Stigma of the Mentally Ill Among University of Tennessee, Knoxville Students

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Stigma of the Mentally Ill Among University of Tennessee, Knoxville Students

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Degree
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Megan Cassidy Herscher
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Abstract

According to the Centers for Disease Control (CDC, 2009), suicide kills nearly 100 people in the United States each day. Suicide rates among college-aged students are higher than among the general population; with suicide as the second leading cause of death among this age group (CDC). In addition to the heightened levels of suicide among the population suffering from mental illness, stigma compounds the issues affecting this population (Link & Phelan, 2001). In response to these issues, communities around the world have reacted with community intervention campaigns, both to combat suicide and to reduce stigma. The dissertation study will examine the issues of suicide, stigma and community-based intervention campaigns within the context of the University of Tennessee, Knoxville’s campus.

Key Words: suicide, stigma, mental health, college-aged students
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Chapter 1
STIGMA, SUICIDE AND INTERVENTION TECHNIQUES

Introduction

This quantitative study will examine stigma towards the mentally ill among undergraduate students at the University of Tennessee, Knoxville, following the implementation of a multi-faceted Social Media Campaign launched by the researcher and the University of Tennessee Counseling Center. Using a community-based prevention model (Substance Abuse and Mental Health Services Administration [SAMHSA], 2001), the Social Media Campaign intends to mitigate factors related to heightened levels of suicidal ideation and completed suicide on The University of Tennessee, Knoxville’s campus. The Social Media Campaign includes three primary components/objectives: increasing knowledge of resources for students struggling with situational or emotional difficulties, increasing bystander awareness and action related to the recognition and aiding of students struggling with emotional or situational difficulties, and decreasing stigma towards the mentally ill among students. The Social Media Campaign designates specific intervention for each of the aforementioned objectives.

This study focuses on the anti-stigma component of the Social Media Campaign. Researchers established stigma as a known stressor among those struggling with a mental illness (Eisenberg, Downs, Golberstein, & Zivin, 2009), particularly those struggling with suicidal ideation (Suduak, Maxim, & Carpenter, 2008). Research demonstrates that preventative measures, such as appropriate community-based interventions, including anti-stigma campaigns, influence and reduce suicidal ideations (Centers for Disease Control and Prevention [CDC], 2001).
This chapter describes the history of the proposed study, including background, context, and conceptual underpinnings that link suicide, community-based intervention campaigns and stigma, and the issue of stigma among college-aged students. Finally, the researcher provides a statement of the problem, significance and purpose of the study, and definition of terms as well as specific research questions and limitations.

**Background and Context**

As stated earlier, research related to stigma towards the mentally ill among the undergraduate students at the University of Tennessee, Knoxville, (UTK) and a subsequent anti-stigma component of the community-based intervention campaign charged with decreasing suicide and suicidal ideations will focus this proposed research study. The impetus for examining stigma towards the mentally ill at UTK emerged from recent reports identifying heightened levels of suicidal ideation among University of Tennessee, Knoxville, students in contrast to comparable universities (University of Texas, Austin, 2011). As a result of these findings, the University Counseling Center pledged to examine and attempt to mitigate factors contributing to heightened levels of suicidal ideations among students through the dissemination of a community-based intervention campaign, the Social Media Campaign (Briscoe, 2011). Included in this pledge was an assessment of the anti-stigma aspect of the Social Media Campaign. A summary of the plan to measure the effectiveness of the Social Media Campaign follows.

First, prior to the implementation of the Social Media Campaign, the researcher obtained a baseline measure of stigma toward the mentally ill among undergraduate students at the University of Tennessee, Knoxville. This initial assessment represented the researcher’s doctoral research competency. Second, following this initial assessment of undergraduate student stigma toward the mentally ill, the UTK Counseling Center embarked upon a community-based
intervention campaign (Social Media Campaign) to combat the heightened levels of suicidal ideations and completed suicides among University of Tennessee, Knoxville, students (University of Texas, Austin, 2011). Third, after the completion of significant aspects of the Social Media Campaign, the researcher will examine the effectiveness of the Social Media Campaign, particularly the anti-stigma component of the campaign. Specifically, the researcher’s dissertation proposal focuses on the assessment of stigma among UTK undergraduates following exposure to the anti-stigma component of the Social Media Campaign and assesses the initial impacts of the campaign on stigma among UTK undergraduate students. For the purpose of this study, the researcher will refer to this initial stigma assessment as *Student Attitudes Survey #1*, and the second stigma assessment as *Student Attitudes Survey #2*. The content of the two surveys is the same except that Student Attitudes Survey #2 includes questions measuring exposure to the Social Media Campaign. The following three sections provide additional detail about the three-step plan summarized above.

**Pre-Social Media Campaign Assessment**

This researcher, to meet the requirements of her research competency, developed a proposal to obtain a baseline measure of stigma among undergraduate students at the University of Tennessee, Knoxville. The researcher identified Day’s Mental Illness Stigma Assessment (Day, Eshleman, & Edgren, 2007) as the most appropriate measurement of student attitudes based on its specificity towards college-aged students. The researcher distributed the assessment via email, entitling it *Student Attitudes Survey #1*. Student Attitudes Survey #1 measured stigma using Day’s Mental Illness Stigma Assessment (Day et al., 2007), compared Social Stigma subsets (Jones et al., 1985), and measured stigma among varying demographic groups. The
faculty in Counselor Education and the Human Subjects Board at UTK approved the research competency proposal.

**Campus-Wide Social Media Campaign**

Following the initial Student Attitudes Survey, the researcher and UTK Counseling Center launched the Social Media Campaign. The identified intervention in this study is exposure to the anti-stigma component of the Social Media Campaign. As stated earlier, the Social Media Campaign’s primary objective is to mitigate factors associated with heightened levels of suicidal ideation and suicide completions among UTK undergraduate students. Within the context of the Social Media Campaign, the anti-stigma component includes the following objectives: decreasing stigma among parents of students, decreasing stigma among male students, and decreasing stigma associated with seeking help. The researcher will refer to these components of the Social Media Campaign charged with decreasing stigma as the anti-stigma component of the Social Media Campaign.

The researcher will focus on the anti-stigma component of the Social Media Campaign in the proposed study. While other components of the campaign may influence student awareness of resources, or likelihood to intervene in a crisis, measurements of stigma will provide insight specific to the anti-stigma component of the campaign. Chapter Three provides a more-detailed description of the campaign.

**Post-Social Media Campaign Assessment**

The semester following the dissemination of the anti-stigma component of the Social Media Campaign (Spring 2013), the researcher will re-survey the participants from Student Attitudes Survey #1 with Student Attitudes Survey #2. The researcher will utilize a quantitative repeated measures methodology to perform these comparisons, with the assumption that a
comparison of the two surveys will provide insight into any changes in stigma resulting from the anti-stigma component of the Social Media Campaign (Creswell, 1993).

**Conceptual Underpinnings**

**An Overview of Suicide, Community Intervention Campaigns, and Stigma**

This section provides a description of suicide, stigma, and community intervention campaigns, concepts that provide a foundation for the study. The section introduces suicide, examines suicide among college-aged students, and explores how current research supports the need for expansion of the current knowledge base. Additionally, this section explores community-based intervention campaigns charged with decreasing suicide and community-based intervention campaigns specifically targeting stigma. Specifically, this section provides an overview of stigma, introduces stigma theory, and links stigma to suicide and suicidal ideations. The relationship among the concepts of suicide, stigma, and community-based intervention campaigns provide the foundation for the proposed study.

**Suicide**

According to Paul Quinnett (2009), who founded of the Question, Persuade, Refer (QPR Institute) for suicide prevention, individuals contemplate suicide when it becomes the only foreseeable solution to a seemingly insolvable problem. Situational risk factors associated with suicide include: a recent relapse from drugs or alcohol, loss of a job, financial difficulties, loss of a relationship, and stigma associated with help-seeking behaviors (SAMHSA, 2001). The co-occurrence of depression or another psychiatric disorder also increases the likelihood of a suicide attempt (CDC, 2009). Suicide is often the result of an underlying disorder, which, if treated, can reduce risk of suicidal ideation or completion (Quinnett, 2009).
Suicide and College-Aged Students

College-aged students appear particularly vulnerable to suicide and suicidal ideations. Research indicates that the onset of pervasive mental health issues often occurs in adolescence and early adulthood, with three quarters of the onset of all mental health issues occurring by age 24 (National Institute of Mental Health [NIMH], 2005), the age of the “traditional” college student. Additionally, research indicates that attending college exacerbates stress since many college students are away from family and other support systems (Shirom, 1986).

Those concerned with the mental health of college-aged students, and more specifically, suicide rates, indicated the need to investigate the contributing factors to suicide rates and explore other factors yet to be identified (New Freedom Commission on Mental Health [NFCMH], 2003). Knowledge related to contributing factors of suicide becomes important because it provides information for developing suicide prevention programs (Mier, Boone, & Shropshire, 2009). Suicide prevention programs often target known contributing factors of those at risk for suicide, using these factors as a basis for suicide-prevention programs (Dryfoos, 1996).

Suicide Prevention and Community-Based Intervention Campaigns

Suicidal ideations do not necessarily result in completion of suicide. Several preventative factors may successfully diminish suicidal ideations and reduce suicide risk. For example, individualized treatment may be effective in decreasing risk of suicide (Linehan et al., 2006; NIMH, 2012). Treatment is an individualized means of alleviating factors contributing to suicidal ideations. For the purpose of this study, the researcher expands upon broader interventions, specifically community-based intervention campaigns charged with decreasing suicide and suicidal ideations.
The Surgeon General stressed the need for community based suicide prevention programs because “Suicide is a Serious Health Problem” (Surgeon General, 1999). Recent attention received from the Surgeon General and other public health agencies resulted in a national call to action to decrease suicide. Grants from the Substance Abuse and Mental Health Association (SAMHSA) provided funding specific to community intervention campaigns charged with increasing awareness of risk factors and behaviors as well as educating individuals on resources and referral procedures (SAHMSA, 2001). National organizations including The National Council for Suicide Prevention (http://www.ncsp.org), the Jed Foundation (http://www.jedfoundation.org), and the Jason Foundation (http://www.jasonfoundation.com) provide screenings and promote education and suicide-prevention awareness. These organizations, communities, and universities use multiple models to prevent suicide on a broad scale. The researcher will provide a more comprehensive exploration of successful community-based intervention campaign models in Chapter Two.

**Anti-Stigma Community Intervention Campaigns**

Similar to the public health implications for suicide, stigma towards the mentally ill is a pervasive issue transcending international borders (Corrigan et al., 2004). In response to the pervasive nature of this issue, community advocates and government agencies developed and disseminated anti-stigma campaigns throughout the world (World Health Organization [WHO], 2012). Proactive anti-stigma campaigns aimed at decreasing stigma among the mentally ill adhere to common themes such as promoting education and decreasing stereotyping (Beldie, den Boer & Brain, 2012). Reactive anti-stigma campaigns rally communities to respond negatively
to media depictions of the mentally ill, identifying the negative impacts of stigma (Link & Phelan, 2001).

The former director of the World Health Organization described universal components of anti-stigma campaigns, finding that campaigns typically disseminate messages of acceptance through radio, television, Internet, and celebrity endorsements (WHO, 2011). Additionally, the WHO emphasized the value of anti-stigma programs and beseeched communities to develop sustainable anti-stigma programs effective in creating long-term changes in stigma. The researcher will further explore successful anti-stigma campaigns in Chapter Two.

**Stigma Overview and Stigma Theory**

Stigma is a well-studied construct in mental health literature. Researchers (Cumming & Cumming, 1957) measured stigma in terms of a Social Distance Scale, based on the Bogardus Social Distance Scale, measuring willingness to interact closely with an individual. Goffman (1968) examined the discomfort experienced by the general population while interacting with those labeled as mentally ill. He linked this discomfort to a recurrent fear that the mentally ill are unpredictable. Scheff (1966) further explored the concept of stigma and its relationship to Labeling Theory in his book *Being Mentally Ill*. He found that it is not the actions of the mentally ill which drive public assumptions but the self-fulfilling prophecy associated with labels placed upon them. Becker’s (1973) exploration of deviance and labeling parallels the findings of Scheff. Becker asserted that similarly, in the case of deviance, it is not the actions of the deviance that categorize them as such but the identification and labeling of one as a deviant by others. Although the aforementioned researchers examined stigma and labeling of the stigmatized in the middle of the twentieth century, their findings remain relevant today.
While research indicates that there have been significant changes in stigma towards the mentally ill throughout the 1900s (Nunnally, 1961), this shift failed to decrease stigma. Beginning in the mid-1950s, mental health professionals began to understand that the general population associates severe mental illness with violent behavior (Phelan, Link, Stueve, & Pescosolido, 2004). According to researchers, stigma is a pervasive issue in American society today (Day et al., 2007).

**Stigma Theory**

Social Stigma Theory (Jones et al., 1985) serves as the basis for Day’s Mental Illness Scale (Day et al., 2007). The following subsets comprise Social Stigma Theory: concealability/visibility; course/outcome; disruptiveness; aesthetic impact; origin; and peril/danger. These provide the theoretical basis for the researcher to explore differing perceptions of the mentally ill within the context of the study. For example, subsets such as course and disruption cause the respondent to consider all degrees of mental illness, ranging from mild to severe. In addition, the complete set of subsets provides researchers a comprehensive view of all assumptions held towards the mentally ill. Wahl (2012) simply described stigma as “a combination of prejudice and discrimination” (p. 10). Social Stigma Theory captures the overall concept of stigma as well as its multiple aspects.

**Effects of Stigma**

Stigma towards the mentally ill is inarguably a detriment to an individual already struggling with the difficulties of a mental illness (Corrigan, River, Lundin, Penn, Uphoff-Wasowski, et al., 2010). Stigma manifests itself in both negative perceptions as well as social distancing from an individual believed to be mentally ill (Chung, Chen, & Liu, 2001). The
General Social Survey (GSS, 2006) found that stigma towards the mentally ill invades every aspect of their lives.

Moskos, Olson, Halber, and Gray (2007) found stigma to be significant among college-aged students. Corrigan (2005) and Morrow and Smith (2011) described this phenomenon among students specifically attending a university. These researchers found that fear of exposure results in chronic stress for the individual struggling with mental illness. This overview of suicide and stigma as it relates to college-age students supports the exploration of stigma among this population.

Statement of Problem

Suicide is an issue that affects more than ten thousand individuals annually in the United States (CDC, 2009). Specifically, students at the University of Tennessee, Knoxville, demonstrated higher suicidal ideations than the general population (University of Tennessee, Austin, 2011). Researchers established a clear link between suicide and stigma (Sudak, Maxim, & Carpenter, 2008). The relationship between these concepts serves as the basis for UTK’s efforts to mitigate suicide and suicidal ideations with a community intervention campaign including anti-stigma programming. Stigma is a pervasive issue among the general population (Corrigan, 2005) as well as among college-aged students (University of Texas, Austin, 2011).

Wahl (2012) defined stigma as the culmination of stereotyping and discrimination.

As mentioned earlier, Jones et al. (1985) operationalized stigma to include six subsets and identified these as Social Stigma Theory. A number of researchers found evidence of the pervasive negative effects of stigma towards the mentally ill (Quinnett, 2009; Moskos, Olson, Halber, & Grey, 2007; Corrigan, 2005). In response, governments and communities launched anti-suicide and anti-stigma interventions both nationally and internationally (WHO, 2012).
stronger understanding of stigma, especially within the context of prevention program delivery, serves as a building block for the development of anti-stigma programs and anti-stigma components of suicide prevention campaigns (SAMHSA, 2009; Thompson et al., 2001). This is the basis for further exploration of stigma among university students at the University of Tennessee, Knoxville.

**Research Questions**

Students at the University of Tennessee, Knoxville, are more likely to report contemplating suicide than students at similar universities (University of Tennessee, Austin, 2011). Prompted by these statistics, the university pledged to explore these issues and respond accordingly. The UTK response includes the dissemination of a Social Media Campaign, including an anti-stigma component. Examining stigma toward the mentally ill among UTK undergraduate students following exposure to the campaign may provide insight into the campaign’s effectiveness in stigma reduction. The following questions will provide insight into stigma among UTK students.

**Research Question 1:** What degree of stigma do UTK undergraduate students have toward persons with mental illness, as measured by Day’s Mental Illness Stigma Scale (Day et al., 2007), following a Social Media Campaign designed to reduce stigma toward persons with mental illness?

**Research Question 2:** What degree of stigma do UTK undergraduate students have related to persons with mental illness, as measured by Day’s Mental Illness Stigma Scale Subsets (Day et al., 2007), following a Social Media Campaign designed to reduce stigma toward persons with mental illness?

a. How anxious is one around someone with a mental illness?
b. Do individuals with mental illness have poor hygiene?

c. How easy is it to tell if someone has a mental illness from looking at them?

d. How treatable is mental illness?

e. How effective are mental health professionals in the treatment of those individuals with a mental illness?

f. How likely is it that someone with a mental illness will recover?

Research Question 3: What degree of stigma do UTK undergraduate students have towards persons with mental illness based on the following demographic characteristics: year in school, gender identity, sexual identity, race/ethnicity, current or past military service, and membership in a Greek organization, as measured by Day’s Mental Illness Stigma Scale (Day et al., 2007), following a Social Media Campaign designed to reduce stigma toward persons with mental illness? (The researcher provides further explanation as to why demographic characteristics are explored in Chapter Two.)

Research Question 4: How does UTK undergraduate student stigma toward persons with mental illness, as measured by Day’s Mental Illness Stigma Scale (Day et al., 2007), change following a Social Media Campaign designed to reduce stigma toward persons with mental illness?

Research Question 5: How does UTK undergraduate student stigma toward persons with mental illness, as measured by Day’s Mental Illness Stigma Scale Subsets (Day et al., 2007), change following a Social Media Campaign designed to reduce stigma toward persons with mental illness?

a. How anxious is one around someone with a mental illness?

b. Do individuals with mental illness have poor hygiene?

c. How easy is it to tell if someone has a mental illness from looking at them?
d. How treatable is mental illness?

e. How effective are mental health professionals in the treatment of those individuals with a mental illness?

f. How likely is it that someone with a mental illness will recover?

Research Question 6: How does stigma among UTK undergraduate students towards persons with mental illness change based on the following demographic characteristics: year in school, gender identity, sexual identity, race/ethnicity, current or past military service, and membership in a Greek organization, as measured by Day’s Mental Illness Stigma Scale (Day et al., 2007), following a Social Media Campaign designed to reduce stigma toward persons with mental illness?

Research Question 7: What percentage of the surveyed population reported exposure to the anti-stigma component of the Social Media Campaign, and how do the responses of these individuals compare to students not exposed to the Social Media Campaign?

Focus and Significance

The focus of this study is to examine changes in stigma following the implementation of a Social Media Campaign. As mentioned earlier, the comparison between baseline measures of stigma and stigma following exposure to the Social Media Campaign may provide a link between the disproportionately high rates of suicide among UTK students (University of Texas, Austin, 2011) and the overall effectiveness of the initial stages of the anti-stigma component of the Social Media Campaign. The researcher hopes to measure effectiveness of the campaign among specific demographic groups, as well as the effectiveness of the campaign in decreasing specific stigma subsets. Results of the study may prompt the researcher and University Counseling Center to modify future Social Media Campaign goals and interventions.
Definition of Key Terms

Community-Based Intervention Campaign: This term refers to a multi-faceted program charged with creating positive change on both an individual and environmental basis. Community leaders, community members, and local or national governments are often responsible for launching these campaigns (Altman, 1995).

Day’s Mental Illness Scale (Day et al., 2007): Day, Eshleman, and Edgren developed this scale to measure attitudes towards the mentally ill based on the following subsets: interpersonal anxiety, relationship disruption, poor hygiene, visibility, treatability, professional efficacy, and recovery. The scale is unique and deemed appropriate for this study based upon its validation among college students and community members.

Personal Stigma: According to Corrigan (2004), personal stigma refers to the perceptions or attitudes that an individual has towards those categorized as mentally ill.

Suicidal Ideation: According to the Centers for Disease Control (CDC), a suicidal ideation refers to “thinking about, contemplating or planning for suicide” (2012).

Stigma: Major and Obrien (2005) asserted that stigma includes both the categorization and negative assumption that individuals with mental health issues are different in a negative way than those without a mental illness.

Social Media Campaign: The University of Tennessee, Knoxville, launched the Social Media Campaign during the Fall 2012 semester, following the distribution of Student Attitudes Survey #1, to mitigate high levels of suicidal ideation among undergraduate students. The campaign’s objectives include increasing knowledge of resources for those students struggling with situational or emotional difficulties, increasing bystander awareness and action related to the
recognition and aiding of students struggling with emotional or situational difficulties, and decreasing stigma towards the mentally ill among students.

Treatment: The use of the term *treatment* within the context of this research refers to all individual interventions provided to those struggling with emotional difficulties by a mental health professional. This is separate from community-based campaigns, such as those described in the Social Media Campaign.

University of Tennessee, Knoxville, Anti-Stigma Component of Social Media Campaign: The anti-stigma component is part of the Social Media Campaign, specifically aimed at decreasing stigma towards the mentally ill on UTK’s campus. The anti-stigma campaign consists of three specific objectives: decreasing stigma among parents, decreasing stigma among male students, and decreasing stigma associated with seeking and receiving help for emotional difficulties.

Limitations

The proposed study contains several limitations by virtue of its quantitative nature. The debate between those who endorse qualitative and quantitative research includes shortcomings associated with quantitative research. Some of the limitations associated with quantitative research include generalizability of data based on limited sample size (Mertler & Vannatta, 2001), as well as a lack of rich and thick data associated with qualitative data (Creswell, 1993). Additionally, limitations exist specific to qualitative research in the social sciences. These include the challenges of researching individual perceptions and experiences through pre-established categories (Fonow, 1991). This limitation is particularly relevant to this study due to the subject of the research. In addition to methodological limitations, Creswell (1993) identified confines associated with a hesitancy for individuals to engage in a survey on an unpleasant topic. This is particularly relevant to this study. In an attempt to mitigate this phenomenon, the
researcher renamed Day’s Mental Illness Stigma Scale (Day et al., 2007) as Student Attitudes Survey #1 and Student Attitudes Survey #2 prior to distribution.

Additional limitations associated with this study include the reliance on incentives to encourage participants to complete Day’s Mental Illness Stigma Scale (Day et al., 2007). Additionally, the survey will only assess current self-reported attitudes toward mental illness and mental health. According to Pettigrew (1991), self-report can be deceptive due to a respondent’s tendency towards idealistic responses rather than those true to their beliefs. A secondary issue associated with self-report is the social desirability component of survey completion. The social desirability component becomes relevant when surveying any type of discrimination (Dovidio & Fazio, 1992). Day et al. (2007) addressed this phenomenon, citing the tendency for respondents to indicate a lower level of discrimination on a survey than actually held.

**Summary**

Chapter One provides an overview of the pervasiveness of suicide and stigma among the general population as well as among college-aged students (CDC, 2009), specifically those attending the University of Tennessee, Knoxville. Despite the incidence of the issue of suicide and stigma, hope exists for those struggling with these issues. Appropriate interventions include community-based intervention campaigns to reduce both suicide and stigma. An examination of these concepts sets the stage for the further exploration of stigma, a significant issue both among those struggling with a mental illness as well as those struggling with suicidal ideations (Sudak, Maxim, & Carpenter, 2008).

The purpose of this study is to examine stigma among undergraduate college students at the University of Tennessee, Knoxville. The study will utilize the repeated measures methodology to examine changes in stigma among undergraduate students following several
months of exposure to the Social Media Campaign, including an anti-stigma component. The research questions will explore overall changes in stigma among undergraduate students as well as changes among specific subsets of stigma. In addition to examining changes in overall perceptions of stigma and stigma subsets, the researcher will examine stigma among and between demographic groups. The intended outcomes of the study are dual fold, to examine changes in stigma toward the mentally ill as well as to gain an understanding of the effectiveness of specific interventions occurring within the context of the anti-stigma component of the Social Media Campaign.

The findings of the study will influence future community-based intervention campaigns charged with decreasing suicide and stigma and benefit students, practitioners, educators, and community members charged with decreasing stigma towards the mentally ill. Chapter Two provides a thorough review of the literature related to precipitating factors leading to suicide and suicidal ideations, successful interventions deterring those with ideations from successful completion of suicide, as well as stigma and the perceptions of those who stigmatize, and the implications for those who experience stigma. Chapter Three provides a comprehensive description of the methodology and data analysis procedures used to explore stigma on the University of Tennessee, Knoxville, campus as and describes in detail in the anti-stigma component of the Social Media Campaign.
Chapter 2

RESEARCH OF STIGMA, SUICIDE AND INTERVENTION TECHNIQUES

Introduction

In the United States, the number of individuals who die from suicide is roughly twice that of the national homicide rate (CDC, 2009). Suicide kills approximately 11.8 people per 100,000 each year (CDC). According to the Centers for Disease Control, suicide continues to be a significant issue in the United States. The issue of suicide is particularly pervasive among college-aged students (ages 15-24) with deaths by suicide among this population accounting for more than 12% of the overall mortality rate (CDC, 2001). Research demonstrates preventative factors such as the dissemination of community-based intervention campaigns may decrease suicide rates (Thompson et al., 2001). Chapter Two provides further exploration of the concepts of stigma, suicide, and community intervention campaigns.

Stigma, Suicide, and Community Intervention Campaigns

The researcher introduced the concepts of suicide, stigma, and community intervention campaigns in Chapter One. In Chapter Two, the researcher narrows the focus to the literature related to the current study, the intervention, and its intended outcomes. Specifically, the dissertation examines stigma towards the mentally ill among undergraduate students at the University of Tennessee, Knoxville, and changes in stigma following the intervention. The intervention is the anti-stigma subset of the Social Media Campaign launched by the University of Tennessee’s Counseling Center.

Chapter Two provides a comprehensive description of the literature pertaining to stigma, the history of stigma, origin of stigma, theoretical bases of stigma, stigma among the proposed population of study (college-aged students), and stigma among varying demographic groups. In
addition, the chapter includes a review of findings related to effectiveness of anti-stigma and suicide prevention campaigns. Finally, Chapter Two outlines alternative and unconventional perceptions of stigma, suicide, and community-based intervention campaigns followed by an exploration of the gaps in the literature.

**Review of the Literature**

The researcher’s exploration of the literature resulted in a comprehensive overview of suicide, stigma, and community intervention campaigns. In October of 2011, the researcher conducted a preliminary search of the ERIC database. This search revealed a vast quantity of data pertaining to suicide, stigma, and community-based intervention campaigns respectively. Initially, the researcher explored each concept independently: stigma, suicide, and community-based intervention campaigns. These searches resulted in peer-reviewed studies and empirical data related to the three concepts as well as literature connecting two of the three concepts. The researcher identified research pairing: stigma and suicide; stigma and anti-stigma community-based intervention campaigns; and suicide and anti-suicide community-based intervention campaigns. In an attempt to gain insight into the progression of professional and public perceptions of these topics, the researcher placed no limitations on the publication dates. A survey of the literature ranging from the early twentieth through the twenty-first century illustrated the evolution of societal beliefs towards the mentally ill, suicide, and preventative community-based intervention plans.

In addition to utilizing ERIC databases to research these concepts, the researcher, in her position as graduate assistant (GA), accessed additional resources from the UTK Counseling Center library, including unpublished data. This data included research conducted by the University of Texas, Austin, in 2011, as well as data obtained from surveys conducted by the
University of Tennessee Counseling Center related to substance abuse and wellness (Health and Wellness Surveys, 2011). Finally, the researcher read papers related to a focus group conducted by Dr. Jennifer Morrow at the request of the UTK Counseling Center. The purpose of the focus group related to perceptions of suicide and the mentally ill.

The Concept of Sigma

Origin/History of Stigma

The term *stigma* originated as a noun used in ancient Greece and referred to the marking or identifying of someone as property. These marks helped identify the link between slaves and owners (Bennett, 1992). Current stigmatization of the mentally ill includes labeling and differentiating from the general population; although not physically visible as the marks used in ancient Greece, these labels are of comparable power. Sociologists such as Becker (1963) and Goffman (1959) explored the concept of stigma in the mid-twentieth century. They focused on stigma towards societal pariahs. In the late twentieth century, Jones et al. (1985) deconstructed the concept of stigma and developed the term *social stigma*, asserting that stigma is composed of specific subsets. The researcher explores the parameters of each of Jones et al.’s social stigma subsets in the following paragraphs. A complete understanding of social stigma requires thorough comprehension of the theoretical and historical roots of stigma.

Historians traced negative perceptions towards the mentally ill to ancient Greece, where community members identified as mentally ill faced “shame, loss of face and humiliation.” (Bennett, 1992, p. 31). Different eras in history produced variant degrees of stigma towards the mentally ill. Attitudes ranged from moderate tolerance and the perception that mental illness was merely the result of the “the frailty of man” (Mora, 1992, p. 51) to outright persecution of the mentally ill and an attribution of their symptoms to witchcraft (Mora, 1992). Although
historians cited fluctuations in the degree of aggression towards the mentally ill across cultures and historical periods, stigma towards the mentally ill remains a pervasive issue with origins dating before biblical times (Bennett, 1992).

Information pertaining to stigma among ancient cultures provides the context for further exploration of the concept of stigma. Recent studies illustrated how negative perceptions of the mentally ill develop and suggested the parallel between development of stigma and cognitive developmental stages. For example, Adler and Wahl (1998) found that as early as third grade, students exhibited stigma towards the mentally ill. Corrigan (2004) reported that negative perceptions about mentally ill persons emerge in the period between adolescence and early adulthood. Morrow and Smith (2011) studied stigma among college-aged students. They found that some students believe mental illness results from a deficiency in spirituality. The historical existence of stigma, as well as the presence of stigma originating in childhood and progressing through adulthood, provides the basis for further exploration of this phenomenon. The following section offers a theoretical explanation of stigma and clarifies the importance of exploring stigma among various demographic groups.

**Stigma Theory**

As mentioned in Chapter One, sociologists Becker (1959) and Goffman (1968) provided insight into the thought process of stigmatizing an individual different from oneself. Goffman deconstructed the process of stigmatization. He described interactions between a normal individual, free from characteristics differentiating him from general society, and an individual with a mental health diagnosis. These descriptions provided insight into cognitive processes of stigmatization. In addition to offering insight into the process of stigmatization, Goffman illustrated the plight of the stigmatized. He explored the difficulty experienced by community
outsiders attempting to reconcile their identity with societal expectations. While the theoretical assertions of sociologists such as Becker and Goffman provide an understanding of the cognitive processes of stigmatization towards all who deviate from societal norms, the dissertation will focus on stigma towards the mentally ill. The remainder of Chapter Two explores stigma as it relates to the mentally ill, focusing specifically on social stigma theory (Jones et al., 1985). Several subsets of stigma compose the concept of social stigma offered by Jones et al. Day et al. used these subsets to develop the instrument used in the proposed study, Day’s Mental Illness Stigma Scale.

Social Stigma (Jones et al., 1985)

Jones et al. mirrored Goffman’s (1968) exploration of relationships and interactions between the normal and the stigmatized. Goffman ultimately broadened his definition of the stigmatized to include criminals, the disabled, and the mentally ill. Jones et al. narrowed the exploration to stigma specific to the mentally ill. Jones et al. based social stigma theory upon a set of eight dimensions specific to stigmatization of the mentally ill. According to Jones et al., the following constructs (or subsets) compose social stigma theory: concealability/visibility; course/outcome; disruptiveness; aesthetic impact; origin; and peril/danger. Jones et al. developed social stigma theory in an effort to dissuade the general population from stigmatizing the mentally ill. In the dissertation, the researcher hopes to offer additional explanations of stigmatization of the mentally ill, specifically among college students, furthering contributions of such theorists as Goffman and Jones et al.

In summary, stigma towards the mentally ill continues to be an issue relevant to modern society, and detracts from the quality of life of those struggling with a mental illness (Link, Yang, Phelan, & Collins, 2004). Stigmatization of the mentally ill is an issue with roots dating
to pre-biblical times (Bennett, 2002). Historians (Mora, 1992) and sociologists (Becker, 1963; Goffman, 1959) examined the concept of stigma. Most recently, Jones et al. (1985) delineated the basis for stigma by examining specific stigma subsets, which compose the theory of social stigma. The historical basis of stigma and the modern exploration of the topic serve as a basis for this study.

**Stigma Among College-Aged Students**

Similar to negative perceptions held by the general population, college students, particularly those with no prior contact with an individual with a mental illness, are likely to stigmatize and maintain social distance from the mentally ill (Chung, Chen, & Liu, 2001). Moskos, Olson, Halbern, and Gray (2007) reported the deleterious effects of stigma on college-aged students with mental illness. Corrigan (2005) and Morrow and Smith (2011) explored stigma among university students at the University of Tennessee, Knoxville.

Corrigan (2004) asserted the distinction between personal stigma (one’s stigma towards the mentally ill) and public stigma (perceptions of the general public of the mentally ill). A study by Eisenberg et al. (2009) revealed a significant negative correlation between degree of personal stigma and an individual’s fear of recognition as mentally ill. Moskos, Olson, Halbern, and Gray (2007) identified stigma as a deterrent to seeking treatment for mental health issues. Fear of seeking treatment for the issue creating stigma further illustrates the pervasive nature of stigma.

Stigma is particularly relevant among the population of college-aged students (CDC, 2009). While attending a university, college students often experience distance from support systems such as family and friends (Eldekeklioglu, 2006), and fear of stigmatization for experiencing emotional or mental health difficulties can further exacerbate the stressors
experienced by this population (Chung, Chen, & Liu, 2001). As mentioned earlier, this population is highly vulnerable to suicide in comparison to the general population (CDC, 2009). The characteristics that make college-aged students susceptible to stigma and suicide support further examination of this population.

**Demographic Characteristics and Stigma**

Research indicates individuals with varying demographic characteristics often hold different perceptions towards the mentally ill (Hayward & Bright, 1997). The following provides an overview of how different demographic groups stigmatize the mentally ill, especially those characteristics most relevant to the college-age population. The demographic characteristics include stigma among students grouped by year in school (freshman, sophomore, junior, and senior status), gender, gender identity, sexual identity, ethnic group, veteran or active military status, and membership in a Greek organization. The researcher’s review of the literature results in conflicting data pertaining to stigma among these groups.

For instance, previous research conducted at the University of Tennessee, Knoxville, identified differences among different ethnic groups as well as students with alternative sexual identities. Morrow and Smith (2011) found African-American students less likely to seek help for emotional difficulties for fear peers may perceive them as lacking spiritual connectivity. Morrow and Smith also identified students with alternative sexual or gender identity to be less likely to stigmatize the mentally ill than other groups of university students. The 2011 Health and Wellness Survey also conducted at UTK (Briscoe, 2011) found males less likely to utilize available resources on campus for fear of stigmatization.

Additional research conducted nationally provides supplemental information regarding demographic characteristics and stigma. Chen et al.’s (2001) findings conflict with UTK
findings associated with gender. Chen et al. identified females as more likely to discriminate against the mentally ill, while Eisenburg et al.’s (2009) findings concurred with the 2011 Health and Wellness Survey conducted at UTK. Eisenberg found males more likely to discriminate against the mentally ill.

The researcher identified literature exploring stigma and other demographic variables such as military experience, age, and moral development. According to the National Council on Behavioral Health (NCBH, 2004), less than half of active military members sought help for mental health issues for fear of stigmatization associated with help seeking. This speaks to the culture of stigma within the military community. Although no previous research linked school year to stigmatization, Day et al. (2007) examined the link between age and stigma. Considering aging related to neurological development through the early twenties (Gogtay, et al., 2004), researchers linked neurological development to development of self and perceptions of others (Keverne, 2004). Researchers also related moral development and the ability to acknowledge and recognize perspectives and emotions to growing older (Decety, Michalska, & Kinzler, 2012). Integrating the developmental nature of aging with the various factors described above, Link, Yang, Phelan, and Collins (2004) acknowledged the perceptions of self and others as imperative to the cognitive processes of stigmatization.

The researcher could not identify specific research pertaining to year in school or membership in a Greek social organization and stigma; however, these demographics relate to other components of stigma (Keverne, 2004). Downs, Golberstein, & Zinn (2009) found those with a low socio-economic status to have higher degrees of stigma towards the mentally ill than those with a higher socioeconomic status. Byer (1997) identified a correlation between higher socioeconomic status and those students who were members of Greek social organizations.
These results provide further support for the investigation of stigma at the college level among different demographic groups.

In summary, the previous section illustrated the significant link between stigma and college-aged students as well as varied demographic groups within this population. College-aged individuals are particularly vulnerable to emotional difficulties due to lack of social and familial support (Eledelekioglu, 2006). Stigma or fear of stigmatization compounds the difficulties experienced by this population (Eisenberg, Downs, Golberstein, & Zivin, 2009). Following an extensive review of the literature, the researcher identified conclusive data pertaining to the concepts of social support, emotional difficulties, and stigma. However, questions remain regarding how different demographic groups stigmatize or perceive the mentally ill. The researcher will further explore these concepts in the study of stigma among UTK undergraduates.

**Anti-Stigma Programs**

The following section reviews Anti-Stigma Programs and their theoretical basis. Attitudes towards the mentally ill are “not easily changeable” (Pitre, Stewart, Adams, Bedard, & Landry, 2007, p.416). Typically, factors present in dispelling negative beliefs about the mentally ill include an anti-stigma initiative or a positive interaction with an individual with a mental illness (Rush, Angermeyer, & Corrigan, 2005). Additional means of decreasing stigma occur through the dissemination of community-based campaigns protesting stereotypes and negative media portrayals of the mentally ill, followed by the re-education of the community about mental illness (Corrigan, et al., 2001). Additional anti-stigma interventions include service-learning experiences that contain exposure to individuals with a mental illness (Barney, Corser, & White,
These anti-stigma campaigns share some commonalities with community-based suicide prevention programs.

**Suicide Prevention Programs**

Many universities and communities actively implement community intervention campaigns targeting suicide, both proactive and reactive. Effective suicide prevention models include: The Public Health Approach (SAMHSA, 2001); The Containment of Suicide Clusters (CDC, 1988); The CAST Model (Coping and Supportive Training); and, finally, a model specific to individual intervention, the C-CARE Model (Counselors Care) (Thompson, Eggert, Ranell, & Pike, 2001).

The Public Health Approach to prevention implements five steps in a particular sequence to produce “significant and sustained reductions in suicide” (SAHMSA, 2001). These steps include identification of the problem, identification of risk and protective factors, development and testing of interventions, intervention implementation, and evaluation of interventions. The Public Health Approach (SAHMSA, 2011) shares the community focus of the CDC Model of Prevention and Containment of Suicide (CDC, 1988).

However, unlike the Public Health Approach to prevention, the CDC Model is more of a reactive model, focused on squelching the “contagion” effect of suicides resulting in more suicides. In the case of multiple suicides occurring in a community, the CDC (1988) recommends implementation of a reactive team to manage the community response (CDC, 1998). This CDC Model recommends that communities identify key respondents to recognize and intervene with high-risk groups and individuals and that communities pair this intervention with appropriate management of the community crisis through media sources.
Outcomes for the CAST and C-CARE Community Intervention models include reducing suicidal ideations and co-occurring emotional issues associated with suicide (depression and anxiety) among high-school students. The CAST Model focuses on group counseling, skill building and fortification of the support system. The C-CARE Model focuses on similar skill building and support building through individual intervention (Thompson, et al., 2001).

Each of the models contains unique positive attributes. Understanding the context in which suicide occurs is the foundation of all models. Researchers and program development experts suggested that programs, including prevention programs, need to be grounded in needs assessments and understanding how emotional issues manifest themselves (CDC, 1998).

In summary, the previous section illustrated ramifications of stigmatization towards the mentally ill. In response, a variety of organizations responded with the distribution of anti-stigma and suicide-prevention campaigns. In spite of research related to stigma, suicide, and community-based intervention campaigns, misperceptions remain (Corrigan, et al., 2001). The following section describes widely held misperceptions related to stigma and suicide and alternative views pertaining to each.

**Misperceptions Related to Stigma and Suicide**

Creswell (2003) suggested, as a way of strengthening the research and increasing quality, researchers thoroughly examine beliefs and concepts related to the chosen research topic. The researcher identified the following four empirically based assumptions related to stigma and suicide. First, stigma is a pervasive issue dating back to ancient times (Bennett, 2002) and continues to be relevant in modern society (Link & Phelan, 2001). Second, despite societal advances, stigma towards the mentally ill continues to occur in modern society. Third, as a result, this stigma negatively influences quality of life for those struggling with a mental illness.
Fourth, suicide as a preventable phenomenon (Quinnett, 2005) is widely accepted among researchers and clinicians. The following provides an overview of alternative views associated with stigma and suicide.

**Stigma Does Exist**

Following a thorough review of the literature, the researcher failed to identify any scholarly articles denying the presence of stigma in the twenty-first century. Generally, researchers established that stigma towards the mentally ill is a pervasive issue, which continues to negatively impact the lives of those living with mental illness (Link et al., 1999; Sadow, Ryder, & Webster, 2002). The following provides alternative views related to the pervasive nature of stigma in modern society. In 2010, the American Psychological Association distributed their Healthy Minds, Healthy Lives Campaign and reported an overall decrease in stigma in the American population. The APA reported that one-third of Americans have decreased negative perceptions towards the mentally ill. The participants attributed their change in perceptions to openness among friends and family related to mental illnesses (APA, 2010).

Similarly, the Department of Defense reported data supporting a decrease in stigma towards the mentally ill (DOD, 2012). The DOD released statistics pertaining to the number of veterans seeking help for mental health issues. This report illustrated trends towards an increase in veterans seeking help for mental health issues, and this number coincided with a decrease in suicides (McIlvane, 2012). While reports of trends of decreased stigma provide hope for addressing the issue, the consensus among scholars remains that stigma continues to be a pervasive issue in the United States and throughout the world (World Health Organization, 2012). In addition to seeking articles illustrating trends of decreasing stigma, the researcher reviewed the literature seeking articles denying the possibility that stigma can be changed.
**Stigma Can Be Changed**

According to the Mental Health Foundation, 90% of individuals with a mental illness report experiencing stigma (MHF, 2012). Research supports the detrimental effects individuals struggling with mental illness suffer from due to stigmatization (Link & Phelan, 2001). A thorough review of the literature failed to identify any researchers or philosophers who asserted that stigma is an unalterable phenomenon. Sociologists and philosophers (Becker, 1963; Goffman, 1959) held differing views pertaining to how to alter stigma, but neither denied its dynamic properties.

Goffman (1959) indicated that the process of destigmatization occurs through the reconciliation of the identity of the individual with mental illness with societal expectations. Becker (1963) asserted that deviance or peculiar behavior exhibited by the stigmatized is a result of societal labeling, and, therefore, is reversible. Additionally, researchers presented different preferred techniques to decrease stigma. In addition to theoretical assertions that stigma is a resolvable phenomenon, the presence and effectiveness of anti-stigma programs supports the concept that stigma is both preventable and changeable. Most notably, widely accepted anti-stigma campaign includes three consistent components: protest, education, and contact (Rush, Angermeyer & Corrigan, 2005).

**Suicide Is Preventable**

Similarly, following a thorough review of the literature, the researcher failed to identify research supporting that suicide is an unpreventable phenomenon. However, a number of researchers assumed different stances on the effectiveness of varying suicide prevention. Several articles pertaining to suicide prevention placed emphasis on either broad organizational or institutional suicide prevention campaigns as the most effective deterrents (Kaslow et al., 2012).
However, Scott (2003) cited the tremendous difficulty associated with preventing suicide, reporting that a mere understanding of suicide and suicidal ideations is inadequate, but that a dynamic strategy needs to be the basis for suicide prevention. This sets the stage for a narrow focus for suicide prevention, focusing on more individualized techniques, such as peer and parental support of an individual struggling with emotional difficulties or suicidal ideation (Kidd et al., 2006). Despite varying beliefs among researchers pertaining to the most effective suicide prevention techniques, researchers maintain the belief that suicide is a preventable phenomenon.

**Summary**

The researcher identified four empirically based assumptions. First, stigma is a pervasive issue dating back to ancient times (Bennett, 2002) and continues to be relevant in modern society (Link & Phelan, 2001). Second, despite societal advances, stigma towards the mentally ill continues to occur in modern society. Third, as a result, this stigma negatively influences quality of life for those struggling with a mental illness (Sadow, Ryder, & Webster, 2002). Fourth, suicide is a preventable phenomenon (Quinnett, 2005), and this concept is widely accepted among researchers and clinicians. There exist alternative views to these assumptions. Alternative views are as follows: although no research denied the presence of stigma, recent Department of Defense reports indicate a decrease in stigma associated with seeking treatment among current military personnel (DOD, 2012). These reports echoed similar statements made by the American Psychological Association (APA, 2010). In comparison, the researcher failed to identify research indicating that stigma is an unchangeable phenomenon. The belief that suicide is a preventable phenomenon is widely held among researchers; however, varying views associated with best practices in suicide prevention exist (Kaslow et al., 2012; Kidd et al., 2006).
Summary

Chapter Two provides a summary of the process through which the researcher obtained the literature to support the study, a comprehensive review of the findings related to the concepts of stigma treatment and suicide. In Chapter Two, the researcher provided information regarding the evolution of stigma, from its initial meaning or marking or labeling (Bennett, 2002) to outlining how stigma ties to negative perceptions of the mentally ill (Link & Phelan, 2001). The researcher explored the sociological basis for stigma, reviewing the works of Goffman (1959) and Beck (1963). Finally, the researcher illustrated how these theories evolved into stigma theory as it pertains to the mentally ill (social stigma theory [Jones et al., 1985]).

The researcher explored stigma pertaining to college-aged students and differing demographic groups as well as community-based anti-stigma and suicide-prevention campaigns. Finally, the researcher summarized the available research and identified basic assumptions that undergird the study and non-conventional beliefs pertaining to stigma and suicide. In the following paragraphs, the researcher explore gaps in the literature to further support the exploration of the concepts of stigma, suicide, and community-based intervention campaigns.

Gaps in the Literature

The most identifiable gap in the literature is absence of literature linking the three concepts explored in the dissertation; suicide, stigma, and community-based intervention campaigns. The researcher surveyed available literature pertaining to stigma, suicide, and community intervention campaigns, including both anti-stigma and anti-suicide campaigns. This resulted in a comprehensive data set. This data provided information pertaining to stigma towards the mentally ill, the impact of stigma on the mentally ill, and information related to how stigmatization relates to suicide and suicide prevention.
In addition to the magnitude of information resulting from the review of the literature, the researcher found extensive research linking stigma and suicide as well as community-based intervention campaigns as an effective means of suicide prevention. Despite a number of articles linking two of the three concepts, the researcher was not successful in identifying scholarly articles or empirical research linking the three primary concepts explored in this proposal. The research conducted through the distribution of the first and second Student Attitudes Surveys will serve as the basis for the future connection of these three concepts.
Chapter 3

DESIGN OF STIGMA ASSESSMENT

Introduction

The purpose of this dissertation study is to assess stigma towards the mentally ill among undergraduate students at the University of Tennessee, Knoxville. The researcher will measure stigma following student exposure to several months of the campus-wide Social Media Campaign. Specifically, the researcher will compare an initial assessment of stigma (data obtained from the researcher’s Research Competency) with measures of stigma obtained by the researcher during the spring 2013 semester. Following the initial assessment during Fall 2012, the researcher and the UT Counseling Center launched the campus-wide Social Media Campaign. After several months of student exposure to the campus-wide Social Media Campaign, the researcher will measure stigma among undergraduate students at the University of Tennessee. The goal of the study is to gain insight into the effectiveness of the intervention.

The researcher will examine both changes to overall stigma towards the mentally ill, as well as changes to stigma subsets [(Jones et al.’s (1984) Social Stigma Theory)]. Additionally, the researcher will draw statistical comparisons between varying demographic groups based on their overall stigma of the mentally ill. The researcher will obtain this data pertaining to stigma towards the mentally ill among undergraduate students at the University of Tennessee, Knoxville through a repeated measures study.

Chapter Three provides an overview of the methodology used to assess stigma among undergraduate UTK students. In this chapter the researcher will provide the rationale for utilizing standard quantitative procedures as a means to measure stigma. The researcher will
include a comprehensive explanation of the instrument used to measure stigma, as well as any modifications made to the instrument for the dissertation study. The researcher will discuss the chosen participants, and the stratification of the sample based on ethnic grouping.

Additionally, the researcher explain the method she will use to compare the baseline measure provided by Student Attitudes Survey #1, with measure of stigma obtained through Student Attitudes Survey #2. Chapter Three provides an outline of the fundamental research questions of the dissertation study. Through these research questions, the researcher seeks to measure overall stigma, stigma subsets and stigma among demographic groups. The researcher will first provide an overview of research questions, and then identifying each by number, illustrate the proposed statistical analysis.

**Rationale**

The basis for comparing data obtained prior to and following the intervention (campus-wide Social Media Campaign) is to gain insight into the intervention’s effect on stigma towards the mentally ill among undergraduate students at UTK. In addition to gaining insight into changes in overall perceptions of the mentally ill among undergraduate students at UTK, the researcher will track changes in beliefs in stigma subsets as well as compare data among different demographic groups. The researcher will compare the following demographic groups: year in school, gender, ethnic background, sexual identity, sexual preference, veteran status and membership of a Greek Organization.

Additionally, the researcher will measure respondent exposure to the the campus-wide Social Media Campaign, and compare changes in stigma of those exposed to the campaign participants and those who were not exposed. The researcher will gauge whether participants participant exposure to the campaign through several questions specific to campaign
interventions. The researcher will make a final determination as to the content and wording of these questions following further progress in the campus-wide anti-stigma campaign.

**Instrumentation**

The researcher identified Day’s Mental Illness Stigma Scale (Day, Edgren & Eshleman, 1997) as the most appropriate means of measuring stigma among college-aged students. In comparison to traditional stigma measures, this scale is rooted in Stigma Theory, and normed among college-aged students. Day, et al., established the reliability and validity of the scale through the use of factor analysis. Concerning validity, Jones et al.’s (1985) Six Dimensions were the basis of the development of a 68-question model. A subset of the 68 items loaded on one or more of the hypothesized factors. Day, et al., used 68 of the original items from the stigma research, and identified seven factors associated with the public's perception of mental illness. Day, et al., asserted reliability through consistency in interpretation across respondents, as well as consistency between the researchers' measurement intent and the respondents' interpretation of the questions.

References to the Diagnostic Statistical Manual (DSM IV, 1994) also support the instrument’s validity and reliability. Factor analysis controlled for any conceptual differences that may have occurred in the questionnaire items between the illness conditions, and Day, Edgren and Eshleman (2007) performed separate z-score transformations within each condition on the original 68 items. The researchers utilized a maximum likelihood analysis using Promax with Kaiser Normalization using the z scores across all four conditions. Using a minimum factor loading of .35, the researchers eliminated some items. Most likely, the intention of Day, et al., in using this scale was to clarify both overall level of stigma as well as differences in mental illness
conditions. Day’s Mental Illness Stigma Scale (Day, et al.,) is appropriate for measuring stigma at the University of Tennessee, Knoxville as it was normed with a group of university students.

The theoretical basis of Day’s Mental Illness Stigma Scale (Day, Edgren and Eshleman, 2007) is rooted in the assumption that stigma comprises the following dimensions, each measured by a multi-item subscale: Relationship Disruption, Hygiene, Visibility, Anxiety, and Professional Efficacy. While the subscales relate stigmatization, they also, according to Jones et al., (1985), are common to a variety of forms of mental illnesses.

The researcher will use Day’s Mental Illness Survey (Day, Edgren & Eshleman, 2007) for both the baseline assessment of stigma, Student Attitudes Survey #1, and Student Attitudes Survey #2. The Student Attitudes Surveys take approximately 25 minutes to complete. At any point during the process of completing the survey, the student will be able to discontinue the survey. The researcher informed the students of the additional incentives for participation in Student Attitudes Survey #1 at the time of its’ distribution as well as at the time in which Student Attitudes Survey #2 is distributed.

Upon completion of the surveys, StudentVoice will receive the response data directly, and direct it to the researcher. In order to preserve the anonymity of the respondent, no identifiers will be associated with each individual respondent. This will preclude comparison of individual respondents; however, a baseline assessment of a sample, followed by an intervention, and a second assessment of the sample is consistent with repeated measures, within-subjects analysis (Gravetter & Wallnau, 2011).

Instrumentation Modifications

Scale modifications, summarized in Table 1, will provide a more comprehensive understanding of the concept of mental illness then provided in the original instrument.
Additional modifications allow the researcher to examine broad attitudes towards the mentally ill, rather than examining subsets of perceptions related to specific mental health issues, such as Bipolar Disorder or Schizophrenia. The researcher addressed proposed changes with Eshleman, the principal author. Through email correspondence, Eshleman indicated that these modifications would not alter the validity or reliability. The ability of the researcher to maintain reliability and validity of the unmodified instrument is rooted in the fact that changes to the instrument include focusing on one aspect of the original instrument, mental illness, rather than modifying the content of the instrument. This change, paired with the modification to the mental illness vignette, comprise the instrument modifications. Again, the researcher provides further explanation in Table 1.

The research design focuses on comparing participants’ attitudes toward stigma at two points in time as well as between-subjects effects related to the stigma among those who have and have not had exposure to the campus-wide Social Media Campaign. Therefore, the researcher will employ a mixed ANOVA in order to establish effects for both between and within groups (Morgan & Griego, 1998, p.215). As part of initial data screening, the researcher will examine the data to ensure that the statistical assumptions of the mixed ANOVA are not violated. If the violations exist and transforming the data does not resolve the problem, the researcher will employ the less restrictive non-parametric Friedman ANOVA test (Morgan & Griego, 1998). ANOVA and MANOVA will be used to complete analyses for each additional research question, assuming assumptions can be met.

**Participants**

Participants will include 2,000 randomly chosen undergraduate UTK students. The minimum age requirement for participation in this survey will be 18 years. To enhance
participation, the researcher will provide incentives for participation in both the preliminary and secondary survey. The researcher will provide a smaller incentive for participation; this will include a coupon for a free soda and popcorn at the University Center Sweet Shop. Those students who participated in Student Attitudes Survey #1 were entered into a drawing to receive a Kindle in addition to the popcorn and soda incentive.

Following several months of exposure to the Social Media Campaign, particularly the anti-stigma component of this campaign, the researcher, through StudentVoice will contact the 2,000 students initially surveyed for Student Attitudes Survey #1, and provide them with a link to Student Attitudes Survey #2. This email will also contain a reminder of the increased incentives (entering into a drawing to win a Kindle or an iPad as well as a second set of coupons for a soda and popcorn at the University Center’s Sweet Shop). The researcher added the iPad as an additional incentive to encourage respondents who participated in Student Attitudes Survey #1 to participate in Student Attitudes Survey #2. Since StudentVoice cannot track individual respondents, the students will use the honor system to enter into the iPad drawing after participating in both surveys.

**Student Attitudes Survey #1**

The researcher distributed student Attitudes Survey #1 in September 2012. The researcher provided StudentVoice with the following parameters for sampling: StudentVoice surveyed Ethnic minorities at twice the percentage that they represent among the student body. A sample of 2,000 undergraduate students included 50 Native American Students, 162 Asian American Students, 308 African American Students, 106 Hispanic Students. In all demographic characteristics other than ethnic minorities, StudentVoice randomly selected students with the
assumption that random sampling would match the population in terms of other demographic variables (veteran status, gender etc.).

**Student Attitudes Survey #2**

With few exceptions, Student Attitudes Survey #2 is identical to Student Attitudes Survey #1. Student Attitudes Survey #2 will contain several additional items related to exposure to the campus-wide Social Media Campaign (specific interventions will be rooted in specific campaign interventions). Similar to the initial survey, Student Attitudes Survey #2 will explore overall stigma and attitudes towards the mentally ill, explore stigma and overall perceptions among different demographic groups, and finally provide insight into specific perceptions or subsets of stigma. These data, compared to the baseline study (Student Attitudes Survey #1) will provide insight into the overall effectiveness of the anti-stigma component of the campus-wide Social Media Campaign. Additionally the data will provide insight into the effectiveness of the campaign among different demographic groups, and finally the campaign’s impact on different subsets of stigma, and those, which remained unchanged by the campaign.

The intention of the researcher is to identify whether students were exposed to the anti-stigma component of the Social Media Campaign, and draw comparisons between perceptions of the mentally ill among those students exposed to the campaign, and those students who had not been exposed to the campaign. The researcher will complete this analysis through a case and control comparison. The researcher will divide these groups based upon reported exposure to the campaign. The researcher addresses this in Research Question 7.

The following section will outline the specific research questions the researcher will seek to answer through distribution of Student Attitudes Survey #2. These questions, also articulated
Research Questions

Research Question 1:
What are UTK undergraduate students’ attitudes toward persons with mental illness, as measured by Day’s Mental Illness Stigma Scale (Day, Eshleman & Edgren, 2007), following a campus-wide media campaign designed to reduce stigma toward persons with mental illness?

Research Question 2:
What specific associations do UTK undergraduate students hold related to persons with mental illness, as measured by Day’s Mental Illness Stigma Scale Subsets (Day, Eshleman & Edgren, 2007), following a campus-wide media campaign designed to reduce stigma toward persons with mental illness?

a. How anxious one is around someone with a mental illness?
b. Do individuals with mental illness have poor hygiene?
c. How easy is it to tell if someone has a mental illness from looking at them?
d. How treatable is mental illness?
e. How effective are mental health professionals in the treatment of those individuals with a mental illness?
f. How likely is it that someone with a mental illness will recover?

Research Question 3:
How do UTK undergraduate students attitudes towards persons with mental illness differ based on the following demographic characteristics: year in school, gender identity, sexual identity, race/ethnicity, current or past military service and membership in a Greek organization, as
measured by Day’s Mental Illness Stigma Scale Subsets (Day, Eshleman & Edgren, 2007), following a campus-wide media campaign designed to reduce stigma toward persons with mental illness?

**Research Question 4:**
How do UTK undergraduate students’ attitudes toward persons with mental illness, as measured by Day’s Mental Illness Stigma Scale (Day, Eshleman & Edgren, 2007), change following a campus-wide media campaign designed to reduce stigma toward persons with mental illness?

The researcher will examine this question using an inferential analysis.

**Research Question 5:**
How do specific associations UTK undergraduate students hold related to persons with mental illness, as measured by Day’s Mental Illness Stigma Scale Subsets (Day, Eshleman & Edgren, 2007), change following a campus-wide media campaign designed to reduce stigma toward persons with mental illness?

a. How anxious one is around someone with a mental illness?

b. Do individuals with mental illness have poor hygiene?

c. How easy is it to tell if someone has a mental illness from looking at them?

d. How treatable is mental illness?

e. How effective are mental health professionals in the treatment of those individuals with a mental illness?

f. How likely is it that someone with a mental illness will recover?

**Research Question 6:**
How do UTK undergraduate students attitudes towards persons with mental illness based on the following demographic characteristics: year in school, gender identity, sexual identity,
race/ethnicity, current or past military service and membership in a Greek organization, as measured by Day’s Mental Illness Stigma Scale (Day, Eshleman & Edgren, 2007), change following a campus-wide media campaign designed to reduce stigma toward persons with mental illness?

Research Question 7:

What percentage of the surveyed population was exposed to the anti-stigma component of the Social Media Campaign, and how do the responses of these individuals compare to students not exposed to the Social Media Campaign?

The remainder of this chapter will provide an outline of the data collection and data analysis procedures proposed in the dissertation study. The researcher presents specific analysis respective to each question. The researcher will conclude the chapter with an explanation of the quality of the research design.

Data Collection Procedures

The researcher will employ the StudentVoice, a consulting organization aiding in student data collection for universities and colleges, to distribute and collect the data obtained from Student Attitudes Survey #2, as well as to track non-response, permitting if needed a targeted second wave of each administration of the survey. The researcher selected StudentVoice based on its performance on the University Counseling Center’s 2011 Health and Wellness surveys. The distribution approach used in the 2011 Health and Wellness surveys will serve as a prototype for the present study.

In order to obtain the initial set of data in the repeated measures study, the Registrar’s Office at UTK collaborated with StudentVoice to generate a random list of 2,000 email addresses.
of undergraduate students consistent with previously cited age and enrollment participation requirements. At the time of the initial survey, StudentVoice emailed the 2,000 participants with an email containing information about the nature of the study, study incentives, an informed consent form as well as the survey link. Upon completion of the survey, the participants were directed to a link wherein they entered for a drawing for a Kindle. Within the email, students were prompted to click on a link where they entered their email addresses, were entered into the drawing for a Kindle, and received an incentive of free popcorn and soda via email.

Those students, who failed to return completed surveys after one week, were sent email reminders an email reminder each week, for several weeks. The researcher distributed a total of three follow up requests for participation. The researcher continued to distribute reminder emails until additional reminders failed to produce additional participation. StudentVoice received the data from the survey containing a randomly generated identification number, routed this data to the Director of the University Counseling Center, and finally to the researcher. The Anti-Stigma Campaign did not begin until after the researcher collected the initial survey data.

The procedure for Student Attitudes Survey #2 will parallel the data collection procedures for Student Attitudes Survey #1. This link will direct students to Student Attitudes Survey #2. This survey will be an exact replica of Student Attitudes Survey #1, with the exception of the inclusion of questions determining if the student has had exposure to the campus-wide Social Media Campaign, specifically the anti-stigma component. Questions included in Student Attitudes Survey #2, are outlined in Appendix A.

Data Collection Analysis

In the following section, the researcher ties each proposed analysis to the respective research question in the section below. Prior to performing the analysis, the researcher will clean
the data, checking for outliers and coding errors. Prior to conducting descriptive statistics in questions one and two, the researcher will ensure that assumptions related to normality are met using skewness and kurtosis statistics (Gravetter & Wallnau, 2011).

Research Question 1:

The researcher will identify and report descriptive statistics directly from Student Attitudes Survey #2. The mean, median and standard deviation will be reported for overall attitudes towards the mentally ill following the intervention.

Research Question 2:

The researcher will conduct the following analysis, descriptive statistics for each stigma subset following the intervention, Student Attitudes Survey #2. Student Attitudes Survey #2 includes the following questions, How anxious one is around someone with a mental illness? Do individuals with mental illness have poor hygiene? How easy is it to tell if someone has a mental illness from looking at them? How treatable is mental illness? How effective are mental health professionals in the treatment of those individuals with a mental illness? How likely is it that someone with a mental illness will recover? The researcher will identify descriptive statistics for each of these stigma subsets.

Research Question 3:

The following analysis will include the identification of descriptive statistics associated with student attitudes/stigma among the demographic groups, in this case each demographic group included in the survey (year in school, gender identity, sexual identity, race/ethnicity, current or past military service and membership in a Greek organization) following the intervention (Student Attitudes Survey #2).
The descriptive statistics among all years in school: Freshman, Sophomore, Junior and Senior will be reported following Student Attitudes Survey #2.

Descriptive statistics among gender identity will be reported: Male, Female, Transgendered, and Other.

The descriptive statistics among sexual identity: Asexual, Bisexual, Gay, Heterosexual, or Intersexed, Lesbian, Questioning, Other will be reported.

The descriptive statistics of race/ethnicity will be reported. The following categories will be examined to determine descriptive statistics: Alaskan Native, American Indian, Asian, Black/African American, Hawaiian or Pacific Islander, Hispanic, Multi, White/Caucasian, and Other.

The descriptive statistics of those students will be compared based on current military service: those currently participating in the military, those not currently participating in the military. The researcher will report these descriptive statistics.

The descriptive statistics of those students with veteran status and non-veteran status will be reported.

The descriptive statistics of those participating in a Greek organization, and those not participating in a Greek organization will be reported

Levene’s test will be utilized to meet the assumption of homogeneity of variance. A series of ANOVAs will be employed to test for significant effects between demographic groups on attitudes towards individuals with mental illness. A Bonferroni correction will be utilized to correct for inflation of Type I error when testing multiple hypotheses. A total of six ANOVAs will be run, therefore, the Bonferroni correction based on a significance value of .05 will be .008 (.05/6 = .008). Tukey’s HSD test will be used to explain any significant main effects found in
the analyses. In the event that statistical assumption of an ANOVA occurs, a non-parametric Kruskal-Wallis test will be used to establish any significant main effects and subsequent Mann-Whitney U tests will be used to explain the main effects.

**Research Question 4:**

The following analysis will include a comparison of Student Attitudes towards the mentally ill prior to and following the anti-stigma component of the campus-wide Social Media Campaign. This is the second inferential analysis using within-subjects design. The researcher will compare stigma of different demographic groups through an ANOVA with a Bonferroni correction and Tukey’s HSD post-hoc test. The researcher selected ANOVA in this instance due to the different categorical variables for comparison. Six demographic variables for comparison exist, so with an alpha of .05, .05 is divided by 6 resulting in a significance value of .008.

**Research Question 5:**

Descriptive statistics will be reported for each of the following subsets, How anxious one is around someone with a mental illness? Do individuals with mental illness have poor hygiene? How easy is it to tell if someone has a mental illness from looking at them? How treatable is mental illness? How effective are mental health professionals in the treatment of those individuals with a mental illness? How likely is it that someone with a mental illness will recover?). The researcher will identify and compare descriptive statistics of each of these groups prior to and following the anti-stigma campaign. For each individual subset group, this will be done through a repeated measures ANOVA. The researcher will also check for sphericity (assumptions of equality of variances and covariance). Depending upon sphericity or equality of variances or covariance, the researcher may utilize a MANOVA. The researcher will utilize a Bonferroni correction for testing multiple hypotheses.
Research Question 6:

The researcher will compare descriptive statistics of different demographic groups prior to and following the launching of the anti-stigma component of the campus-wide Social Media Campaign. The following demographic characteristics will be examined comparing scores from Student Attitudes Survey #1 to Student Attitudes Survey #2.

Descriptive statistics for gender: males, female and transgendered scores from Student Attitudes Survey #1 will be compared to descriptive statistics for the same respective categories in Attitudes Survey #2.

Descriptive statistics among sexual identity scores: Asexual, Bisexual, Gay, Heterosexual, or Intersexed, Lesbian, Questioning, Other will be compared to determine significant changes among them following the intervention.

The descriptive statistics of race/ethnicity will be compared prior to and following the intervention. The following categories will be compared respectively: Alaskan Native, American Indian, Asian, Black/African American, Hawaiian or Pacific Islander, Hispanic, Multi, White/Caucasian, Other.

The descriptive statistics of those students will be compared based on current military service: those currently participating in the military, those not currently participating in the military. The researcher will compare both of these groups’ descriptive statistics both prior to and following the intervention.

The descriptive statistics of those students with veteran status and non-veteran status will be compared prior to and following the intervention.
The descriptive statistics of those participating in a Greek organization, and those not participating in a Greek organization will be compared both prior to and following the intervention.

The researcher will analyze this data though the use of a mixed ANOVA, with between-subject analysis. This analysis will compare different demographic groups and the within-subject group aspect of change over time. The researcher will use the Bonferroni correction for this analysis as well. Levene’s test will assess meeting the assumption of homogeneity of variance. The assumption of sphericity will also be analyzed using Mauchly’s test. Several mixed ANOVAs will test for significant main effects and interactions for between-subjects and within-subjects effects. The researcher will integrate Bonferroni tests in a post hoc fashion to explain any significant main effects.

**Research Question 7:**

What percentage of the sample was exposed to the anti-stigma component of the Social Media Campaign? How do the overall student attitudes towards the mentally ill of those who have been exposed to the anti-stigma campaign compare to the overall student attitudes towards the mentally ill of those who have not been exposed to the anti-stigma campaign? This analysis will be a between subjects analysis, and will be completed through a mixed ANOVA. The researcher hopes that the results of these analyses will support efficacy of the intervention (campus-wide Social Media Campaign). Levene’s test will assess meeting the assumption of homogeneity of variance. The assumption of sphericity will also be analyzed using Mauchly’s test. The researcher will utilize Bonferroni tests in a post hoc fashion to explain any significant main effects.
Conclusion

The researcher will utilize data obtained as a component of her research competency as a baseline measure of stigma among undergraduate students at UTK. The researcher will compare the measure of stigma following initial exposure to the campus-wide Social Media Campaign to the baseline data obtained through her Research Competency. This approach is a standard quantitative Within-subjects design. (Gravetter & Wallnau, 2011). Throughout Chapter Three, the researcher provided a comprehensive overview of the methodology of the dissertation study. The researcher reviewed the rationale for her choice of a standard within subjects repeated measures quantitative study to compare baseline stigma towards the mentally ill to stigma following the intervention.

The researcher outlined her correspondence with the author of the instrument, Day’s Mental Illness Stigma Scale (Day, Engleman & Eshleman, 2007) and the modifications to the instrument prior to utilizing it for Student Attitudes Surveys #1 and Student Attitudes Survey #2. The researcher discussed the selected respondents, and specific ethnic groups targeted to increase response rates to increase likelihood of generalizable data. The researcher included the specific research questions, and respective analysis for each question. Chapter Three provided a comprehensive description of the means utilized by the researcher to obtain the data serving as the basis for the dissertation study.
Chapter 4

RESULTS OF STIGMA ASSESSMENT

Introduction

The following chapter provides an overview of the results obtained through the dissertation study. The primary focus of Chapter Four is the results obtained through the dissemination of Student Attitudes Survey #2, specifically overall stigma scores and stigma subset scores. The researcher reports stigma subset scores for Treatability, Relationship Disruption, Hygiene, Anxiety, Visibility, Recovery and Professional Efficacy. Second, the researcher describes trends from data obtained prior to the campaign, with Student Attitudes Survey #1, and how they relate to results obtained from Student Attitudes Survey #2 following the campaign.

These trends include trends in overall stigma, individual stigma subsets and varying demographic groups (Greeks and non-Greeks, and Males and Females) at UTK following the campus-wide community intervention campaign as well as stigma trends prior to and following the launching of campaign. Finally, the researcher provides information about campaign efficacy, illustrated by UTK students reporting exposure in Student Attitudes Survey #2. All of the data collected and reported in Chapter Four directly corresponds to the methodology outlined in Chapter Three and the research questions referenced throughout the first three chapters.

Participants

The researcher partnered with StudentVoice in an attempt to gain a representative sample of the undergraduate student population at the University of Tennessee, Knoxville. The overall response rate was .06%, out of the 2,000 students, only 121 responded. The demographics of the participants for Student Attitudes Survey #2 follow. A total of 34.7% of the participants were
male, 67.8% were female, and 1.7% identified themselves as “other”. The majority of the respondents identified themselves as White (63.6%), 13.6% identified themselves as Asian American, 9.3% were African American, and Alaskan Natives, American Indians, Hawaiian and Pacific Islanders, and Hispanics created the other 14% of participants, with less than 6% in each respective group. The vast majority of participants were neither currently in active military service (98.7%) nor were Veterans (97.5%). A total of 21.2% of participants identified themselves as belonging to a Greek organization, while 78% identified themselves as non-members.

**Methods**

Following the dissemination of the video message, *StudentVoice* emailed the representative group of 2,000 UTK students a link to Student Attitudes Survey #2. The survey was distributed for the first time on March 19th, followed by distribution on March 24th, and March 30th. Student Attitudes Survey #2 was identical to Student Attitudes Survey #1, with the exception of two questions intended to gauge exposure to the campaign. Respective percentages for these questions are in Table 7. In this chapter the researcher discusses outcomes of both Student Attitudes Survey #2, and identifiable trends in stigma from Student Attitudes Survey #1 to Student Attitudes Survey #2.

**Overall Stigma**

The following descriptive statistics offer insight into the overall measure of stigma among the sample of undergraduate students at University of Tennessee, Knoxville described above. The data indicates a neutral level of stigma towards the mentally ill among UTK students (M= 3.50, SD=.59). An overall stigma score of (M=3.5) indicates a centralized score, meaning
most people’s perceptions of the mentally ill were neither highly stigmatizing, nor did they hold views consistent with someone very unlikely to stigmatize. Table 3 represents the overall stigma score.

**Stigma Subsets**

Throughout preceding chapters, the researcher presented the theoretical origin of the stigma subsets examined in the dissertation study. The researcher measured the following stigma subsets following exposure to the anti-stigma subset of the campus-wide community intervention campaign: Treatability, relationship disruption, hygiene, anxiety, visibility, recovery and professional efficacy. The researcher measured perceptions about whether a mentally ill person could be treated (Treatability) following exposure to the anti-stigma component of the campus-wide community intervention campaign. The results were as follows, (M= 5.37, SD =1.04). This mean score was trending towards higher stigma among respondents particular to Treatability. The researcher further illustrates this in Table 3.

The researcher measured perceptions related to whether a mentally ill person would have significant disruption in his or her relationships (Relationship Disruption). This measure followed the respondent’s exposure to the anti-stigma component of the campus-wide community intervention campaign. The results (M= 3.14, SD=1.24), indicated a trend towards a lower degree of stigma related to perceptions of whether a person with a mental illness could successfully function in interpersonal relationships. The researcher outlines this in Table 3.

The researcher measured perceptions about whether a mentally ill person has poor hygiene (Hygiene). This measure followed the respondent’s exposure to the anti-stigma component of the campus-wide community intervention campaign. The results (M= 2.42, SD=...
1.25), indicated a trend towards a lower degree of stigma related to perceptions of whether a person with a mental illness has poor hygiene. The researcher illustrates this in Table 3.

The researcher measured perceptions about how anxious or worried they should be when near a mentally ill person (Anxiety). This measure followed the respondent’s exposure to the anti-stigma component of the campus-wide community intervention campaign. The results indicated (M=2.96, SD=1.28), indicating a trend towards a lower degree of anxiety or worry associated with being around someone with a mental illness. The researcher illustrates this in Table 3.

The researcher measured perceptions about how easily they could recognize a mentally ill person (Visibility). This measure followed the respondent’s exposure to the anti-stigma component of the campus-wide community intervention campaign. The results indicated (M=3.93, SD=1.11), indicating a trend towards a higher than neutral perception that UTK students could easily identify someone with a mental illness by outward appearances. The researcher illustrates this in Table 3.

The researcher measured perceptions about the likelihood of someone with a mental illness recovering from the illness (Recovery). This measure followed the respondent’s exposure to the anti-stigma component of the campus-wide community intervention campaign. The results indicated (M= 5.29, SD=1.31), indicating a trend towards perceptions that one with a mental illness cannot recover are higher than neutral among UTK students measured. The researcher illustrates this in Table 3.

The researcher measured perceptions about how effectively a person with a mental illness can be treated by a psychiatrist or psychologist (Professional Efficacy). This subset is closely linked to Treatability. This measure followed the respondent’s exposure to the anti-stigma component of the campus-wide community intervention campaign. The results indicated (M=
5.01, SD=1.41), indicating trends towards stronger than neutral perceptions among UTK students measured that individuals with mental illnesses cannot successfully be treated by mental health professionals. The researcher illustrates this in Table 3.

In addition to overall reporting of stigma subset scores, the researcher ran between subjects analysis, and found the following significant main effects: Treatability (M=5.37, SD=1.05), (p=.005), Relationship Disruption (M=3.14, SD =1.24 ), (p=.046) and Hygiene (M=2.42 , SD =1.25 ), (p=.037). These findings indicate that male students were significantly more likely to have stigma related to these aforementioned subsets than female students following the launching of a campus-wide community intervention campaign. The researcher illustrates this in Table 3.

**Overall Stigma and Demographic**

As outlined in Chapter Three, the researcher grouped respondents into several demographic groups in an attempt to compare overall stigma perceptions of these demographic groups following exposure to the anti-stigma component of the campus-wide community intervention campaign. While the researcher attempted to compare stigma scores based on year in school, gender identity, sexual identity, race/ethnicity, current military or veteran status, and membership in a Greek organization, the researcher could not compare the majority of these groups due to lack of adequate response rates in most categories. In an attempt to increase respondent rates among members of ethnic minorities, the researcher collapsed the categories. The researcher created aggregate categories for all respondents other than those in the majority of each respective demographic group, in an attempt to compare this new aggregate variable to the majority. Despite this, the numbers were inadequate for cross sectional analysis.
The only demographic categories, which included adequate respondents in two or more of the groups, were gender identity and Greek organization membership. A comparison of overall stigma scores between males and females failed to indicate significant differences between the sexes, or a non-significant main effect $F(7, 110) = 1.52$, $p=.17$, $\eta^2=.09$, power =.61. This finding indicates there were no significant differences between male and female students on overall stigma scores following exposure to the anti-stigma component of the campus-wide community intervention campaign. Respondents identifying themselves as anything other than male or female were insufficient to integrate into the comparison. Refer to Table 4 for the table of means.

The researcher drew comparisons between those belonging to a Greek Organization and non-members. The results found a non-significant main effect, $F(7,112) = 1.35$, $p=.234$, $\eta^2=.08$, power =.55. No significant differences in overall stigma exist between members and non-members of a Greek organization following exposure to the anti-stigma component of the campus wide community intervention campaign. However, this data indicates a trend towards a significant difference between how members and non-members of Greek organizations stigmatize the mentally ill, with a higher degree of stigma among members than non-members. Hypotheses related to how to further explore stigma between these groups will be addressed in Chapter Five. These results are displayed in Table 4.

The researcher attempted to utilize a between subjects analysis to compare the remaining demographic groups. These groups include year in school, sexual preference, sexual identity, race/ethnicity, current military service and veteran status. In an attempt to obtain adequate responses in minority categories, the researcher attempted to collapse “other” categories in each
of these demographic groups. This methodology failed to provide adequate numbers for the proposed analysis.

**Change in Stigma**

The researcher obtained descriptive statistics to illustrate degree of overall stigma among UTK students prior to exposure to the anti-stigma component of a campus-wide community intervention campaign. These descriptive statistics indicated a trend of generally neutral feelings towards the mentally ill (M=3.48, SD=.57). The descriptive statistics obtained from Student Attitudes Survey #2 also demonstrated neutral scores (M=3.5, SD=.59). This indicates an exactly neutral perception or stigmatization of the mentally ill among UTK students, following the anti-stigma component of the campus-wide community intervention campaign. There was consistency in overall stigma prior to and following the launching of the anti-stigma component of the campus wide community intervention campaign.

**Change in Stigma Subsets**

In addition to reporting the stigma subset scores following the launching of the anti-stigma component of the campus-wide community intervention, the researcher analyzed the preliminary subset scores. This section outlines the descriptive statistics for each subset both prior to and following the launching of the anti-stigma component of the campus-wide community intervention campaign. Scores for Treatability are as follows, results from Student Attitudes Survey #1 were (M=4.13, SD=.57), and Student Attitudes Survey #2 were (M=5.37, SD=1.05). Scores for Relationship Disruption are as follows, results from Student Attitudes Survey #1 were (M=3.07, SD=1.15), and Student Attitudes Survey #2 were (M=3.14, SD=1.24). Results for Hygiene are as follows, the results for Student Attitudes Survey #1 were (M=2.49, SD=1.16), and Student Attitudes Survey #2 were (M=2.42, SD=1.25). Results for Anxiety are as
follows, results from Student Attitudes Survey #1 were (M=2.97, SD=1.17) and results from Student Attitudes Survey #2 were (M=2.96, SD=1.28).

Results for Visibility are as follows, results from Student Attitudes Survey #1 were (M=3.88, SD=1.13) and results from Student Attitudes Survey #2 were (M=3.93, SD=1.11). The results for Recovery are as follows, the results from Student Attitudes Survey #1 were (M=5.28, SD=1.25) and the results from Student Attitudes Survey #2 were (M=5.29, SD=1.32). The results for Professional Efficacy are as follows, the results from Student Attitudes Survey #1 were (M=4.89, SD=1.33) and the results from Student Attitudes Survey #2 were (M=5.02, SD=1.41). The results for Relationship Disruption are as follows, results from Student Attitudes Survey #1 were (M=3.07, SD=1.15) and results from Student Attitudes Survey #2 were (M=3.14, SD=1.24). For each of the subsets, the researcher suggests trends towards an increase or decrease in stigma in each respective subset. As a mean score increases over time that indicates a trend towards an increase in stigma, as a mean score decreases over time that indicates a trend towards a decrease in stigma for that particular subset. Table 6 represents data pertaining to stigma subsets obtained from both Student Attitudes Survey #1, and Student Attitudes Survey #2.

**Change in Overall Stigma among Demographic Groups**

As mentioned earlier, there was limited statistical power to compare overall stigma scores. Therefore, the researcher reported only means of those groups who had adequate numbers, gender (male/female) and membership in a Greek organization (member/non-member). Student Attitudes Survey #1 found the following scores for overall stigma for males (M=3.59, SD=.62) and females (M=3.40, SD=.60). Student Attitudes Survey #2 found the following scores for overall stigma males (M=3.61, SD=.71) and females (M=3.44, SD=.53). Student
Attitudes Survey #1 found the following scores for overall stigma for Members of Greek organization (M=3.60, SD=.82), and non-members (M=3.46, SD= .58). Student Attitudes Survey #2 found the following scores for overall stigma for members of a Greek organization, (M=3.68, SD=.58) and non-Greek members (M=3.45, SD=.60). Table 4 presents these results.

**Exposure to Campaign**

The differentiation between Student Attitudes Survey #1, distributed in Fall of 2012 and Student Attitudes Survey #2, distributed in Spring of 2012 included both the time in which the researcher distributed them, and some content changes. The second survey had additional questions to ascertain respondent exposure to the anti-stigma component of the campus-wide community intervention campaign. Two specific questions identified if a respondent had been both exposed and successfully impacted by the campaign. These questions assessed recognition of the tag line associated with the anti-stigma component of the campus-wide community intervention campaign and an image of the spokesperson for the campaign.

Responses indicating awareness of the tagline and spokesperson of the campaign were low, with 8.3% and 9.9% respectively. These results indicated that the anti-stigma component of the campus-wide community intervention campaign were ineffective in reaching more than 10% of representative student population. Additionally, these numbers were inadequate to perform a between subjects analysis comparing overall stigma between those respondents who were impacted by the campaign and those who were not.

**Conclusion**

Chapter Four provided a comprehensive overview of the results of the dissertation study. The researcher reported results obtained following the launch of the anti-stigma component of a campus-wide community intervention campaign (Student Attitudes Survey #2). These included
overall stigma score of UTK students, scores for each stigma subset, as well as overall stigma scores for several demographic groups. Additionally, the researcher reported stigma scores obtained from Student Attitudes Survey #2, in conjunction with preliminary stigma scores obtained from Student Attitudes Survey #1. The pairings of these descriptive statistics provide the reader with an understanding of trends in stigma scores prior to and following the launching of the anti-stigma component of the campus-wide community intervention campaign. Specifically these trends may be identified among overall stigma scores, stigma subset scores and stigma scores among different demographic groups.

Finally, the researcher provided the reader with an understanding of what portion of the representative sample reflected an impact from the anti-stigma component of the campus-wide community intervention campaign. In Chapter Five, the researcher will draw conclusions based on the results presented in Chapter Four, as well as identify how these results may impact researchers and professionals. Finally, the researcher will suggest ways in which future researchers may expand upon the data obtained through the dissertation study.
Chapter 5

SUMMARY AND INTERPRETATION OF STIGMA OUTCOMES

Introduction

The purpose of the dissertation study was to examine the issues of suicide, stigma and community-based intervention campaigns within the context of the University of Tennessee, Knoxville’s campus. Specifically, the researcher focused on stigma following the implementation of the anti-stigma component of the campus-wide community intervention campaign. The researcher based her examination of suicide, stigma and community intervention among University of Tennessee, Knoxville students on findings that UTK students possess heightened levels of suicide and suicidal ideation (University of Texas, Austin, 2011).

The researcher administered a preliminary survey of stigma among UTK students through Student Attitudes Survey #1. Student Attitudes Survey #1 provided comprehensive data related to UTK student stigmatization of the mentally ill, specific theoretically based subsets of stigma (Jones et al., 1985) as well as data related to how different demographic groups stigmatize the mentally ill. The preliminary data served as a baseline measure of stigma from which the researcher drew conclusions about trends in stigma following Student Attitudes Survey #2, as well as provided direction for the development of the anti-stigma component of the campus-wide community intervention campaign.

The researcher made the following modifications and developments to the campaign based upon preliminary stigma assessments. Preliminary analysis indicated that male students were significantly more likely to stigmatize the mentally ill than female students. The researcher integrated these findings into the anti-stigma component of the campaign by featuring a male student in the video campaign with the tag line “You are Not Alone”. The researcher chose a
personalized message from a student for the campaign based upon research supporting the use of an “individualized message” as most effective in combatting stigma towards the mentally ill (Sadlow & Ryder, 2008). The University of Tennessee displayed a video of the message on the “jumbotron” at the University of Tennessee Lady Vol’s Basketball Game on February 28, 2013, featured on the UTK website from March 4th – 8th, and displayed on the “jumbotron” at the University of Tennessee’s Men’s Basketball Game on March 9th, 2013.

Chapter Five provides an in-depth discussion of the results of the dissertation study, including reports of stigma, stigma subsets, stigma subsets among demographic groups, as well as trends in these scores from the preliminary assessment, Student Attitudes #1 and secondary assessment Student Attitudes #2. The researcher outlines the limitations of the dissertation study, implications for researchers and community and academic administrators interested in disseminating community-wide campaigns. Following a discussion of the limitations and implications, the researcher proposes recommendations for future research.

Discussion

The dissertation study resulted in data from which the researcher may reach several conclusions. The discussion section first examines independent results from Student Attitudes Survey #2, data regarding overall stigma, stigma subsets, and stigma among demographic groups. Following a discussion of these conclusions, the researcher discusses identified stigma trends from Student Attitudes Survey #1, disseminated prior to the launching of the campaign, and data obtained from Student Attitudes Survey #2. The researcher concludes with a discussion of her inability to reach the targeted population with the intervention, the “Big Idea” video.
Overall Stigma

The first result is the precisely neutral degree of stigma found among UTK students (M=3.5); The scale, outlined in Chapter Four, is a likert-type scale ranging from 1 to 7, meaning a mean score of 3.5 is precisely neutral. Student Attitudes #2 reported this neutral score, consistent with overall stigma measures from Student Attitudes Survey #1. This score indicates that UTK students are neither highly empathetic, nor highly stigmatizing towards individuals with a mental illness. The researcher proposes several possible conclusions from this finding. Social Desirability (Dovidio & Fazio, 1992) is a phenomenon that dissuades individuals from reporting truthfully about topics associated with negative personal characteristics or bias. Despite the anonymity of the respondent, social desirability may account for hesitancy for respondents to indicate a high level of stigma towards the mentally ill.

Conversely, influences causing respondents to report less empathetically towards those with mental illness may be attributable to the deeply rooted stereotypes and negative perceptions of the mentally ill which begin as early as childhood (Adler & Wahl, 1998). Additionally, media events depicting the mentally ill as dangerous, such as the Connecticut school shootings, and events directly connected to former UTK student Chamique Holsclaw may have compounded negative stereotypes towards the mentally ill (Wahl, Hanrahan, Karl, Lasher & Swaye, 2007). While research supports multi-directional influences on stigma towards the mentally ill, overall stigma results from the dissertation study did not depict a trend in either direction. Later in Chapter Five, the researcher provides further explanation and interpretation of a neutral stigma score.

In addition to influences swaying student perceptions of the mentally ill positively and negatively, the concept of a “neutral” score of stigma is a concept which likely requires further
exploration. Garfinkle (1991), through his breaching experiments identified that examining the response of one within the social norm, observing a deviant provides insight into society’s social structure. Garfinkle’s theory is supported by Adler and Wahl’s (1991) study indicating that along with acquisition of knowledge of social norms, children simultaneously recognize and learn to discriminate against those who deviate from these norms. The deeply embedded nature of negative perceptions of those “deviants” likely remains unchanged unless actively challenged. The basis for future attempts to change deeply rooted perceptions may be supported by Festinger’s (1957) assertion that the only way by which one changes deeply rooted assumptions is exposure to thoughts and situations inconsistent with these beliefs. Cognitive dissonance theory may be integrated into future methods to decrease stigma.

**Stigma Subsets**

In addition to the overall stigma score obtained from Student Attitudes #2, the survey provided data specific to subsets of stigma. Similar to interpretations of the overall stigma score, the researcher drew conclusions from this data based on the assumption that on a likert typed scale of 1-7, a mean score of 3.5 is precisely neutral. Therefore the researcher drew several conclusions based on trends for specific subsets to link to higher levels of stigma. The following stigma subsets indicated fewer stigmas: Hygiene, Anxiety and Relationship Disruption. The fact that respondents were less likely to adhere to stereotypes linking the mentally ill to poor hygiene and anxiety associated with being in the presence of someone with a mental illness may indicate that more antiquated stereotypes of the mentally ill are less frequent (Wahl, Hanrahan, Karl, Lasher & Swaye, 2007). Less stigmatizing views of how functional individuals with a mental illness may be in relationships may be related to personal contact that respondents may have had with students who are forthcoming with their mental health issues. Research indicates that a
personal connection with an individual with a mental illness is effective in decreasing stigma (Sadlow & Ryder, 2008).

Conversely, results of the dissertation study indicated several stigma subsets exceeded the neutral point of M=3.5. Subsets with scores exceeding this neutral mark included: Treatability, Visibility, Recovery, and Professional Efficacy. The researcher identified that sampled UTK students held perceptions that an individual with a mental illness cannot be effectively treated, that they are easily identified, are unlikely to recover from their mental illness, and that mental health providers are ineffective in providing these individuals help.

Similar to the impact on overall stigma scores, the researcher hypothesizes that negative perceptions may be linked to the media surrounding Chamique Holsclaw a highly recognizable local sports hero, known for her victories with UT’s Women’s Basketball Team (Lady Vols). The media depiction of Holsclaw as dangerous and volatile occurred only several months prior to the distribution of Student Attitudes Survey #2 (Rohlin, 2013). Chamique Holsclaw spoke at the University of Tennessee Knoxville in September; this speech was widely attended among UTK students. The content of the speech included personal struggles with mental health issues, and reports of successful treatment and recovery. Several months after the presentation, Chamique Holsclaw was allegedly involved in a violent incident, widely publicized by local media.

**Stigma Among Demographic Groups**

Chapter Four outlined the lack of responses among minority groups, among the groups which included adequate numbers to perform cross-sectional analysis (males/females, Greeks/non-Greeks). The group which trended towards significant differences included Greeks and Non-Greeks, with trends indicating Greeks are more likely to stigmatize. Chapter Two outlined research associated with different demographic groups and stigma, due to the lack of
research linking those in a Greek organization to stigma, the researcher identified literature linking Greeks to higher socioeconomic status (Byer, 1997), however, Downs, Golberstien and Zinn (2009) linked those with a lower socioeconomic status to higher stigma.

Since the research failed to provide an explanation for the trends towards higher stigma among Greeks, the researcher hypothesizes that stigmatization towards the mentally ill is consistent with the discretionary nature of the Greek system. Members of Greek Organizations are exclusive by nature, allowing membership only following an often lengthy assessment process (Biernat, Vescio & Green, 1996). While the factors by which Greek organizations make determinations about memberships, it is possible that the assessment inherent within the Greek system is generalized to assessment about those with mental health issues. Additional explanation for findings related to trends of Greeks stigmatizing more than non-Greeks is associated with “Greek Think” (Sher, Nanda & Bartholow, 2001), the phenomenon wherein social norms are reinforced within the context of a Fraternity or Sorority. The following section continues to explore trends, specifically from Student Attitudes Survey #1 to Student Attitudes Survey #2.

Following the aforementioned discussion of the data obtained from Student Attitudes Survey #2, the remainder of Chapter Five outlines observed trends from Student Attitudes Survey #1 to Student Attitudes Survey #2. The data provided the following trends; consistency in overall stigma among UTK students following the launching of the anti-stigma component of the campus-wide social media campaign, multi-directional trends among stigma subsets, and data associated with exposure to the campaign. The researcher explores possible explanations each of these observed trends.
Overall Stigma Trends

The mean stigma scores among UTK students surveyed in Student Attitudes Survey #1 and Student Attitudes Survey #2 were very similar with a very slight trend towards an increase in overall stigma scores. The researcher presents the following hypotheses for this trend. The anti-stigma component of the campus-wide community intervention campaign is only a small portion of the campaign; the overall campaign includes targeting student stigma through many additional venues (parents, electronic billboards etc.) (Briscoe, 2012). Therefore, distribution of only a small portion of a large campus-wide campaign is unlikely to create significant change among the student population. In addition, data indicated that less than 10% of the students surveyed experienced exposure to this partial intervention. The lack of full exposure to the campaign, as well as few students reporting exposure to the partial campaign, supports the trends of consistent stigma levels among UTK students from Student Attitudes Survey #1 to Student Attitudes Survey #2.

Stigma Subset Trends

In contrast to the consistency of overall stigma scores obtained from Student Attitudes Survey #1 and Student Attitudes Survey #2, the researcher observed varying trends among stigma subsets. The researcher observed trends towards an increase in stigma among the following subsets: Treatability, Relationship Disruption, Visibility, Recovery, and Professional Efficacy, this is an area that warrants further investigation. The researcher observed trends indicating a decrease in stigma among the following subsets: Hygiene and Anxiety.

An increase in stigma related to whether an individual with a mental illness can be treated, maintain a relationship, is easily identified, can recover or be effectively treated by a mental health professional could be attributable to a number of circumstances. Similar to the
hypotheses presented related to whether subsets were higher or lower than neutral on the stigma scale, contextual information may likely impact these trends. Media portrayal of mentally ill individuals failing to effectively maintain a relationship, being unable to recover or be treated could be linked to the media coverage of Chamique Holsclaw (Rohlin, 2013). Increased stigma related to how easily one can identify an individual with a mental health issue may have been influenced by the stereotypical physical characteristics of individuals in the past year who have been deemed mentally ill. These individuals’ violent and unpredictable behaviors are consistent with negative stereotypes about the mentally ill, (Jared Loughner, arrested for shooting Gabby Giffords, Adam Lanza, suspected in the Newtown Connecticut Shootings, and James Holmes arrested for mass shootings in a Colorado Movie Theatre (Wikipedia, 2013). Trends indicating a decrease in some stigma subsets, Hygiene and Anxiety could be attributed to a number of factors. The researcher proposes that perhaps student body exposure to individuals UTK students who identify themselves as mentally ill such as those portrayed in (A Play for Nobody) written and performed by a UTK student, break down stereotypes associating those with mental health issues with having poor hygiene and being unpredictable or frightening. Possibilities for additional factors contributing to these changes in stigma subsets are endless. In addition to providing data pertaining to overall stigma, and stigma subsets among UTK students, data obtained through the dissertation study provided specific scores for several demographic groups; however no trends from Student Attitudes Survey #1 to Student Attitudes Survey #2 occurred.

**Intervention**

In addition to drawing conclusions related to stigma, stigma subset scores and demographic group scores of stigma following exposure to the anti-stigma component of the campus-wide community intervention campaign, Student Attitudes Survey #2 provided
information related to how effective the anti-stigma message was in reaching UTK students. The researcher determined whether a student was influenced by or impacted by the campaign through two questions, the first asking if the student recognized the tag line associated with the video, the second a visual of the student featured in the video. The researcher questioned respondents about whether they recognized either the tag line or the student featured in the video. Responses to these questions were 8.3% and 9.9% respectively. Despite the university displaying the video message in high traffic locations (Thompson Bowling Arena) and the UTK website, relatively few students surveyed indicated that they recognized the tag line or video message.

The researcher drew several conclusions associated with the relatively low level of recognition. The first factor linked to low recognition, is that the video on the website ran only if the student identified that they wanted to view the video and then clicked on the link. Research indicates that complex cognitive processes are associated with user activities within the context of a website, therefore; this could be linked to respondents failing to view a link if an extra step is required to access the link (Atterer, Wnuk & Schmidt, 2006). Additionally, while each UTK student accesses vital information such as email, financial information and grades through the UTK website, it is possible that students become accustomed to linking to the information they are intending to reach (i.e. email) that they may ignore messages posted on the site.

Failure for UTK students to recognize the video is not exclusively related to a failure to identify the video through the UTK website, explanation must also be provided as to why the campaign failed to reach students in attendance at the UTK Lady Vol’s game on February 28th 2013 and Men’s Basketball game on March 5th 2013. The researcher proposes two possible explanations for a failure of recognition of this video at these sporting events. The first is that
the university ran the video during half time; this is a time when those in attendance are often away from their seats. This could limit the amount of exposure of the video, as it cannot be assumed that because a student attends a game that he or she is in their seat at the time in which the video is displayed.

A second explanation associated with failure to reach students during the game because could be the strong contrast of the positive fun environment associated with a sporting event, and the serious nature of mental illness. This is consistent with human tendency to avoid concepts which are associated with facilitating negative affect (Neumann & Strack, 2000). Upon beginning to absorb and focus on the video, students may perceive that now is not the time to focus on serious issues such as mental health. A number of additional explanations are possible as to why the campaign video failed to reach a large number of students, ways in which the researcher or other researchers may rectify this situation will be discussed in the limitations section of Chapter Five.

**Limitations**

Similar to any study, the researcher cannot fully anticipate the challenges and difficulties associated with data collection and the nuances of a particular research study until after the researcher conducts the study. Examining the data, trends and response rates from the dissertation study allowed the researcher to identify the limitations associated with this particular study. Throughout the limitations section the researcher focuses on the following limitations: administrative limitations associated with the survey provider, *StudentVoice’s* inability to match subjects, inadequate responses from a variety of minority groups and limited recognition of the intervention.
The researcher was able to report overall stigma scores, stigma subset scores, and some overall stigma scores for some demographic groups. Additionally, the researcher was able to identify trends from the initial stigma assessment (Student Attitudes Survey #1) to the second Stigma Assessment, (Student Attitudes Survey #2). While identification of these trends are useful in determining changes in stigma among UTK students, the researcher was unable to draw conclusions related to the significance of these changes.

A second limitation associated with the dissertation study is that it only measured a small portion of the overall campaign, as outlined in Chapter Two; the campus-wide community intervention campaign includes a number of interventions targeting both student and parent groups. The UTK Counseling center continues to work towards launching the full campaign in 2013 and 2014. The researcher was cognizant of the fact that the measure would only be of a small portion of the campaign, but perceived that the dissertation study could be the first of many studies intermittently determining the effectiveness of each portion of the campaign. However, the lack of decrease in stigma among the student body indicates that perhaps more of the campaign should have been disseminated among UTK student prior to measuring its effectiveness. Even if the dissertation study indicated a significant decrease in stigma, the results could not be generalized to the effectiveness of the entire campaign.

In addition to limitations of the dissertation study within the control of the researcher, the researcher identified two specific limitations based on lack of respondents, as well as lack of recognition of the intervention. The researcher was unable to comparisons between the proposed demographic groups with the exception of males and females, and members and non-members of a Greek organization. The researcher anticipated the difficulty of obtaining adequate response rates from individuals within the context of ethnic minorities, sexual minorities, active military
and veterans. In an attempt to gain a higher response rate from ethnic minorities, the researcher oversampled groups identified as ethnic minorities, sampling double the representative rate of these minorities among UT students. Despite the oversampling of ethnic minorities, inadequate response rates among these groups prohibited the researcher from completing the proposed analysis. Failure to oversample other minority groups due to an inability to identify these respondents resulted in the same issue.

The final limitation associated with the dissertation study is the limited student recognition of the intervention. The researcher attempted to distribute the campaign in areas with high visibility (UTK Website, UTK Sporting Events), however more than 90% of UTK students surveyed failed to recognize the tag line or visuals associated with the campaign. An inability to run a cross sectional analysis between those who were exposed to the intervention and those who were not exposed to the intervention creates significant limitations for the researcher in determining effectiveness of the intervention. Later in Chapter Five, the researcher hypothesizes how an intervention might be better distributed in future research.

Throughout the limitations section the researcher identified confines which prohibited more comprehensive analysis of the data provided by the dissertation study. Despite these limitations, the researcher was able to draw conclusions regarding trends obtained from this data. The researcher will identify how to avoid similar limitations in future research endeavors later in Chapter Five.

**Implications for Researchers, School Administrators, and Community Organizations**

The previous section outlined the limitations associated with the dissertation study. Despite these limitations, the results of this dissertation have implications for researchers, school administrators and community organizations cognizant of the pervasive and negative effects of
Stigma towards the mentally ill. The trends which have the most significant impact on these aforementioned groups include the fact that that stigma is an issue among UTK students. This trend is of particular interest to researchers interested in the link between suicide and stigma, as UTK is a school with disproportionately high rates of suicide and suicidal ideation (UT Austin, 2011). In addition to findings related to overall stigma, the researcher identified specific subsets of stigma as more negatively perceived among UTK students, most notably Treatability, Visibility, Recovery, and Professional Efficacy. Results indicated trends towards significant differences between members of a Greek organization and non-members on stigma, with Greek members demonstrating a higher level of stigma and finally, based on limited evidence, it appears that a video-based anti-stigma component of the community intervention campaign to decrease stigma was generally ineffective.

**Stigma Among College Students**

While UTK students provided consistently neutral overall stigma scores on a likert-type scale towards those with mental health issues, these scores implicate tolerance of those with mental health issues, and often indicate an unwillingness to disagree with negative statements towards the mentally ill. The finding that stigma is an issue supports widely held assertions of researchers indicating that stigma is a pervasive issue (Scheffe, 1966); (Sirey, Bruce, Alexopolous, Perlick, Friedman & Meyers, 2001) that it continues to be an issue in modern society (Wahl, 2012) with significant impacts on those struggling with mental health issues (Link & Phelan, 2001).

From a social justice perspective, the relevance of this finding is significant for society as a whole, and particularly for those researching stigma, and those attempting to decrease stigma. The findings of the dissertation study contest most recent findings from the National Council on
Behavioral Health (2012) that stigma is decreasing. The findings that stigma continues to be an issue particularly among university students supports the need for continued campus-wide and community intervention campaigns to combat the issue of stigma.

**Stigma Among College Students and Suicide**

The dissertation study provided insight into overall stigma score among UTK students, in addition to supporting research indicating that stigma has and continues to be a pervasive issue in modern society, the researcher reflected upon the premise for examining and decreasing stigma among the UTK student population. Researchers identified the UTK student population as having greater rates of suicide and suicidal ideation than comparable universities (UT Austin, 2011), and awarded a SAMHSA grant to target the issue due to the unique issue of suicide (Briscoe, 2012). Stigma exacerbates difficulties associated with experiencing mental health issues, particularly among those struggling with suicidal ideations (Link & Phelan, 2001). The results of the study further link the concept of suicide and stigma, the results extol the need for additional research to further explore this link, as well as focus from university and community organizations interested in improving overall well-being of college or community members. The following section identifies more specific components of stigma associated with a higher level of stigma.

**Stigma Subsets**

While the overall stigma scores among UTK students were neutral, indicating neither a tendency to agree or disagree with negative statements about the mentally ill, several subsets of stigma, based on Jones et al.,(1985)’s Social Stigma Theory indicated high levels of stigma. Specifically, these include the subsets which maintained a higher than neutral stigma score
through Student Attitudes Survey #1, and Student Attitudes Survey #2. These subsets are: Treatability, Visibility, Recovery and Professional Efficacy. The following section explores the implications for a higher degree of stigma in each of these subsets, and the implications for both researchers and community and university administrators interested in specifically decreasing stigma.

The researcher identified the link between the stigma subsets of Treatability, Recovery and Professional Efficacy therefore the implications of higher levels of stigma among these groups will be connected. The assumption drawn from the data obtained from the dissertation study is that there is a strong belief among UTK students that an individual with a mental health issue cannot be effectively treated, cannot recover, and that mental health professionals lack the ability to successfully impact the mental health issues experienced by an individual with a mental illness. The final stigma subset associated with a greater degree of stigma from UTK students is visibility, that an individual who is mentally ill is easily identified and holds stereotypical attributes immediately recognizable by others. These subsets provide significant information towards stigmatization, and add to the comprehensive research associated with stigma. Researchers interested in further exploring the cognitive processes of stigma could likely integrate these concepts into their research. In addition to being subjects for additional research, I believe that the findings, albeit not statistically generalizable, warrant a sustained or increased intervention by the University to combat such unsubstantiated beliefs; the consequences of such beliefs are pernicious.

The most significant implication for the heightened level of stigma among these subsets is for those interested in decreasing stigma on a large scale, school and community administrators interested in targeting the issue of stigma on a broad scale through community
intervention campaigns. While research associated with the thought process and justification associated with stigma is plentiful (Major & O’Brien, 2005), the dissertation study is innovative in its identification of specific subsets of stigma widely held. The results that these are the most significant components of stigma within the UTK population provide insight for how to best target stigma among these populations. Rather than launching anti-stigma campaigns without research to guide their efforts, school and community administrators may employ means to target these specific subsets. Specifically, a community wide intervention might directly target perceptions that someone with mental health issues cannot recover, and feature an individual who self-identifies as having a mental health issue, but lacks stereotypical physical characteristics of one suffering from mental illness.

Demographic Differences and Stigma

As mentioned earlier in Chapter Five, the researcher was limited in her ability to perform cross sectional analysis on members of varying demographic groups due to low response rates among the majority of the demographic categories. The exceptions included, male and female respondents, which failed to consistently demonstrate significant differences between the groups, and members and non-members of a Greek organization. Although neither demonstrated consistent significant differences between the two, trends in stigma between Greeks and non-Greeks suggested that differences between how members of these groups perceive the mentally ill may result in significant differences if further explored. Specifically, the members of a Greek organization are significantly more likely to stigmatize the mentally ill that non-members.

Data pertaining to Greek and non-Greek stigma trends is particularly relevant to researchers. In Chapter Two, the researcher highlighted research associated socioeconomic factors of Greek and non-Greek members, in an attempt to supplement the lack of research
linking these groups of university students to stigma. Later in Chapter Five, the researcher will propose specific means by which these populations may be further explored, providing direction for further research. The relevance of these data are of particular importance to school administrators and community organizations planning for intervention campaigns targeted at decreasing stigma. Similar to the direction provided by understanding particular subsets of stigma, the dissertation study provides a specific group of university members possibly targeted in an anti-stigma community wide intervention campaign. The dissertation research provides much needed direction to those interested in decreasing stigma on a large scale as well as on a small scale. The following section will address how the specific implementation of community wide anti-stigma campaigns might be impacted by the dissertation study.

Anti-Stigma Campaigns

The researcher’s decision to use a male student’s personal story of mental illness, the “Big Idea Video”, in the intervention was rooted in research both specific to the university, obtained through Student Attitudes Survey #1, as well as general research supporting the effectiveness of a personalized story in dispelling negative perceptions of the mentally ill (Sadlow & Ryder, 2008). The researcher’s dissemination of the story through various media sources mirrors research illustrating the most effective means of reaching a wide audience through a multitude of sources (Beldie, denBoer & Brian, 2012). Despite the theoretical basis for the dissemination of the anti-stigma component of the campus-wide community intervention campaign, specifically the “Big Idea” video, the intervention failed to reach the vast majority of the students targeted. With aggregate values of less than 10% of those surveyed impacted by the video, the researcher determined the implementation to be ineffective.
This failure for effective dissemination of the “Big Idea” video provides relevant information to researchers as well as school administrators and community organizations. Researchers particularly interested in effectively distributing messages to large audiences may explore the specifics of this particular failure, making determinations about how to best reach college-aged individuals in the digital age. The researcher’s inability to effectively reach the targeted audience is particularly relevant to school administrators and community organizations interested in targeting large groups of individuals. The lack of recognition of a message disseminated on both a “jumbotron” and website indicates that these means of reaching individuals on a broad scale may be antiquated, and underline the need for campaign managers to integrate innovative methods. The following section blends findings and implications into a basis for specific research endeavors born from the dissertation study.

**Implications for Future Research**

Although the limitations of the study precluded the researcher from deriving statistically significant results, the methodology and results of the dissertation study provide the basis for future research in a number of areas. Throughout this section the researcher will discuss future research endeavors based on the dissertation study. These include: future studies with matched respondents, targeting campus groups with known populations of minority groups and further exploring the trends of stigma differences between members and non-members of Greek organizations.

The researcher placed tremendous value on the anonymity of the respondents of this survey. To eliminate or minimize the Social Desirability effect (Dovidio & Fazio, 1992) the researcher failed to link the respondent with a particular identifier. Therefore, the respondent had complete anonymity; however, as a result, the researcher was unable to track changes in
stigma and stigma subsets among specific respondents. The researcher’s inability to track specific responses from pretest and posttest precluded the researcher from drawing statistically significant conclusions related to stigma. While the able to identify trends and changes related to stigma, the researcher was unable to cite significant changes in stigma or stigma subsets from the preliminary and secondary assessments. In the future, when assessing the effectiveness of any intervention, the researcher will link each respondent’s scores. This will allow the researcher to draw more comprehensive conclusions related pre and posttest scores attributable to an intervention.

In addition to the changes in methodology, in future research, the researcher will likely take a different approach in targeting minority groups, and disseminate the intervention on a smaller scale. The researcher will likely survey particular group and with the sponsorship of an organization, attempt to yield a higher response rate. The researcher would inform potential participants of the value of their participation, both individually, but also as members of that participating organization. Many student organizations exist at the University of Tennessee, Knoxville. Specifically, UTK hosts numerous, groups for ethnic minorities (Association of Asian American Students), members of sexual minorities (GLAAD), specific to students with active military or veteran status (Association of Student Veterans). In addition to the benefit of obtaining adequate response rates from students belonging to an ethnic or sexual minority, targeting student groups would allow the researcher to determine with certainty whether or not an intervention impacted a particular group, allowing the researcher to draw more definite conclusions about intervention exposure.

Finally, in future research endeavors, the researcher would further explore the identified stigma trends between members and non-members of Greek organizations. As mentioned earlier
in Chapter 5, the researcher identified trends between these groups, specifically members of a Greek organization were more likely to stigmatize the mentally ill than non-members. These trends, although neither conclusive nor significant, provide the basis for future research exploring stigma between these groups. Furthering the examination of stigma among these groups, the researcher may take more of a qualitative approach.

The researcher identified specific means to complete this future research. The researcher would likely attempt to partner with Greek organizations on campus, as well as comparable non-Greek organizations to explore differing opinions and perceptions related to the mentally ill. Additionally, the researcher may also mirror the suggested methodology of working with different minority groups, to gauge the effectiveness of anti-stigma messages among members and non-members of Greek Organizations in an attempt to compare changes in perceptions. Further research related to members and non-members of Greek organizations is of particular interest to the researcher due to its innovative nature.

The preceding two sections of Chapter Five identified ways in which limitations and findings of the dissertation study could be further explored. The researcher identified ways in which she could overcome methodological limitations, low response rates and ineffective dissemination of the intervention associated with the dissertation study in future research attempts. Although the researcher drew few conclusions from the results of the dissertation study, trends indicating stigma differences between members and non-members of Greek organizations would be used as the basis for further exploration of these populations and their perceptions of the mentally ill.
Conclusion

Throughout Chapter Five, the researcher linked the dissertation research to the empirical basis for the study, reiterating the link between suicide, stigma and effective anti-stigma campaigns, and the impact of a community intervention campaign on reducing stigma. Throughout Chapter Five, the researcher explored the quantitative data reported in Chapter Four, pairing the outcomes with interpretation and relevance to researchers, School Administrators and Community Organizations. The researcher illustrated the differences between the preliminary stigma assessment (Student Attitudes Survey #1) and secondary stigma assessment (Student Attitudes Survey#2) with a strong focus on the post intervention stigma assessment.

The researcher outlined the theoretical basis of the “Big Idea” intervention, characteristics of the intervention, and specifics about the researcher’s methodology in launching the intervention. Chapter Five includes interpretation and hypotheses associated with overall stigma reports, stigma trends, and overall stigma subset data, and variances in overall stigma associated with demographic characteristics. Research indicated consistently neutral overall stigma scores among the UTK student population, but multi-directional differences among stigma subsets. Comparison of stigmatization among demographic groups was limited due to inadequate numbers; however, the researcher identified trends indicating Greeks are more likely to stigmatize than non-Greeks.

In addition to the conclusions drawn from the dissertation study, the researcher reflected upon the dissertation process. Chapter Five provided an outline of the limitations of the study, how these limitations may be overcome in future research and implications for both researchers and school administrators and community organizations interested in targeting stigma through a community wide intervention campaign. Although the circumstances surrounding the
dissertation study precluded the researcher from completing generalizable statistical assessments, the dissertation study provides a basis for further exploration of the issue of stigma, and decreasing stigma through effective community intervention campaigns.
Table 1. Modifications to Day’s Mental Illness Stigma Scale

<table>
<thead>
<tr>
<th>Component</th>
<th>Modification</th>
<th>Rational/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions for respondents</td>
<td>The introductory paragraph will be modified by eliminating its present focus on the history of mental illness, to a definition of mental illness encompassing both mild and severe mental illnesses.</td>
<td>Justification: Proposed change should provide a more comprehensive understanding of mental illness than originally provided. Personal correspondence with one of the instrument’s authors (Eshleman) indicate that these modifications will not alter the validity or reliability of the scale.</td>
</tr>
<tr>
<td>Scales included: Bipolar</td>
<td>Drop this scale.</td>
<td>Justification: Proposed change should focus on obtaining overall perspective on perceptions of mental illness, rather than a comparison of perceptions of different mental illnesses.</td>
</tr>
<tr>
<td>Scales included: Depression</td>
<td>Drop this scale.</td>
<td>Justification: Proposed change should focus on obtaining overall perspective on perceptions of mental illness, rather than a comparison of perceptions of different mental illnesses.</td>
</tr>
<tr>
<td>Scales included: Schizophrenia</td>
<td>Drop this scale.</td>
<td>Justification: Proposed change should focus on obtaining overall perspective on perceptions of mental illness, rather than a comparison of perceptions of different mental illnesses.</td>
</tr>
</tbody>
</table>
Table 2. *Stigma Subset Data from Student Attitudes Survey #2*

<table>
<thead>
<tr>
<th>Stigma Subset</th>
<th>Subset Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatability</td>
<td>5.37 (1.05)</td>
</tr>
<tr>
<td>Relationship Disruption</td>
<td>3.14 (1.24)</td>
</tr>
<tr>
<td>Hygiene</td>
<td>2.42 (1.25)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2.96 (1.28)</td>
</tr>
<tr>
<td>Visibility</td>
<td>3.93 (1.11)</td>
</tr>
<tr>
<td>Recovery</td>
<td>5.29 (1.32)</td>
</tr>
<tr>
<td>Professional Efficacy</td>
<td>5.02 (1.41)</td>
</tr>
<tr>
<td>Total Stigma Score</td>
<td>3.50 (0.60)</td>
</tr>
</tbody>
</table>

N = 121
Table 3. *Stigma among Demographic Groups*

<table>
<thead>
<tr>
<th></th>
<th>Survey #1</th>
<th>Survey #2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Greek Membership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greek</td>
<td>3.60 (0.82)</td>
<td>3.68 (0.58)</td>
</tr>
<tr>
<td>Non-Greek</td>
<td>3.46 (0.58)</td>
<td>3.45 (0.60)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.59 (0.62)</td>
<td>3.61 (0.71)</td>
</tr>
<tr>
<td>Female</td>
<td>3.40 (0.60)</td>
<td>3.44 (0.53)</td>
</tr>
</tbody>
</table>
Table 4. *Stigma Trends*

<table>
<thead>
<tr>
<th></th>
<th>Survey #1</th>
<th>Survey #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stigma Score</td>
<td>3.48 (0.57)</td>
<td>3.50 (0.59)</td>
</tr>
</tbody>
</table>
Table 5. *Trends among Stigma Subsets*

<table>
<thead>
<tr>
<th></th>
<th>Survey #1</th>
<th>Survey #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatability</td>
<td>4.13 (0.57)</td>
<td>5.37 (1.05)</td>
</tr>
<tr>
<td>Relationship Disruption</td>
<td>3.07 (1.15)</td>
<td>3.14 (1.24)</td>
</tr>
<tr>
<td>Hygiene</td>
<td>2.49 (1.16)</td>
<td>2.42 (1.25)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>2.97 (1.17)</td>
<td>2.96 (1.28)</td>
</tr>
<tr>
<td>Visibility</td>
<td>3.88 (1.13)</td>
<td>3.93 (1.11)</td>
</tr>
<tr>
<td>Recovery</td>
<td>5.28 (1.25)</td>
<td>5.29 (1.32)</td>
</tr>
<tr>
<td>Professional Efficacy</td>
<td>4.89 (1.33)</td>
<td>5.02 (1.41)</td>
</tr>
</tbody>
</table>
Table 6. Exposure to Anti-Stigma Campaign

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition of Slogan       8.30%</td>
</tr>
<tr>
<td>Recognition of Visual        9.90%</td>
</tr>
</tbody>
</table>
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Appendix
INTRODUCTION:
You are invited to participate in a research study. The purpose of the study is to ascertain data on the way that college students at the University of Tennessee, Knoxville perceive other students. This is a two-part research study, you may choose to participate in the first part, the second part, both or neither. You must be 18 years of age or older to participate.

INFORMATION ABOUT PARTICIPANTS’ INVOLVEMENT IN THE STUDY
You are receiving this e-mail because you were one of 2,000 randomly selected undergraduate students currently enrolled at the University of Tennessee, Knoxville to participate in the study. This survey should take you about 25 minutes.

RISKS
Some of the questions on the survey ask questions about your thoughts related to individuals with mental health issues. Your responses will be kept confidential. If you find some of the material upsetting you may stop at any time. If you find that you are upset by the material and need to seek counseling, you may go to or call the Counseling Center for an appointment (1800 Volunteer Blvd, Knoxville TN 37996, 865-974-2196) If you are uncomfortable going to the counseling center, you may contact Dona Diftler, LCSW (865-588-0488) to schedule an appointment.
BENEFITS

The benefits of this survey will be that we will be able to gain a better understanding of how The University of Tennessee, Knoxville students perceive others.

The results of this survey will help us to dispel stigma that some people feel towards those with mental health issues.

CONFIDENTIALITY

Responses provided will **not** be linked to you as an individual. The surveys are administered by an external survey provider, *StudentVoice* and all data is sent directly to *StudentVoice*. There is no penalty if you elect not to complete the survey or send survey data to *StudentVoice*. Once the survey is completed, data is submitted directly to *StudentVoice*.

COMPENSATION

This study intends to examine student perceptions of the mentally ill both prior to and following a campus wide social media campaign. Therefore, you will be asked to complete a survey during both the beginning of the semester and several months later. You may elect to participate in only the first portion of the survey, the second portion of the survey both or neither. With the completion of either survey, you may receive compensation of a coupon to receive a free can of soda and small box of popcorn at the University Center Sweet Shop. This coupon will be included in an envelope sent to you via U.S. or Campus mail. There will also be a drawing for one student to receive a Kindle. This incentive will be offered for those who participate in either the first or second survey. For those students who choose to participate in both the pre and post survey, you will be eligible to participate in a drawing to receive an Ipad. To be eligible, you
will be required to submit your name and e-mail address. Students are not required to complete the survey to be eligible for the incentives. Neither students’ names nor e-mail addresses will be matched with the data as the data is sent directly to StudentVoice.

CONTACT INFORMATION

If you have any questions pertaining to this study, you may contact the lead researcher Megan Herscher at the UT Counseling Center 1800 Volunteer Blvd, Knoxville TN 37996. She can be reached by telephone at 865-523-6126, or by email at Mhersch1@utk.edu. You may also contact the Director of Community Outreach for the University of Tennessee Counseling Center, Dr. Connie Briscoe at 865-974-2196 or by email at Briscoe@utk.edu.

If you have questions related to your rights at a participant in this survey, you may contact the University of Tennessee Office of Research Compliance Officer, Brenda Lawson at 865-974-3466.

CONSENT

By linking to this survey, I acknowledge that I have read the above information and agreed to participate in the study.

Link for the survey: link
By linking to this incentive page, I acknowledge that I have read the above information and understand that I will be required to submit my name and e-mail address if I wish to be included for a random drawing of incentives. Neither student names nor e-mail addresses will be matched with the data. The data is sent directly to StudentVoice.

Link to register for incentives: link

VIII. QUALIFICATIONS OF THE INVESTIGATOR(S) TO CONDUCT RESEARCH

Megan Herscher is in her third year of doctoral studies in the Counselor Education Program. She is working in conjunction with Dr. Connie Briscoe (Assistant Director of the Counseling Center & Director of Community Outreach). Megan also works collaboratively with Dr. Jennifer Morrow (Educational Psychology & Counseling Department), who has agreed to provide ongoing feedback on this project.

BEGIN SURVEY**

Mental Illness Overview

Mental illness can include a number of emotional difficulties. These difficulties can be extreme and require hospitalization or they can be relatively mild. You may have experienced mental health issues or been close to someone with these issues.

There are a few observable characteristics which exist associated with the term “mental illness.” These issues may include: feelings of sadness or irritability for an extended period of time, changes in eating/sleeping habits and loss of interest in previously enjoyed activities, intermittent
feelings of excitement paired with feelings of depression and lack of motivation, or worry that someone is watching or following you or hearing or seeing things which are not there.

We are interested in your opinions about mental illness and people who have a mental illness. By answering the following questions about your thoughts on mental illness it will help us better understand how University of Tennessee Students perceive those with a mental illness. Please rate the extent to which you agree or disagree with each statement.

If you are interested in providing your opinion please answer yes to the first question and continue, if not please answer no to “opt out” of the survey.

I would like to give my opinions related to mental illness.

1 yes 2 no “opt out”

2. There are effective medications for mental illnesses that allow people to return to normal and productive lives.

1 2 3 4 5 6 7

completely
completely
disagree

agree

3. I don’t think that it is possible to have a normal relationship with someone with a mental illness.
4. I would find it difficult to trust someone with a mental illness.

5. People with mental illnesses tend to neglect their appearance.

6. It would be difficult to have a close meaningful relationship with someone with a mental illness.
7. I feel anxious and uncomfortable when I’m around someone with a mental illness.

1 2 3 4 5 6 7
completely completely
completely
disagree agree

8. It is easy for me to recognize the symptoms of mental illnesses.

1 2 3 4 5 6 7
completely completely
disagree agree

9. There are no effective treatments for mental illnesses.

1 2 3 4 5 6 7
completely completely
10. I probably wouldn’t know that someone has a mental illness unless I was told.

12. There is little that can be done to control the symptoms of mental illness.
13. I think that a personal relationship with someone with a mental illness would be too demanding.

1 2 3 4 5 6 7
completely
completely
disagree

14. Once someone develops a mental illness, he or she will never be able to fully recover from it.

1 2 3 4 5 6 7
completely
completely
disagree

15. People with mental illnesses ignore their hygiene, such as bathing and using deodorant.

1 2 3 4 5 6 7
16. Mental illnesses prevent people from having normal relationships with others.

1 2 3 4 5 6 7
completely
completely
disagree agree

17. I tend to feel anxious and nervous when I am around someone with a mental illness.

1 2 3 4 5 6 7
completely
completely
disagree agree

18. When talking with someone with a mental illness, I worry that I might say something that will upset him or her.

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<tbody>
<tr>
<td>19.</td>
<td>I can tell that someone has a mental illness by the way he or she acts.</td>
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<td></td>
<td>completely</td>
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<td>20.</td>
<td>People with mental illnesses do not groom themselves properly.</td>
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<td>21.</td>
<td>People with mental illnesses will remain ill for the rest of their lives.</td>
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</table>
22. I don’t think that I can really relax and be myself when I’m around someone with a mental illness.

23. When I am around someone with a mental illness I worry that he or she might harm me physically.

24. Psychiatrists and psychologists have the knowledge and skills needed to effectively treat mental illnesses.
25. I would feel unsure about what to say or do if I were around someone with a mental illness.

26. I feel nervous and uneasy when I'm near someone with a mental illness.

27. I can tell that someone has a mental illness by the way he or she talks.
28. People with mental illnesses need to take better care of their grooming (bathe, clean teeth, use deodorant).

1 2 3 4 5 6 7

29. Mental health professionals, such as psychiatrists and psychologists, can provide effective treatments for mental illnesses.

1 2 3 4 5 6 7

The following questions ask about your demographic information.

30. What is your classification?

Freshman
Sophomore
Junior
Senior
Master’s Student
Doctoral Student
Professional Program Student
Other
Prefer not to respond

31. What best describes your gender identity?
Male
Female
Transgendered
Other
Prefer not to respond

What best describes your sexual identity?
Asexual
Bisexual
Gay
Heterosexual
Intersexed
Lesbian
Questioning
Other
Prefer not to respond
Which best describes your race/ethnicity?
Alaskan Native
American Indian
Asian
Black or African American
Hawaiian or Pacific Islander
Hispanic
Multi
White or Caucasian
Other
Prefer not to specify

Are you currently serving in the armed services or reserves?
Yes
No
Prefer not to respond

Have you previously served in the armed services or reserves?
Yes
No
Prefer not to respond

Are you a member of a social sorority or fraternity?
Yes
No
Prefer not to respond
VITA

Megan Herscher has worked in the counseling and mental health field since 2004, with experience in counseling those struggling with a number of mental health problems. Specifically, Megan has worked clinically with those struggling with Addiction, Depression, Bi-Polar Disorder and Trauma. She has worked clinically with children, adolescents and adults. Her work has spanned a variety of contexts from residential, outpatient and private practice counseling. Megan received her Master’s in counseling from Marymount University in Arlington, Virginia in 2005, and her PhD from The University of Tennessee, Knoxville in 2013. Megan’s research foci include, group dynamics, stigma towards the mentally ill and suicide among college students with interest in all components of the mental health fields. Megan continues to work in the mental health field both working directly with clients and in an administrative capacity.