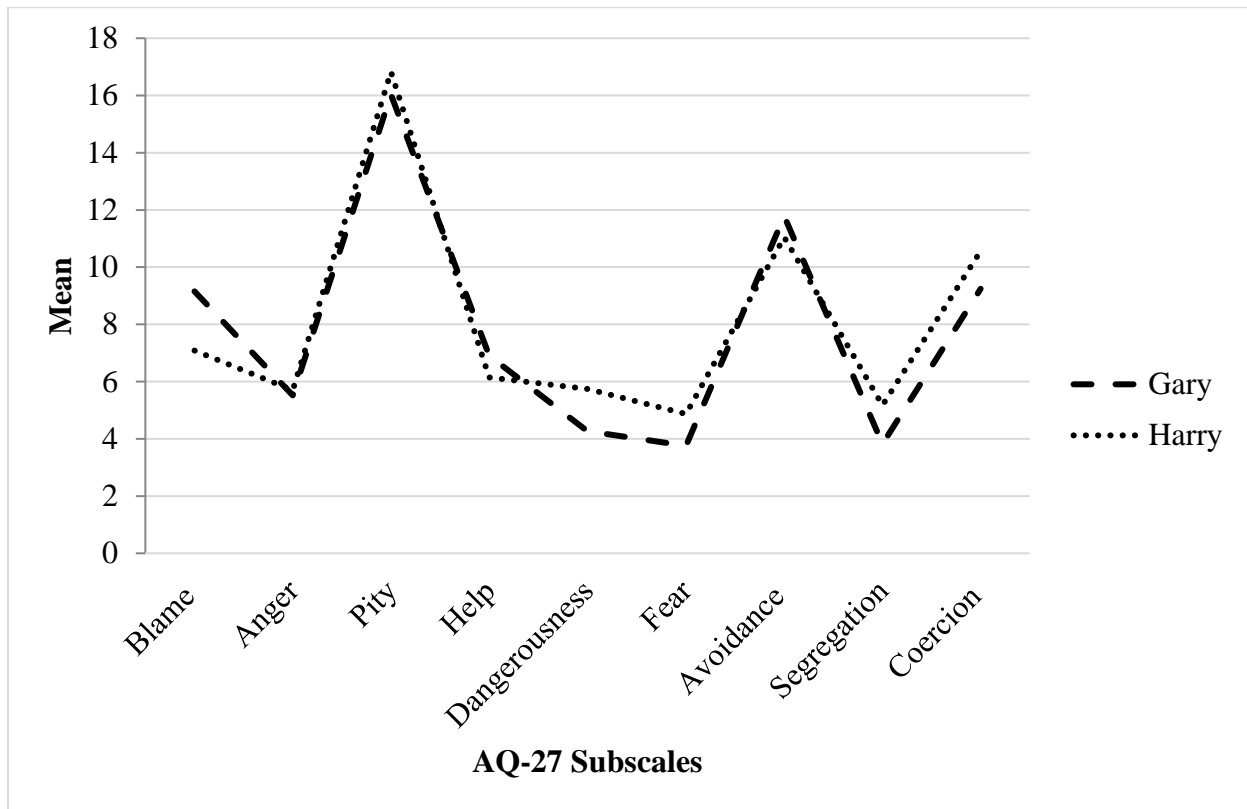


Figure 5. Line graph of vignette type by AQ-27 subscale.

To examine the mean difference between the AQ-27 and the independent variable (vignette presented), an independent sample t-test was conducted. The results were not statistically significant, $t(77) = 0.63, p = .53$. Figure 6 is a boxplot of the data showing the AQ27 total score separated for each vignette type. Further examination of the data (see Table 9) explains this result. Vignette A group’s mean was 75.15 ($SD=19.35$), while Vignette B group’s mean was 70.48 ($SD = 17.58$); thus the mean difference was fairly small.

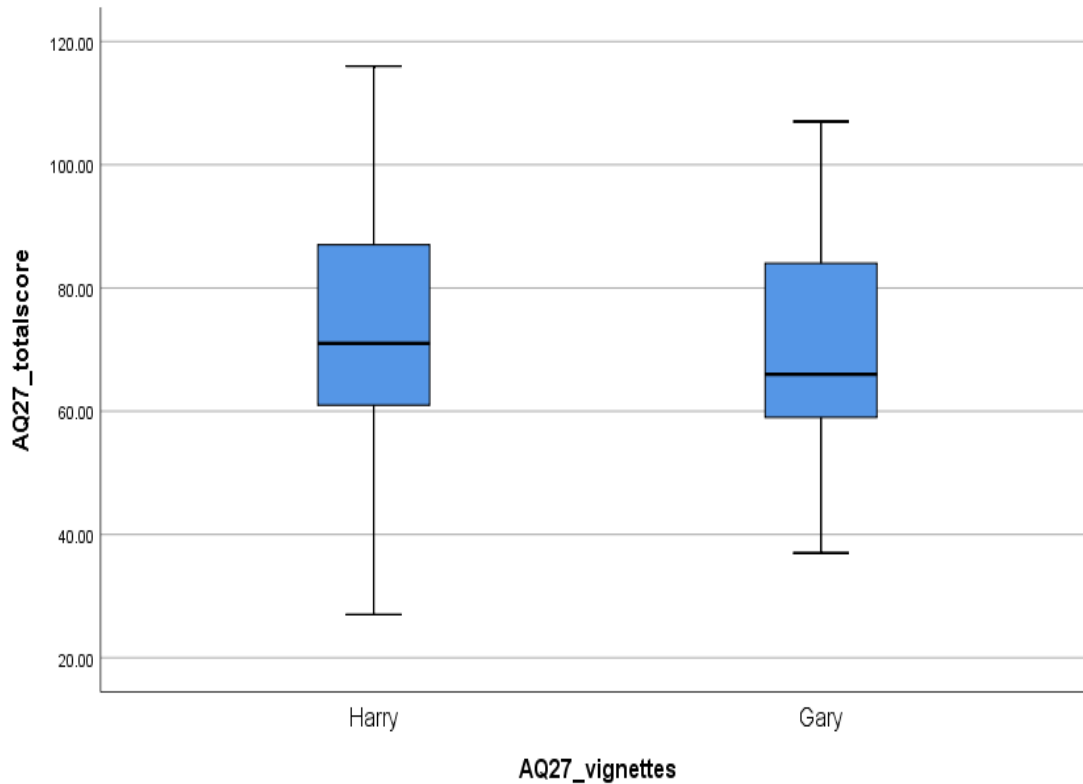


Figure 6. Boxplot of the effect of each vignette on the AQ-27 total score.

To investigate Research Question 2 further, correlations between the type of vignette and the nine AQ-27 subscales were conducted using Pearson correlation coefficients. To reduce the risk of making a Type I error across the nine comparisons, a conservative alpha value of .01 was set to find statistical significances. Results suggested that two out of the nine correlations were statistically significant at or below the alpha (α) level of .01. These subscales were blame ($r = .29$) and dangerousness ($r = -.30$). This result indicates that higher scores in blame were associated with Vignette B (Gary with Generalized Anxiety disorder) then vignette A (Harry with schizophrenia spectrum disorder). Additionally higher scores in dangerousness were ascribed to vignette A (Harry with schizophrenia spectrum disorder) than vignette B (Gary with generalized anxiety disorder). Table 10 has been provided to show all the calculated Pearson correlation coefficients.

Table 10

All Pearson Correlation Coefficients of the Vignette Type by AQ-27 Subscales

Attribution Question Subscales	Pearson (r)	<i>p</i>
Blame	.29**	.010
Anger	-.03	.807
Pity	-.08	.496
Help	.10	.362
Dangerousness	-.30**	.008
Fear	-.28*	.012
Avoidance	.07	.555
Segregation	-.22*	.047
Coercion	-.15	.192

Note. Coding for vignette type: Vignette A = 1, Vignette B = 2

* $p < .05$, ** $p < .01$

Research Question 3 Results

How do prior contact and familiarity factors influence attitudes towards individuals with SPMI while controlling for demographic characteristics?

A summary of all demographic data was presented in Table 5. A hierarchical multiple regression analysis was conducted to evaluate the influence of scores on the prior contact and level of familiarity scores to predict attitudes towards individuals with SPMI while simultaneously controlling for demographic variables. The second level included data from the LOF and the SADP-PCF-R. The correlations of all predictor variables were calculated and are presented in Table 11. The predictor variables were weakly to moderately correlated with each other ranging from $r = .01$, $p = .454$, to $r = .49$, $p < .001$. Table 11 also indicates there are weak to moderate correlations with the dependent variable (AQ-27) ranging from $r = -.01$, $p = .464$ to $r = -.38$, $p < .001$.

The first step of the hierarchical multiple regression included five demographic factors (e.g., age, gender, program of study, work experience, and level of education) as predictors. The

first model was statistically significant, $F(6,72) = 3.64, p = .003$, and explained 23% of the variance in the dependent variable (AQ-27 total scores). After the input of these demographic factors, the second step included LOF and SADP-PCF-R scores. After entry of the second step the overall R^2 was 28%. The second model was statically significant, $F(8,70) = 3.39, p = .002$, and explained an additional 5% variance in the model. In the final adjusted model, four out of the seven predictor variables were statistically significant. The predictor gender had the highest beta value ($\beta = -.32, p = .005$), then rehabilitation counselors (dummy code 1) ($\beta = -.31, p = .018$), number of years worked ($\beta = -.27, p = .019$), and SADP-PCF-R scores ($\beta = -.29, p = .039$). All calculated values from the hierarchical multiple regression can be found in Table 12.

Table 11

All Intercorrelations for Demographic, Level of Contact, and Frequency of Contact Data by AQ-27 Total Scores

Variable	1	2	3a	3b	4	5	6	7
AQ-27 total score	-.01	-.28**	-.29**	.09	-.22*	-.19*	-.04	-.38***
Step 1								
Age (1)	--	-.28	.12	-.04	-.08**	.17	.08	.31
Gender (2)		--	.06	-.12	-.21	-.03	.11	.06
Program of study (3) ^a			--	--	--	--	--	--
Dummy variable 1(3a)				--	.11	.01	.03	.49***
Dummy variable 2 (3b)					-.06	.25	.07	-.36***
Number of years worked (4)					--	-.13*	.11	.40***
Level of Education (5)						--	-.03	.06
Step 2								
LOF (6)							--	.31**
SADP-PCF-R (7)								--

Note. LOF = Level of Familiarity scale; SADP-PCF-R = Prior Contact Form R; AQ- 27 = Attribution Questionnaire-27; Gender was coded Male – 1, Female – 2.

^a Dummy variable 1: Mental health counselor – 0, Rehabilitation counselor – 1, other – 0. ^b

Dummy variable 2: Mental health counselor – 1, Rehabilitation counselor – 0, Other – 0;

Number of years worked was coded “Under 1 year” – 1, “1 -2 years” -2, “3-4 years” – 3, “5-6 years” – 3, & “Over 6 years”– 4; Level of education was coded “Undergraduate” – 1, "Graduate" – 2

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 12

Hierarchical Regression Analysis, Predicting Attitudes With Demographic, Level of Contact, and Frequency of Contact Data

Step and predictor variable	R^2	ΔR^2	sp	β	t
Step 1	.233				
Age			.040	.037	.343
Gender			-.326	-.319	-2.931**
Program of study					
Dummy Variable 1 ^a			-.276	-.308	-2.407*
Dummy Variable 2 ^b			-.104	-.177	-.888
Number of years worked			-.273	-.269	-2.407*
Level of Education			-.052	-.050	-.444
Step 2	.279	.047			
LOF			.121	.114	1.021
SADP-PCF-R			-.243	-.289	-2.100*

Note. sp = semipartial correlation coefficient; LOF = Level of Familiarity scale; SADP-PCF-R = Prior Contact Form R; Gender was coded Male – 1, Female – 2.

^a Dummy variable 1: Mental health counselor – 0, Rehabilitation counselor – 1, Other – 0. ^b

Dummy variable 2: Mental health counselor – 1, Rehabilitation counselor – 0, Other – 0;

Number of years worked was coded “Under 1 year” – 1, “1 -2 years” -2, “3-4 years” – 3, “5-6

years” – 3, & “Over 6 years” – 4; Level of education was coded “Undergraduate” – 1, “Graduate” – 2

* $p < .05$, ** $p < .01$

CHAPTER 5

DISCUSSION

The purpose of this study was to examine stigmatized attitudes towards individuals with SPMI among human services providers in training. This topic is important to investigate due to the prevalence of mental illness and the effects of stigma on individuals with severe and persistent mental health concerns. Close to 10 million adults, 18 years and older, have SPMI in the United States (NIMH, 2015). Individuals diagnosed with a mental illness may face many personal and social difficulties in their daily lives (Auerbach & Richardson, 2005; Brohan & Thornicroft, 2010; Cook, 2006), contributing to significant stress and affecting many daily activities (Falvo, 2014).

As Corrigan and colleagues (2015) discussed, stigma towards individuals with SPMI can have a profound impact on their full participation, affecting employment, housing, and other social integration. If members of the public view mental illness with fear or uncertainty, or perceive individuals with SPMI as dangerous, they are more likely to have fewer interpersonal relations with them and increase their social distance (Cooper et al., 2003). The root of stigma may be attributed to what some regard as underlying cause. If individuals are seen as responsible for a mental illness (e.g., through poor life choices, an inability to cope with stress, etc.), they are more likely to be the target of negative attitudes. Therefore, the degree to which people stigmatize an individual with a mental health condition may differ from the degree of stigma toward an individual diagnosed with cancer. This phenomenon is related to attribution theory, which was the primary theoretical basis for this study. If mental health is stigmatized in a community or society, individuals who have mental health issues may hide their condition from

others (Schulze & Angermeyer, 2003). This tendency may contribute to individuals being less willing to seek treatment or seek out community resources to aid in their recovery.

Those who work in the field of human services must be aware of the influence of stigma on mental health conditions. As others have researched (Kennedy et al., 2014; Smith & Cashwell, 2010), HSPs may not be immune from having negative reactions to those with severe mental illness. The stigmatization of mental illness may impact service delivery and treatment outcomes (Sadow et al., 2002). Building on the work of others (Granello & Gibbs, 2016; Kennedy et al., 2014; Smith & Cashwell, 2010), this study examined stigmatizing attitudes towards those with SPMI among counselors in training. This study utilized two scale instruments: the Attribution Questionnaire -27 (AQ-27; Corrigan, 2012), and the Mental Health Provider Stigma Inventory (MHPSI; Kennedy et al., 2014). A total of 79 participants took part in this study from 27 universities throughout the United States.

Summary of Findings

This study evaluated three research questions, all considering stigmatizing attitudes toward individuals with SPMI among human services providers in training. There were several findings based on the data analyses. The following research questions were addressed: Is there a significant difference in mean scores on the AQ-27 and MHPSI between students from counselor education, rehabilitation counseling, and other academic programs? What is the function of the type of mental illness (schizophrenia spectrum disorder versus generalized anxiety disorder) on attitudes towards individuals with SPMI among HSPs in training? How do prior contact and familiarity factors influence attitudes towards individuals with SPMI while controlling for demographic characteristics?

To evaluate the first research question, one-way ANOVAs were conducted between the program of study and both AQ-27 and MHPSI scores. The first ANOVA analysis to compare program of study with AQ-27 scores was statistically significant. The second ANOVA analysis comparing program of study with MHPSI scores was also statistically significant; see Table 7. The strength of the relationship between the program of study and the MHPSI, as measured by eta squared (η^2), was small, with the program of study accounting for only 9% of the variance in the MHPSI scores (Tabachnick & Fidell, 2007). In a post-hoc analysis, the data suggested that rehabilitation counselors in training had lower levels of mental health provider stigma than other participants as measured by the MHPSI. This result differed from prior research and was not anticipated (Kennedy et al., 2014; Lam et al. 2015; Smith & Cashwell, 2010). The overall sample size may have impacted this result given that there were 30 mental health counselor students, 26 rehabilitation counseling professionals in training, and 23 from other programs.

To address the next research question, an independent sample t-test was used to determine if there were mean differences in AQ-27 scores between those exposed to the first vignette (“Harry,” $n = 46$) and those exposed to the second vignette (“Gary,” $n = 33$). The results suggested that there were no statistically significant differences between the two groups. This result was not anticipated given the results of the pilot study and prior research (Corrigan, 2000, 2016; Granello & Gibbs, 2016; Schulze & Angermeyer, 2003; Taylor & Dear, 1981).

To further evaluate this question, Pearson (r) correlation coefficients were performed (Cooper et al., 2003). Results indicated that the AQ-27 subscale that had a positive relationship to the vignette presented was blame. The subscales that had a negative relationship to the vignette presented were dangerousness, fear, and segregation; a full list of the correlation coefficients can be found in Table 10. The two correlations that were statistically significant at an

conservative alpha level ($\alpha = .01$) were blame and dangerousness. These results suggest that participants had higher levels of blame towards Gary (an individual described as having generalized anxiety) than Harry (an individual described as having schizophrenia spectrum disorder). In addition higher scores in dangerousness were ascribed to the first vignette (Harry) over the second vignette B (Gary). This results appears to support Attribution Theory as discussed in chapter 3 (Corrigan, 2004).

The results from a hierarchical multiple regression analysis were statistically significant. The final results of this study yielded evidence to support that participants' self-reported level of prior contact with persons with disabilities and level of familiarity with individuals with SPMI had a meaningful effect on their AQ-27 score while controlling for demographic factors (see Table 12). The results from the second analysis that tested the two additional factor predictors were not statistically significant. The conclusion from this result is that the addition of the two scales (LOF and SADP-PCF-R) as predictors did not have a meaningful statistical influence on the overall model. Further, the data suggest that among the factors examined, there were three predictors that were all statistically related to the AQ-27 scores. Gender was the first predictor, program of study was next, and number of years worked was last.

Age was not found to be significant predictor of stigmatized attitudes toward individuals with SPMI. This was a departure from the literature (Link et al., 2004; Yucker, 1988). Gender differences were found. Females reported fewer stigmatized attitudes when compared to males as shown in Figures 7 and 8. This result was consistent with previous literature (Boysen, 2017; Corrigan & Watson, 2007; Wright, 1980; Yucker, 1988). Looking further into this result, the evaluation of gender and vignette type is an area for future evaluation (see Figures 7 and 8). Individuals with higher levels of education showed less stigma, consistent with prior research

(Marili et al., 2012; Miller et al., 2009). Finally, individuals with more work experience appeared to have lower levels of stigmatizing attitudes.

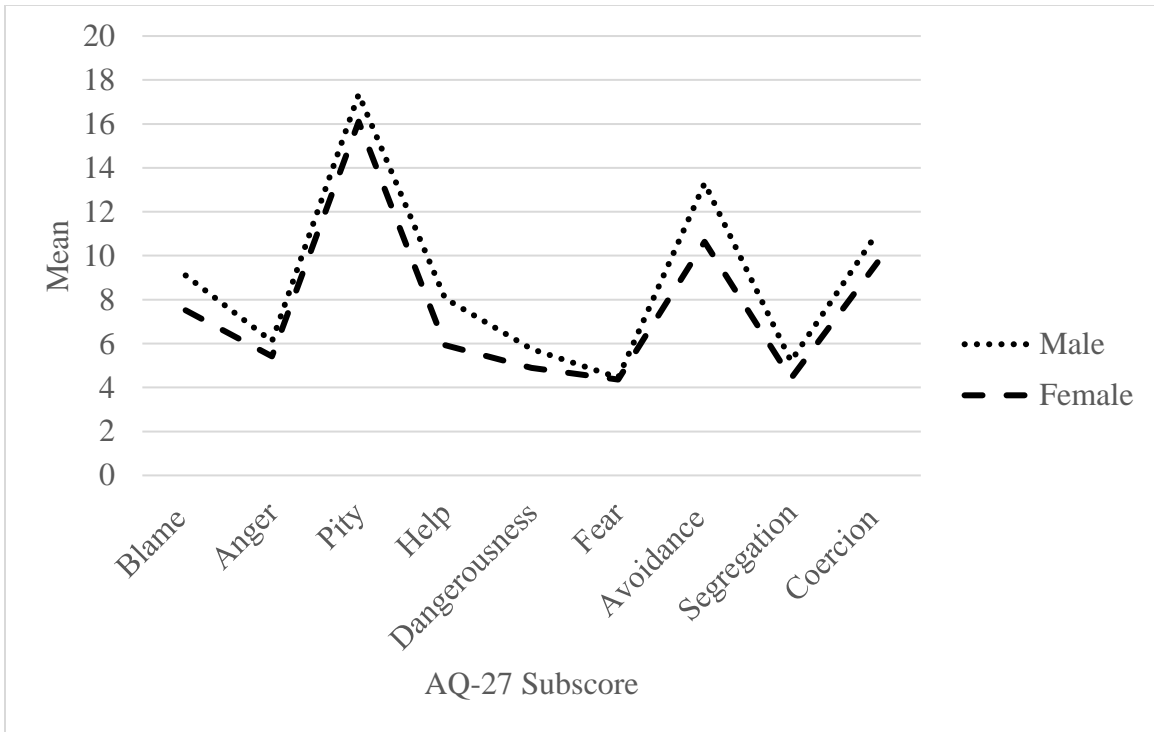


Figure 7. Line graph of gender by AQ-27 score.

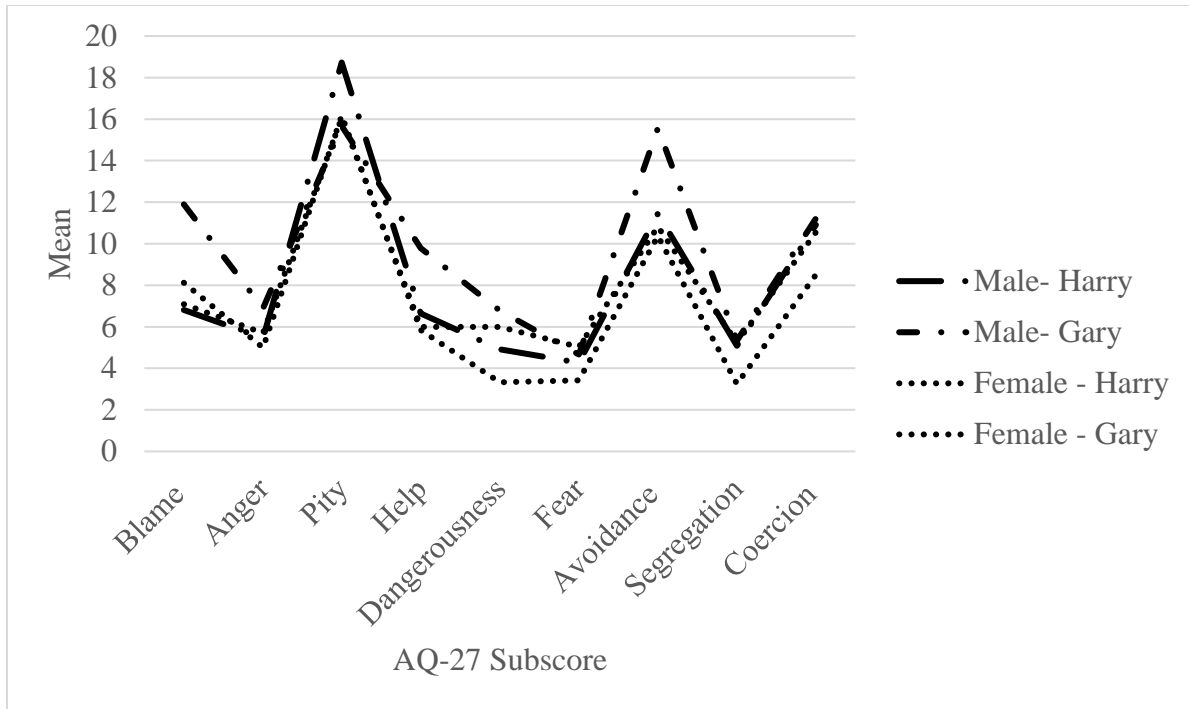


Figure 8. Line graph of gender /vignette by AQ-27 score.

Limitations

There were many study limitations. The primary issue was the sample size. As indicated in the Methodology chapter, there were multiple attempts to reach out to potential participants. The first data collection occurred on the SIU campus where multiple email requests were sent. The investigator went to selected classes, and with the permission of the instructor, requested participation. Other universities and colleges throughout the United States were contacted. Finally, I contacted several professional organizations to distribute participant requests. Despite these efforts, a total of 79 individuals completed the survey materials. There are many reasons to account for the low response rate (Dillman et al., 2009). There was only one method by which students could participate in the study. Individuals were asked to follow an online link to SurveyMonkey in order to take part in the study. This may have been inconvenient for

individuals who saw a flyer or heard about the study from a fellow student. The decision was made to offer the survey materials only through SurveyMonkey to reduce response variability.

The second area that may have contributed to the low response rate was the type and frequency of the email requests. As Dillman et al. (2009) suggested, researchers who carefully plan and implement participant contact methods increase the likelihood of greater response rates for their research. For this study, procedures were established to ensure that multiple email requests were sent. However, these procedures were altered depending on the groups or organizations that were contacted. For example, participant recruitment at some universities consisted of only one email request. This was due to the availability of the staff/faculty who worked with the researcher.

The inclusionary criteria established for this study may have affected the response rate. The purpose of this study was to gather the responses of individuals in graduate-level human services academic programs in the United States. This affected the overall population pool from which the sample was drawn. Another limitation of the current study was the presumption that HSPs in training carry negative or stigmatized attitudes towards persons with mental illness. Furthermore, the assumption was also made that negative attitudes may impact participants' responses to the current study. To address this concern, the current study methodology was designed in a fashion similar to existing research (Corrigan et al., 2012; Hackler et al., 2016; Reinke et al., 2004). The final limitation of this study was that attitudes towards individuals with SPMI were examined at one point in time. The purpose of the current study was to examine and not alter existing attitudes or stigma associated with individuals with SPMI. Furthermore, any longitudinal examinations of these factors were beyond the scope of the current study.

Some errors were found during the data collection process with the use of the demographic form established for this study. First, the question “highest degree obtained” did not include an “undergraduate” selection. Therefore, many participants manually wrote responses including *undergraduate degree, undergrad, or B.S./B.A* in the “other” category. In the data checking process, I needed to manually change these entries. Second, the disability status question was designed on SurveyMonkey to be required with a conditional follow-up question; however, after all the data were collected, it was apparent that the responses did not reflect accurately. This may have been due to the programming of the survey, responder error, or some other factor.

Given the aforementioned limitations, three proposed changes are suggested for reproducing the current study. The first is to identify and utilize different sampling procedures to increase the overall sample size (e.g., more direct contact with potential participants). The second is the recruitment of HSP professionals who have worked directly with individuals with SPMI as a comparison group to the HSPs in training. With this step, I could have examined the effects of work experience on stigma towards individuals with mental illness. Finally, in addition to the vignettes depicting two diagnosable conditions, I would include a third vignette depicting an individual whose mental health status is not disclosed. Therefore, the analysis would further examine the effects of a mental health diagnosis on stigmatizing attitudes.

Implications for Rehabilitation Counselors

Stigma towards individuals with SPMI permeates society and affects many individuals (Jones et al., 1984). This research follows an extensive record of stigma research (Corrigan et al., 2012; Couture & Penn, 2003; Link et al., 2004). Further, the aim of this study was to provide a foundation for future investigations of stigmatizing attitudes surrounding SPMI among

counselors in training. An evaluation of the influence of the specific SPMI diagnosis on stigma among HSPs was also conducted. Professionals who work in human services fields are more likely to interact with individuals who have SPMI. Attitudes and beliefs about this group may not impact only the professionals but also the clients with whom they work (Corrigan, 2005). Understanding and awareness of how SPMI impacts individuals are critical for those entering HSP fields.

This study yielded evidence to support that rehabilitation counselor graduate students may have fewer stigmatizing attitudes towards SPMI when compared to students in other HSP graduate programs according to scores on the MHPSI. This result may reflect the training offered to future rehabilitation counseling professionals (Riggan & Maki, 2004; Wright, 1980). Future research may further explore the dynamics involved in the professional training of HSPs to evaluate student recognition of attitudes towards SPMI.

Research may use methods similar to this study while further evaluating the stigma of SPMI. First, the effects of mass media on attitudes towards mental illness have been extensively researched (Corrigan et al., 2013; Coverdale et al., 2001; Stout et al., 2004). The effects of media (including social media), although not evaluated in this study, are critically important for the understanding of how SPMI is viewed within a society (Penn, Chamberlin, & Mueser 2003). Future research may address stigmatizing attitudes toward mental illness among vocational rehabilitation professionals, who evaluate job readiness and vocational opportunities among individuals with SPMI (Corrigan et al., 2012; Elliott, & Konet 2014). Other research may include evaluating the willingness of landlords or property owners to rent to a person with SPMI (Russinova et al., 2011). Both the AQ-27 and MHPSI instruments have been established in the literature and may be used simultaneously as demonstrated in this study.

Conclusions

The evaluation of stigmatizing attitudes towards SPMI was evaluated among graduate-level human service professionals in training in the United States. Several factors were examined, from the type of diagnosable condition presented to the evaluation of demographic factors with their relative roles in predicting attitudes towards mental illness. Results from three research questions were presented. This research was based on the attribution theory, which suggests that, in part, the controllability of a condition affects how others react to the condition (Colman, 2006; Maio & Olson, 2000). The primary limitation of this study was the small sample size. Given the recruitment procedures used, the researcher is confident that sufficient measures were taken to reach potential participants. Despite these setbacks, several results were found and implications for future research were uncovered. These results may provide insights into this topic and contribute to the body of knowledge surrounding attitudes towards individuals with disabilities and the stigma of SPMI.

REFERENCES

- Ackerman, G. W., & McReynolds, C. J. (2005). Strategies to promote successful employment of people with psychiatric disabilities. *Journal of Applied Rehabilitation Counseling, 36*(4), 35- 40.
- Ainlay, S. C., Becker, G., & Coleman, L. M. (1986). *The dilemma of difference: A multidisciplinary view of stigma*. New York, NY: Plenum.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- American School Counselor Association. (n.d.). *The role of a school counselor*. Retrieved September 26, 2018, from <https://www.schoolcounselor.org/asca/media/asca/Careers-Roles/RoleStatement.pdf>
- Antonak, R. F. (1981). Prediction of attitudes towards disabled persons: A multivariate analysis. *The Journal of General Psychology, 104*, 119-123. doi:10.1080/00221309.1981.9921026
- Antonak, R. F. (1982). Development and psychometric analysis of the Scale of Attitudes Toward Disabled Persons. *Journal of Applied Rehabilitation Counseling, 32*, 22-29.
- Antonak, R. F. (1992). *Scale of attitudes toward disabled persons (SAPD) form R*. Durham, NH: University of New Hampshire.
- Antonak, R. F., & Livneh, H. (1988). *The measurement of attitudes toward people with disabilities: Method, psychometrics and scales*. Springfield, IL: Charles C. Thomas.
- Antonak, R. F., & Livneh, H. (2000). Measures of attitudes towards persons with disabilities. *Disability and Rehabilitation, 22*(5), 211-224. PMID: 10813560

- Arns, P. G., & Linney, J. A. (1993). Work, self, and life satisfaction for persons with severe and persistent mental disorders. *Psychosocial Rehabilitation Journal*, 17, 63-70. doi: 10.1037/h0095599
- Auerbach, E. S., & Richardson, P. (2005). The long-term work experiences of persons with severe and persistent mental illness. *Psychiatric Rehabilitation Journal*, 28(3), 267-273. doi:10.2975/28.2005.267.273
- Barker, R. L. (2003). *The social work dictionary*. Washington, DC: The National Association of Social Workers.
- Bar-Tal, D., Graumann, C. F., Kruglanski, A. W., & Stroebe, W. (1989). *Stereotypes and prejudice: Changing concepts*. New York, NY: Springer-Verlag.
- Boen, R., Upton, T. D., Knickmeyer, N., & Anuar, A. (2016). Students' perceptions on the relative fairness of selected educational accommodations. *Journal of Cognitive Science and Human Development*, 1, 99 – 109. ISSN: 2462-1153
- Boysen, G. A. (2017). Explaining the relation between masculinity and stigma toward mental illness: The relative effects of sex, gender, and behavior. *Stigma and Health*, 2(1), 66-79. doi: 10.1037/sah0000041
- Brodwin, M., Parker, R. M., & DeLaGarza, D. (2010). Disability and reasonable accommodations. In E. M. Szymanski & R. M. Parker (Eds.), *Work and disability: Context, issues, and strategies for enhancing employment outcomes for people with disabilities* (3rd ed., pp. 281-324). Austin, TX: Pro-Ed.
- Brohan, E., & Thornicroft, G. (2010). Stigma and discrimination of mental health problems: Workplace implications. *Occupational Medicine*, 60, 414–420. doi:10.1093/occmed/kqq048

- Brostrand, H. L. (2006). Tilting at windmills: Changing attitudes toward people with disabilities. *Journal of Rehabilitation, 72*(1), 4-9.
- Bulmer, M. G. (1979). *Principles of statistics*. New York, NY: Dover.
- Bureau of Labor Statistics. (2016). *Persons with a disability: Labor force characteristics- 2015* [Press Release]. Retrieved from <http://www.bls.gov/news.release>
- Center for Behavioral Health Statistics and Quality. (2016). *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health*. Retrieved from: <http://www.samhsa.gov/data/>
- Chan, F., Bezyak, J., Ramirez, M. R., Chiu, C., & Fujikawa, S. S. (2010). Concepts, challenges, barriers, and opportunities related to evidence-based practice in rehabilitation counseling. *Rehabilitation Education, 24*, 179-190. ISSN: 08897018.
- Cheatham, L. P., Abell, N., & Kim, H. (2015). Development and validation of the Social Worker's Attitudes toward Disability scale. *Journal of Social Work Education, 51*, 379–397. doi: 10.1080/10437797.2015.1012939
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, J., & Struening, E. L. (1962). Opinions about mental illness in the personnel of two large mental hospitals. *Journal of Abnormal and Social Psychology, 64*(5), 349-360.
doi:10.1037/h0045526
- Coleman, L. M. (1986). Stigma: An enigma demystified. In S. C. Ainsley, G. Becker, & L. M. Coleman (Eds.), *The dilemma of difference: A multidisciplinary view of stigma* (pp. 211-232). New York, NY: Plenum.
- Colman, M. A. (2006). *Oxford dictionary of psychology*. New York, NY: Oxford University.

- Cook, J. A. (2006). Employment barriers for persons with psychiatric disabilities: Update of a report for the president's commission. *Psychiatric Services*, 57(10), 1391-1405.
doi:10.1176/ps.2006.57.10.1391
- Cooper, A. E., Corrigan, P. W., & Watson, A. C. (2003). Mental illness stigma and care seeking. *The Journal of Nervous and Mental Disease*, 191, 339-341.
doi:10.1097/01.NMD.0000066157.47101.22
- Corrigan, P. W. (2000). Mental health stigma as social attribution: Implications for research methods and attitude change. *Clinical Psychology: Science and Practice*, 7, 48-67.
doi:10.1093/clipsy.7.1.48
- Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist*, 59 (7), 614-625. doi:10.1037/0003-066X.59.7.614
- Corrigan, P. W. (2005). *On the stigma of mental health: Practical strategies for research and social change*. Washington, DC: The American Psychological Association.
- Corrigan, P. W. (2012). *A toolkit for evaluation programs meant to erase the stigma of mental illness*. Unpublished manuscript, National Consortium on Stigma and Empowerment.
Retrieved from <http://www.stigmaandempowerment.org/>
- Corrigan, P. W. (2014). *The stigma of disease and disability: Understanding causes and overcoming injustices*. Washington, DC: The American Psychological Association.
- Corrigan, P. W. (2016). Beating stigma? Augment good interventions with the critical eye. *Stigma and Health*, 1, 1-2. doi:10.1037/sah0000023
- Corrigan, P. W., Edwards, A. B., Green, A., Diwan, S. L., & Penn, D. L. (2001). Prejudice, social distance, and familiarity with mental illness. *Schizophrenia Bulletin*, 27(2), 219-225.

- Corrigan, P. W., Green, A., Lundin, R., Kubiak, M. A., & Penn, D. L. (2001). Familiarity with and social distance from people who have serious mental illness. *Psychiatric Services*, 52, 953-958. doi:10.1176/appi.ps.52.7.953
- Corrigan, P. W., Larson, J. E., Michaels, P. J., Buchholz, B. A., DelRossi, R., Fontecchio, M. J., . . . Rüsç, N. (2015). Diminishing the self-stigma of mental illness by coming out proud. *Psychiatry Research*, 229, 148-154.
- Corrigan, P. W., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior*, 44, 162–179
- Corrigan, P. W., Morris, S. B., Michaels, P. J., Rafacz, J. D., & Rusch, N. (2012). Challenging the public stigma of mental illness: A meta-analysis of outcome studies. *Psychiatric Services*, 63, 963-973. doi: 10.1176/appi.ps.201100529
- Corrigan, P. W., Powell, K. J., & Michaels, P. J. (2013). The effects of news stories on the stigma of mental illness. *The Journal of Nervous and Mental Disease*, 201, 179-182. doi:10.1097/NMD.0b013e3182848c24
- Corrigan, P. W., Rowan, D., Green, A., Lundin, R., River, P., Uphoff-Wasowski, K., . . . Kubiak, M. A. (2002). Challenging two mental illness stigmas: Personal responsibility and dangerousness. *Schizophrenia Bulletin*, 28, 293-308. PMID:12693435
- Corrigan, P. W., & Watson, A. C. (2002). Understanding the impact of stigma on people with mental illness. *World Psychiatry*, 1, 16-20. PMCID: PMC1489832
- Corrigan, P. W., & Watson, A. C. (2007). The stigma of psychiatric disorder and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal*, 43, 439-458. doi:10.1007/s10597-007-9084-9

- Corrigan, P. W., Watson, A. C., Warpinski, A. C., & Gracia, G. (2004). Stigmatizing attitudes about mental illness and allocation of resources to mental health services. *Community Mental Health Journal, 40*, 297-307.
- Couture, S. M., & Penn, D. L. (2003). Interpersonal contact and the stigma of mental illness: A review of the literature. *Journal of Mental Health, 12*, 291-305.
doi:10.1080/09638231000118276
- Coverdale, J., Nairn, R., & Claasen, D. (2002). Depictions of mental illness in print media: A prospective national sample. *Australian and New Zealand Journal of Psychiatry, 36*, 697–700. doi:10.1046/j.1440-1614.2002.00998.x
- Creswell, J. W. (2014). *Research designs: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Crowe, A., & Averett, P. (2015). Attitudes of mental health professionals toward mental illness: A deeper understanding. *Journal of Mental Health Counseling, 37*, 47-62.
doi:10.17744/mehc.37.1.123251h783703q2
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail and mixed-mode surveys: The tailed design method* (3rd ed.). Hoboken, NJ: Wiley.
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, Z. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review, 1*, 1-20 doi: 10.1177/1077558709335173
- Elliott, B., & Konet, R. J. (2014). The connections place: A job preparedness program for individuals with borderline personality disorder. *Community Mental Health Journal, 50*, 41–45. doi:10.1007/s10597-013-9601-y

- Falvo, D. R. (2014). *Medical and psychosocial aspects of chronic illness and disability* (5th ed.). Burlington, MA: Jones and Bartlett.
- Fichten, C. S., Schipper, F., & Cutler, N. (2005). Does volunteering with children affect attitudes toward adults with disabilities? A prospective study of unequal contact. *Rehabilitation Psychology* 50(2), 164–173. doi:10.1037/0090-5550.50.2.164
- Finch, J. (1987). Research note: The vignette techniques in survey research. *Sociology*, 12, 105-114.
- Findler, L., Vilchinsky, N., & Werner, S. (2007). The Multidimensional Attitudes Scale toward persons with disabilities (MAS): Construction and validation. *Rehabilitation Counseling Bulletin*, 50(3), 166-176. doi:10.1177/00343552070500030401
- Fink, J. P., & Tasman, A. (1992). *Stigma and mental illness*. Washington, DC: American Psychiatric Press.
- Gliner, J. A., Morgan, G. A., & Leech, N. L. (2009). *Research methods in applied settings: An integrated approach to design and analysis*. New York, NY: Routledge.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. New York, NY: Simon and Schuster.
- Gordon P. A., Chariboga-Tantillo, J., Feldman, D., & Perrone, K. (2004). Attitudes regarding interpersonal relationships with mental illness and mental retardation. *Journal of Rehabilitation*, 70(1), 50-56.
- Granello, D. H., & Gibbs, T. A. (2016). The power of language and labels: “The mentally ill” versus “people with mental illnesses.” *Journal of Counseling & Development*, 91, 31-40. doi:10.1002/jcad.12059/abstract

- Green, S. B., & Salkind, N. J. (2014). *Using SPSS for Windows and Macintosh: Analyzing and understanding data*. Upper Saddle River, NJ: Pearson.
- Hackler, A. H., Cornish, M. A., & Vogel, D. L. (2016). Reducing mental illness stigma: Effectiveness of hearing about the normative experiences of others. *Stigma and Health, 1*(3), 201-205. doi:<http://dx.doi.org/10.1037/sah0000028>
- Hamann, H. A., Howell, L. A., & McDonald, J. L. (2013). Causal attributions and attitudes towards lung cancer. *Journal of Applied Social Psychology, 43*, E37-E35. doi:10.1111/jasp.12053/abstract
- Hampton, N. Z., & Sharp, S. E. (2014). Shame-focused attitudes toward mental health problems: The role of gender and culture. *Rehabilitation Counseling Bulletin, 57*(3), 170–181. doi:10.1177/0034355213501722
- Hayward, P., & Bright, J. A. (1997). Stigma and mental illness: A review and critique. *Journal of Mental Health, 6*, 345-354. doi:10.1080/09638239718671
- Heatherton, T. F., Kleck, R. E., Helb, M. R., & Hull, J. G. (2000). *The social psychology of stigma*. New York, NY: Guilford.
- Hergenrather, K. C., Gitlin, D. J., & Rhodes, S. D. (2011). Consumers with a bipolar disorder: A theory-based approach to explore beliefs impacting job placement. *Journal of Rehabilitation, 77*(3), 14-24.
- Hertzog, M. A. (2008). Consideration in determining sample size for pilot studies. *Research in Nursing and Health, 31*, 180-191. doi:10.1002/nur.20247
- Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY: Wiley.
- Hinshaw, S. P. (2007). *The mark of shame: Stigma of mental illness and an agenda for change*. New York, NY: Oxford University Press.

- Holmes, E. P., Corrigan, P. W., Williams, P., Canar, J., & Kubiak, M. A. (1999). Changing attitudes about schizophrenia. *Schizophrenia Bulletin*, *25*, 447–456.
- Howell, D. C. (2010). *Statistical methods for psychology* (7th ed.) Belmont, CA: Wadsworth-Cengage.
- Huitema, B. E., (2011). *The analysis of covariance and alternatives*. Hoboken, NJ: Wiley
- Hughes, R., & Hughes, M. (2001). The application of vignettes in social and nursing research. *Journal of Advanced Nursing*, *37*(4), 382 -386. doi:10.1046/j.1365-2648.2002.02100.x
- Hughes, R., & Hughes, M. (2004). The construction and interpretation of vignettes in social research. *Social Work & Social Sciences Review*, *11*(1), 36-51.
- Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behaviors among college students. *Journal of Adolescent Health*, *46*, 3-10.
doi:10.1060/j.jadohealth.2009.08.008
- Jones, E. E., Farina, A., Hastorf, A. H., Markus, H., Miller, D. T., & Scott, R. A. (1984). *Social stigma: The psychology of marked relationships*. New York, NY: W. H. Freeman and Company.
- Jussim, L., Palumbo, P., Chatman, C., Madon, S., & Smith, A. (2000). Stigma and self-fulfilling prophecies. In T. F. Heatherton, R. E. Kleck, M. R. Helb, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 374-418). New York, NY: Guilford.
- Kennedy, S. C., Abell, N., & Mennicke, A. (2014). Initial validation of the Mental Health Provider Stigma Inventory. *Research on Social Work Practice*, *27*(3), 335-347.
doi:10.1177/1049731514563577.

- Kim, H. Y. (2015). Statistical notes for clinical researchers: *Post-hoc* multiple comparisons. *Restorative Dentistry & Endodontics*, *40*(2), 172–176.
doi:10.5395/rde.2015.40.2.172
- Kopera, M., Suszek, H., Bonar, E., Myszk, M., Gmaj, B., Ilgen, M., & Wojnar, M. (2015). Evaluating explicit and implicit stigma of mental illness in mental health professionals and medical students. *Community Mental Health Journal*, *51*, 628–634. doi: 10.1007/s10597-014-9796-6
- Kvaale, E. P., Haslam, N., & Gottdiener, W. H. (2013). The ‘side effects’ of medicalization: A meta-analytic review of how biogenetic explanations affect stigma. *Clinical Psychology Review*, *33*, 782-794. doi:10.1016/j.cpr.2013.06.002
- Lam, W. Y., Gunukula, S. K., McGuigan, D., Isaiah, N., Symons, A. B., & Akl, E. A. (2010). Validated instruments used to measure attitudes of healthcare students and professionals towards patients with physical disability: A systematic review. *Journal of NeuroEngineering and Rehabilitation*, *7*, 1-7. doi: 10.1186/1743-0003-7-55
- Lam, T., P., Lam, K. F., Lam, E. W., & Sun, K. S. (2015). Does postgraduate training in community mental health make a difference to primary care physicians’ attitudes to depression and schizophrenia? *Community Mental Health Journal*, *51*, 641–646.
doi:10.1007/s10597-015-9829-9
- Lin, C. Y., Chang, C. C., Wu, T. H., & Wang, J. D. (2016). Dynamic changes of self-stigma, quality of life, somatic complaints, and depression among people with schizophrenia: A pilot study applying kernel smoothers. *Stigma and Health*, *1*, 29-43. doi: 10.1037/sah0000014

- Link, B., Cullen, F., Frank, J., & Wozniak, J. F. (1987). The social rejection of former mental patients: Understanding why labels matter. *American Journal of Sociology*, *92*, 1461–1500. doi: 10.1086/228672
- Link, B., Cullen, F., Struening, E., Shrout, P., & Dohrenwend, B. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review*, *54*, 400–423.
- Link, B. G., Yang, L. H., Phelan, J. C., & Collins, P. Y. (2004). Measuring mental illness stigma. *Schizophrenia Bulletin*, *30*, 511-541.
- 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 and Medicine*, *71*, 2150-2161. doi:10.1016/j.socscimed.2010.09.030
- Lynch, R. T., & Thomas, K. R. (1994). People with disabilities as victims: Changing an ill-advised paradigm. *Journal of Rehabilitation*, *60*(1), 8-11.
- Macrae, N. C., & Bodenhausen, G. V. (2001). Social cognition: Categorical person perception. *British Journal of Psychology*, *92*, 239–255. doi: 10.1.1.318.4390&rep=rep1&type=pdf
- Maio, G. R., & Olson, J. M. (2000). *Why we evaluate: Functions of attitudes*. Mahwah, NJ: Lawrence Erlbaum.
- Marili, I., Glover-Graf, N. M., & Millington, M. (2012). *Psychosocial aspects of disability: Insider perspective and strategies for counselors*. New York, NY: Springer.
- Martin, J. K., Pescosolido, B. A., & Tuch, S. A. (2000). Of fear and loathing: The role of “disturbing behavior,” labels, and causal attribution in shaping public attitudes toward people with mental illness. *Journal of Health and Social Behavior*, *41*, 208-223.

- Meline, T. (2006). *Research in communication science and disorders: Methods, applications, evaluation*. Upper Saddle River, NJ: Pearson.
- Miller, E., Chen, R., Glover-Graf, N. M., & Kranz, P. (2009). Willingness to engage in personal relationship with persons with disabilities. *Rehabilitation Counseling Bulletin, 20*, 1-14. doi:10.1177/0034355209332719
- Murphy, K. R., & Myers, B. (2004). *Statistical power analysis: A simple and general model for traditional and modern hypothesis tests* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Moffat, C. T. (2011). Helping those in need: Human service workers. *Occupational Outlook Quarterly, 55*(3), 22-32.
- Nadler, J. T., Bartels, L. K., Naumann, S., Mo, R., Locke, J., Beurskens, M., . . . Gin, M. (2015). Sampling strategies in the top I-O journals: What gets published? *The Industrial-Organizational Psychologist, 53*(2), 139-147.
- National Institute of Mental Health. (2017). *Serious mental illness (SMI) among U.S. adults*. Retrieved from www.nimh.nih.gov
- Nelson, L. K. (2013). *Research in communication science and disorders* (2nd ed.). San Diego, CA: Plural.
- Neukrug, E. (2006). *The world of the counselor: An introduction to the counseling profession*. (3rd ed.). Pacific Grove, CA: Brooks/Cole.
- Olney, M. F., & Kim, A. (2001). Beyond adjustment: Integration of cognitive disability into identity. *Disability & Society, 16*(4), 563-583. doi:10.1080/09687590120059540
- Overton, S. L., & Medina, S. L. (2008). The stigma of mental illness. *Journal of Counseling and Development, 86*, 141-151. doi:10.1002/j.1556-6678.2008.tb00491.x

- Parker, R. M., Szymanski, E. M., & Patterson, J. B. (2004). *Rehabilitation counseling: Basics and beyond* (4th ed.). Austin, TX: Pro-Ed.
- Penn, D. L., Chamberlin, C., & Mueser, K. T. (2003). The effects of a documentary film about schizophrenia on psychiatric stigma. *Schizophrenia Bulletin*, 29(2), 383-391.
- Penn, D. L., Guyman, K., Dally, T., Spaulding, W. D., Garbin, C. P., & Sullivan, M. (1994). Dispelling the stigma of schizophrenia: What sort of information is best? *Schizophrenia Bulletin*, 20, 567-578. PMID: 7973472
- Perlick, D. A. (2001). Special section on stigma as a barrier to recovery: Introduction. *Psychiatric Service*, 52(12), 1613-1614. doi: 10.1176/appi.ps.52.12.1613
- Pingani, L., Forghieri, M., Ferrari, S., Ben-Zeev, D., Artoni, P., Mazzi, F., . . . Corrigan, P. W. (2012). Stigma and discrimination toward mental illness: Translation and validation of the Italian version of the Attribution Questionnaire-27 (AQ-27-I). *Social Psychiatry Epidemiology*, 47, 993–999. doi: 10.1007/s00127-011-0407-3
- Pratt, C. W., Gill, K. J., Barrett, N. M., & Roberts, S. (2007). *Psychiatric rehabilitation* (2nd ed.). Burlington, MA: Elsevier Academic.
- Reeder, G. D., & Pryor, J. B. (2000). Attitudes toward persons with HIV/AIDS: Linking a functional approach with underlying process. In G. R. Maio & J. M. Olson (Eds.), *Why we evaluate: Functions of attitudes* (pp. 295-323). Mahwah, NJ: Lawrence Erlbaum.
- Reinke, R. R., Corrigan, P. W., Leonhard, C., Lundin, R. K., & Kubiak, M. A. (2004). Examining two aspects of contact on the stigma of mental illness. *Journal of Social and Clinical Psychology*, 23, 377-389. doi: 10.1521/jscp.23.3.377.35457
- Riggar, T. F., & Maki, D. R. (2003). *Handbook of rehabilitation counseling*. New York, NY: Springer

- Russinova, Z., Griffin, S., Bloch, P., Wewiorski, N. J., & Rosoklija, I. (2011). Workplace prejudice and discrimination toward individuals with mental illnesses. *Journal of Vocational Rehabilitation, 35*, 227–241. doi: 10.3233/JVR-2011-0574
- Rutherford, A. (2011). *ANOVA and ANCOVA: A GLM approach*. Hoboken, NJ: Wiley.
- Sadow, D., Ryder, M., & Webster, D. (2002). Is education of health professionals encouraging stigma towards the mentally ill? *Journal of Mental Health, 11*(6), 657-665.
doi:10.1080/0963832000058210
- Schulze, B. (2007). Stigma and mental health professionals: A review of the evidence on an intricate relationship. *International Review of Psychiatry, 19*(2), 137-155.
doi:10.1080/09540260701278929.
- Schulze, B., & Angermeyer, M. C. (2003). Subjective experiences of stigma: A focus group study of schizophrenic patients, their relatives and mental health professionals. *Social Science & Medicine, 56*, 299–312
- Smith, A. L., & Cashwell, C. S. (2010). Stigma and mental illness: Investigating attitudes of mental health and non-mental-health professionals and trainees. *Journal of Humanistic Counseling, Education and Development, 49*, 189-202. doi:10.1002/j.2161-1939.2010.tb00097.x
- Stout, P. A., Villegas, J., & Jennings, N. A. (2004). Images of mental illness in the media: Identifying gaps in the research. *Schizophrenia Bulletin, 30* (3), 543-561.

- Stedman, J. M., Neff, J. A., & Morrow, D. (1995). Career pathways and current practice patterns of clinical and counseling psychologists: A follow-up study of former interns. *Journal of Clinical Psychology, 51*, (3), 441-448.
- SurveyMonkey. (2018). *Academic surveys*. Retrieved from <https://www.surveymonkey.com/mp/academic-surveys/>
- Struening, E. L., & Cohen, J. (1963). Factorial invariance and other psychometric characteristics of five opinions about mental illness factors. *Educational and Psychological Measurement, 23*, 289-298. doi:10.1177/001316446302300206
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental design using ANOVA*. Belmont, CA: Thomson Brooks/Cole.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Boston, MA: Pearson.
- Taylor, S. M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin, 7*, 225-240. doi:10.1016/j.sbspro.2013.06.247
- Todor, I. (2013). Opinions about mental illness. *Procedia - Social and Behavioral Sciences, 82*, 209-214.
- Trochim, W. M. K., & Donnelly, J. P. (2006). *Research methods knowledge base*. Mason, OH: Cengage.
- Turner, N., O'Mahony, P., Hill, M., Fanning, F., Larkin, C., Waddington, J., Clarke, M. (2015). Work life after psychosis: A detailed examination. *Work, 51*, 143-152. doi:10.3233/WOR-141865
- Twamley, E. W., Padin, D. S., Bayne, K. S., Narvaez, J. M., Williams, R. E., & Jeste, D. V. (2005). Work rehabilitation for middle-aged and older people with schizophrenia: A

- comparison of three approaches. *The Journal of Nervous and Mental Disease*, 193(9), 596 – 601. doi:10.1097/01.nmd.0000177789.53840.e3
- Upton, T. D., & Harper, D. C. (2002). Multidimensional disability attitudes and equitable evaluation of educational accommodations by college students without disabilities. *Journal of Postsecondary Education and Disability*, 15(2), 115-130.
- Upton, T. D., Harper, D. C., & Wadsworth, J. (2005). Postsecondary attitudes toward persons with disabilities: A comparison of college students with and without disabilities. *Journal of Applied Rehabilitation Counseling*, 36(3), 24-31.
- Wakefield, J. C. (1992). Disorder as harmful dysfunction: A conceptual critique of DSM-III-R's definition of mental disorder. *Psychological Review*, 99, 232-247. doi: 10.1037/0033-295X.99.2.232
- Walton-Moss, B., Gerson, L., & Rose, L. (2005). Effects of mental illness on family quality of life. *Issues in Mental Health Nursing*, 26, 627-642. doi:10.1080/01612840590959506
- Watson, A. C., Corrigan, P., Larson, J. E., Sells, M. (2007). Self-stigma in people with mental illness. *Schizophrenia Bulletin*, 33(6), 1312-1318. doi:10.1093/schbul/sbl076
- Weiner, B. (1993). On sin versus sickness: A theory of perceived responsibility and social motivation. *American Psychologist*, 49(9), 957-965.
- Wilson, J., & While, A. E. (1998). Methodological issues surrounding the use of vignettes in qualitative research. *Journal of Interprofessional Care*, 12(1), 79 – 86. doi: 10.3109/13561829809014090
- Wright, B. A. (1983). *Physical disability – a psychosocial approach* (2nd ed.). New York, NY: Harper Collins.
- Wright, G. N. (1980). *Total rehabilitation*. Boston, MA: Little, Brown and Company.

Yuker, H. E. (1988). *Attitudes toward persons with disabilities*. New York, NY: Springer Publishing.

Yuker, H., Block, J., & Young, J. (1966). *The measurement of attitudes toward disabled persons*. Albertson, NY: Human Resources Center.

APPENDICES

APPENDIX A

Demographic Form

1. What is your age? *

- | | |
|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> 18 to 24 | <input type="checkbox"/> 55 to 64 |
| <input type="checkbox"/> 25 to 34 | <input type="checkbox"/> 65 to 74 |
| <input type="checkbox"/> 35 to 44 | <input type="checkbox"/> 75 or older |
| <input type="checkbox"/> 45 to 54 | |

2. What is your sex? *

- | | |
|---|---------------------------------|
| <input type="checkbox"/> Male | <input type="checkbox"/> Female |
| <input type="checkbox"/> Prefer not to answer | |

3. What is your ethnicity? * (Please select all that apply)

- | | |
|--|---|
| <input type="checkbox"/> American Indian or Alaskan Native | <input type="checkbox"/> Hispanic or Latino |
| <input type="checkbox"/> Asian or Pacific Islander | <input type="checkbox"/> White / Caucasian |
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> Prefer not to answer |

4. What is the highest degree you obtained? *

- Graduate Masters
 Graduate Doctorate
 Other (please specify) _____

5. What is your specialty area? *

- | | |
|---|--|
| <input type="checkbox"/> Counseling Psychology | <input type="checkbox"/> School Counselor |
| <input type="checkbox"/> Mental Health Counselor | <input type="checkbox"/> Marriage and Family Therapist |
| <input type="checkbox"/> Rehabilitation Counselor | <input type="checkbox"/> Social Work |
| <input type="checkbox"/> Other (please specify) _____ | |

6. What university do you attend? *(Example: *Southern Illinois University- Carbondale* or *SIUC*)

7. Do you have work experience in the field of counseling __Yes**__No

**Number of years worked?

- | | |
|---------------------------------------|------------------------------------|
| <input type="checkbox"/> Under 1 year | <input type="checkbox"/> 1-2 years |
| <input type="checkbox"/> 3-4 years | <input type="checkbox"/> 5-6 years |
| <input type="checkbox"/> Over 6 years | |

8. Do you have a disability? __Yes**__No

** Please specify the type of disability:

- Physical disorder (i.e., deaf or hard of hearing, visual impairment, or mobility impairment)
 Learning disability or Attention Deficit Hyperactivity Disorder
 Psychological disorder (i.e., anxiety disorder, major depression, or personality disorder)
 Other : _____

9. Would you like to be included in a drawing to win a \$25.00 Visa gift card? __Yes*__No

**Please provide your contact information for the Visa gift card drawing.

First Name _____ E-mail address _____ Phone Number () - _____

* Required question

** Follow-up question required

APPENDIX B

Prior Contact Form-R (PCF-R)

Please rate your general knowledge of the conditions and life circumstances of persons with disability:

No Knowledge

1

2

3

4

Extensive Knowledge

5

6

Please rate the frequency of your contact with persons with a disability:

Very Infrequent

1

2

3

4

Very Frequent

5

6

Please rate the intensity of your contact with persons with a disability, regardless of the frequency of contact:

Not At All Intense

1

2

3

4

Very Intense

5

6

Antonak, R. F. (1992). *Scale of attitudes toward disabled persons (SAPD) form R*. Durham, NH:

University of New Hampshire.

APPENDIX C

Level of Familiarity Scale (LOF)

Directions:

PLEASE READ EACH OF THE FOLLOWING STATEMENTS CAREFULLY. AFTER YOU HAVE READ ALL OF THE STATEMENTS BELOW, PLACE A CHECK BY EVERY STATEMENT THAT REPRESENTS YOUR EXPERIENCE WITH PERSONS WITH A SEVERE MENTAL ILLNESS.

___ I have watched a movie or television show in which a character depicted a person with mental illness.

___ My job involves providing services/treatment for persons with a severe mental illness.

___ I have observed, in passing, a person I believe may have had a severe mental illness.

___ I have observed persons with a severe mental illness on a frequent basis.

___ I have a severe mental illness.

___ I have worked with a person who had a severe mental illness at my place of employment.

___ I have never observed a person that I was aware had a severe mental illness.

___ A friend of the family has a severe mental illness.

___ I have a relative who has a severe mental illness.

___ I have watched a documentary on television about severe mental illness.

___ I live with a person who has a severe mental illness.

Corrigan, P. W. (2012). *A toolkit for evaluation programs meant to erase the stigma of mental illness*. Unpublished manuscript, National Consortium on Stigma and Empowerment.

Retrieved from <http://www.stigmaandempowerment.org/>

APPENDIX D

Attribution Questionnaire -27

Directions:

PLEASE READ THE FOLLOWING STATEMENT ABOUT HARRY:

Vignette A or Vignette B*

NOW ANSWER EACH OF THE FOLLOWING QUESTIONS ABOUT HARRY/GARY. CIRCLE THE NUMBER OF THE BEST ANSWER TO EACH QUESTION.

1. I would feel aggravated by Harry/Gary.

1 2 3 4 5 6 7 8 9
not at all *very much*

2. I would feel unsafe around Harry/Gary.

1 2 3 4 5 6 7 8 9
no, not at all *yes, very much*

3. Harry/Gary would terrify me.

1 2 3 4 5 6 7 8 9
not at all *very much*

4. How angry would you feel at Harry/Gary?

1 2 3 4 5 6 7 8 9
not at all *very much*

5. If I were in charge of Harry's/Gary's treatment, I would require him to take his medication.

1 2 3 4 5 6 7 8 9
not at all *very much*

6. I think Harry/Gary poses a risk to his neighbors unless he is hospitalized.

1 2 3 4 5 6 7 8 9
none at all *very much*

7. If I were an employer, I would interview Harry/Gary for a job.

1 2 3 4 5 6 7 8 9
not likely *very likely*

8. I would be willing to talk to Harry/Gary about his problems.

1 2 3 4 5 6 7 8 9
not at all *very much*

APPENDIX E

Mental Health Provider Stigma Inventory

The first domain of the MHPSI concerns service provider attitudes about mental health clients. Please read each item below, then choose the number, where 1 = *completely disagree* and 7 = *completely agree*.

Attitudes

	1	2	3	4	5	6	7
My good decisions in life have protected me from having problems like my clients have.							
Clients behave like other people with the same diagnostic label(s).							
Clients with chronic diagnostic labels should not make their own decisions.							
Clients will not follow through on recommendations or instructions.							
Once a person becomes a mental health client, they will never get better.							
It's okay to remind clients that the staff is in charge.							
I could never have the same problems as clients.							
Clients are crazy.							
When a client and coworker are having a disagreement, I side with my coworker.							

 The second domain of the MHPSI concerns service provider behaviors. Please read each item below, then choose the number, where 1 = *completely disagree* and 7 = *completely agree*.

Behaviors

	1	2	3	4	5	6	7
I tell clients that they cause their own problems.							
I refer to clients by their diagnostic label(s).							
I tell clients that I am the expert.							

I talk about clients to my coworkers in dismissive terms.							
I tell coworkers I don't approve of clients' lifestyles.							
I make fun of clients when talking about them to coworkers.							
It bothers me when coworkers make fun of clients.							
I refer to clients by their diagnostic label(s) when discussing them with coworkers							

The third domain of the MHPSI addresses coworker influence in the workplace. Please read each item below, then choose the number, where 1 = *completely disagree* and 7 = *completely agree*.

Coworker Influence

	1	2	3	4	5	6	7
If my coworkers talked about a client in disrespectful terms, I would be more likely to use ugly or hurtful language when discussing them myself.							
If my coworkers treated an adult client like a child, I would be more likely to restrict that client from making decisions about their care.							
If my coworkers talked about how a client was incapable of change, I would be more likely to give up on that client.							
If my coworkers talked about how they were smarter or more rational than clients, I would be more likely to think clients should do what I say because I'm "the expert."							
If my coworkers made fun of clients, I would be more likely to do so too.							
If my coworkers talked about the bad decisions a client made, I would be more likely to lower my expectations for that client.							
If my coworkers told me a client was a liar, I would be more likely to ignore that client if they alleged mistreatment from the staff.							

Kennedy, S. C., Abell, N., & Mennicke, A. (2014). Initial validation of the Mental Health Provider Stigma Inventory. *Research on Social Work Practice, 27*(3), 335-347.

doi:10.1177/1049731514563577

APPENDIX F

E-mail Requests Sent to Students

First E-mail Research Request

(Date)

Greetings,

We are writing to ask for your participation in a survey we are conducting in the Rehabilitation Institute at Southern Illinois University Carbondale in Carbondale, Illinois. You have been contacted because of your enrollment in a Rehabilitation Counseling Program. This research has been approved by the Institutional Review Boards at Southern Illinois University Carbondale and Troy University.

Did you know that mental illness affects nearly 4.0% of the entire United States population? In your career as a Rehabilitation Counseling professional, odds are you will work with individuals who have a mental illness. You may know individuals who have experienced severe and persistent mental illness at some point in your life.

This is a short survey related to mental illness and should take you no more than 15 minutes to complete. Your participation is voluntary and your identity will remain confidential throughout the process. You will have the option to enter into a drawing to win a \$25.00 Visa gift card. Should you have any questions or comments about this survey, please feel free to contact me at (618) 453-2860, or randallboen@siu.edu. The faculty adviser for this study is Dr. Thomas Upton, his email is tupton@siu.edu. Please click on the link below to go to the survey's website (or copy and paste the provided link into your internet browser) to start the survey.

Survey Link: http://_____

****If you have already participated in this study you may discard this message****

Thank you in advance for completing this survey. Your responses are highly valued. It is only through your help that we can further understand this important issue.

Sincerely,

Randall Boen, MS, CRC
Doctoral Candidate
Rehabilitation Institute

Thomas Upton, Ph.D., CRC
Professor
Rehabilitation Institute

This project has been reviewed and approved by the SIUC and Troy University Human Subjects Committees.

- Southern Illinois University - Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

- Troy University - If you have any questions concerning your rights as a research participant, contact the Institutional Review Board by sending an email to irb@troy.edu or calling 334-808-6294.

Second E-mail Research Request

(Date)

Greetings,

We recently sent you an email on March 27 asking for your participation in a short survey. Your participation is valued as a future rehabilitation counselor. If you can spare around 15 minutes, please consider participating in this study. Your participation is voluntary and your identity will remain confidential throughout the process. You will have the option to enter into a drawing to win a \$25.00 Visa gift card.

Please click on the link below to go to the survey's website (or copy and paste the provided link into your internet browser) to start the survey. Should you have any questions or comments about this survey, please feel free to contact me at (618) 453-2860 or randallboen@siu.edu.

Survey Link: **http://**_____

****If you have already participated in this study you may discard this message****

Your responses are important and will help us to further understand this important issue. Thank you for your help in completing this survey.

Sincerely,

Randall Boen, MS, CRC
Doctoral Candidate,
Rehabilitation Institute

Thomas Upton Ph.D., CRC
Professor
Rehabilitation Institute

This project has been reviewed and approved by the SIUC and Troy University Human Subjects Committees.

- Southern Illinois University - Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu
- Troy University - If you have any questions concerning your rights as a research participant, contact the Institutional Review Board by sending an email to irb@troy.edu or calling 334-808-6294.

Third E-Mail Research Request

(Date)

Greetings,

Spring semester is a busy time for students, and I understand how valuable your spare time is during the semester. We are hoping you can spend around 10 to 15 minutes to participate in a study about mental illness. Your participation is voluntary and your identity will remain confidential throughout the process. You will have the option to enter into a drawing to win a \$25.00 Visa gift card.

If you have already participated in this study, I really appreciate your time. If you have not yet responded, I would like to encourage you to do so. I plan to end data collection soon so would encourage everyone to participate.

Please click on the link below to go to the survey's website (or copy and paste the provided link into your internet browser) to start the survey. Should you have any questions or comments about this survey, please feel free to contact me at (618) 453-2860 or randallboen@siu.edu.

Survey Link: **http://**_____

Your responses are important and will help us to further understand this important issue. Thank you for your help in completing this survey.

Sincerely,

Randall Boen, MS, CRC
Doctoral Candidate,
Rehabilitation Institute

Thomas Upton Ph.D., CRC
Professor
Rehabilitation Institute

This project has been reviewed and approved by the SIUC and Troy University Human Subjects Committees.

- Southern Illinois University - Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu
- Troy University - If you have any questions concerning your rights as a research participant, contact the Institutional Review Board by sending an email to irb@troy.edu or calling 334-808-6294.

APPENDIX G

Flyer for Participants

What are you doing in the next 10 – 15 minutes?

- Checking Facebook
- Drinking coffee
- ✓ Participating in research

Mental illness affects nearly 4.0% of the entire United States population? In your career, odds are you will work with individuals who have severe and persistent mental illness. You may know individuals who have experienced mental illness at some point in your life. If you are a graduate student in psychology and over the age of 18, we are asking for your help

This is a short survey is related to mental illness and should take you approximately 15 minutes to complete. Your participation is voluntary and your identity will remain confidential throughout the process. You will have the option to enter into a drawing to win a \$25.00 Visa gift card. Questions or comments? Contact me at (618) 453-2860 or randallboen@siu.edu. The faculty adviser for this study is Dr. Thomas Upton, his email is tupton@siu.edu.

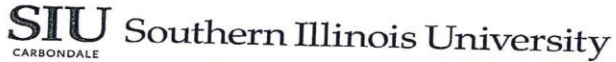
To take part in the study go to: www.surveymonkey.com/r/SPMIsurvey



This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

APPENDIX H

Institutional Review Board Approval Letter: Southern Illinois University- Carbondale



HUMAN SUBJECTS COMMITTEE
OFFICE OF SPONSORED PROJECTS
ADMINISTRATION
WOODY HALL - MAIL CODE 4709
900 SOUTH NORMAL AVENUE
CARBONDALE, ILLINOIS 62901

siuhsc@siu.edu
618/453-4531
618/453-8031

ospa.siu.edu/compliance/human-subjects

HSC Approval letter (exempt)

To: Randall Boen

From: Kimberly K. Asner-Self
Chair, Human Subjects Committee

Date: November 15, 2017

Title: *Evaluation of Attitudes Towards Individuals with Mental Illness Among Counselors in Training*

Protocol Number: 17280

The above referenced study has been approved by the SIUC Human Subjects Committee. The study is determined to be exempt according to 45 CFR 46.101(b)4. This approval does not have an expiration date; however, any future modifications to your protocol must be submitted to the Committee for review and approval prior to their implementation.

Your Form A approval is enclosed.

This institution has an Assurance on file with the USDHHS Office of Human Research Protection. The Assurance number is FWA00005334.

KAS:kr

Cc: Thomas Upton

APPENDIX I

Institutional Review Board Approval Letter: Troy University

Institutional Review Board

Adams Administration
LL Rm 11 A
Troy, AL 36082

334-808-6294 Office
334-670-3912 Fax

<http://www.troy.edu/institutionalreview>



May 25, 2018

Randall Boen
Graduate Students
Rehabilitation Institute
Southern Illinois University

Dear Researcher(s),

The Troy University Institutional Review Board has finished reviewing your application for: The Evaluation of Attitudes Towards Individuals with Mental Illness Among Counselors In Training (Protocol #201804011) and has approved your protocol, as is.

This approval is good from May 25, 2018 until May 25, 2019. If you wish to continue your research after this date, you must complete and submit a Continuation Application. You are also responsible for immediately informing the Institutional Review Board of any changes to your protocol, or of any previously unforeseen risks to the research participants.

Please let me know if you have any questions.

Sincerely,

Dr. Tom Reiner



CONSENT FORM

My name is Randall Boen, I'm a doctoral student in the Rehabilitation Counseling Program at Southern Illinois University-Carbondale.

I am asking for your participation in my research study. You are able to participate in this study if you: are currently enrolled in a graduate program (Masters or Doctorate) in counselor education or closely related program in the United States, over the age of 18, and have not previously participated in this study. The purpose of this study is to gather how people feel towards individuals with severe and persistent mental illness. At the end of this study you will be asked general information about yourself, including age and class standing.

Participation is voluntary. If you choose to participate in the study, it will take approximately 15-30 minutes of your time. You are not required to agree this consent form and you may refuse to do so without affecting your right to participate in any assistive programs or events offered by SIU or any services you are receiving or may receive. However, if you refuse to sign this form, you cannot participate in this study. You may withdraw your consent to participate in this study at any time. If you choose to withdraw from the study before data collection is completed, any collected data will be destroyed and not used.

All your responses will be kept confidential within reasonable limits. Only those directly involved with this project will have access to the data including Dr. Thomas Upton and myself.

If you have any questions about the study, please contact me.

My phone number is (618) 453-8260 or randallboen@siu.edu. The faculty adviser for this study is Dr. Thomas Upton of the Rehabilitation Institute, 322A Rehn Hall Carbondale IL 62901. He may also be reached at (618) 453-8287 or tupton@siu.edu.

Thank you for taking the time to assist me in this research.

By clicking accept I have read and understood all contents this consent form.

Accept

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

APPROVED ON
MAY 25 2018
TROY IRB

Troy University
Institutional Review Board
Approval Expires:

05 / 25 / 2019

QUESTIONS OR CONCERNS?
Contact Us: 334-670-6294
irb@troy.edu

APPENDIX J

Follow-up Questions Given to Participants of Pilot Study

Directions: Thank you for taking part in my study. Please take a few moments to answer the following questions regarding the study.

	Agree	Disagree
All questions were easy to understand.		
I understood the vignette provided.		
The vignette provided sufficient details for me to answer all the questions on the Attribution Questionnaire-27.		
I understood how I was to respond to each question.		
The vocabulary used in each question was understandable.		

Do you recall the mental health diagnosis of Harry / Gary?* If so, please provide _____

Did Harry's / Gary's* mental health diagnosis influence your responses to the questions?

- Yes
- No
- Unsure

If no information was provided about Harry's / Gary's* mental health diagnosis, would your answers to the questions have been different?

- Yes
- No
- Unsure

Do you have any further comments about this study? _____

Note. *questions varied depending on vignette viewed

APPENDIX K

Permission from Dr. Patrick Corrigan to Use the AQ-27 and LOF Scales

From: Patrick Corrigan <corrigan@iit.edu>
Sent: Monday, February 20, 2017 10:53:37 AM
To: Randall Derek Boen
Subject: RE: RE:

Hi Randall
You have my permission to use the scales
Four lessons should be downloadable at www.NCSE1.org

Pat

Patrick W. Corrigan
Distinguished Professor of Psychology
Illinois Institute of Technology
Chicago, IL, USA
312 567-6751

National Consortium on Stigma and Empowerment (www.NCSE1.org)
Honest, Open, Proud to Erase the Stigma of Mental Illness (www.HOPprogram.org)
Stigma and Health, an APA Journal (www.apa.org/pubs/journals/sah/)

Chicago Health Disparities (www.chicagohealthdisparities.org)

APPENDIX L

Permission from Dr. Stephanie Kennedy to Use the MHPSI Scale

Re: Mental Health Provider Stigma Inventory

KS

Kennedy, Stephanie <stephanie.kennedy@uconn.edu>

Today, 10:50 AM

Randall Derek Boen ↕

👤 Reply all | ▼

Inbox

You replied on 8/4/2017 10:54 AM.

Randall,

This sounds like a fascinating project! I'm thrilled that you're interested in using the MHPSI, and I wish you a large sample and no missing data.

Please let me know if I can help in any way and best of luck!

Sincerely,

Stephanie

Stephanie C. Kennedy, PhD, MSW

Assistant Professor

School of Social Work

University of Connecticut

VITA

Graduate School
Southern Illinois University

Randall Boen

Randallboen@siu.edu

Bachelor of Science, Psychology, May 2010

Master of Science, Rehabilitation Counseling, May 2014

Special Honors and Awards:

Lorenz/ Baker Student Award SIU. 2013, 2017

Outstanding May Graduate in Psychology APSU. 2010

Most Valuable Member Award, Psi Chi /Psychology Club APSU. 2009

Dissertation title: The Evaluation of Attitudes towards Individuals with Mental Illness among Rehabilitation Counselors in Training

Major Professor: Dr. Thomas Upton

Publications:

Boen, R., Anuar, A., & Ghazali, N. M. (in press). Cannabis use among adolescents with specific learning disabilities. *Rehabilitation Counselors and Educators Journal*.

Boen, R., Knickmeyer, N., Upton, T., & Anuar, A. (2016). Questions of fairness: Perceptions of educational accommodations by others in the classroom. *Journal of Cognitive Sciences and Human Development*, 1, 99-109.

Boen, R. (2014). Evaluation of general and specific assistive technology knowledge among students with disabilities in postsecondary environments. *Theses*. Paper 1431.